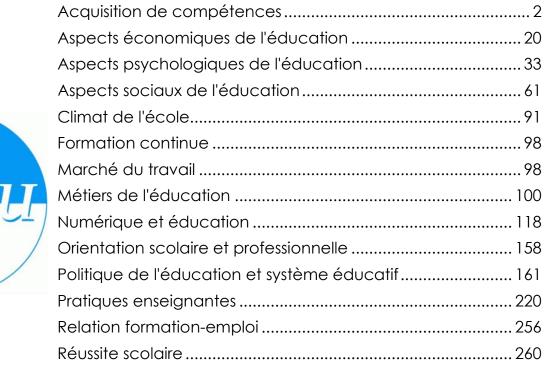# Veille de l'IREDU

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Acquisition de compétences

Abufhele, A., Bravo, D., Lopez-Boo, F., & Soto-Ramirez, P. (2022). *Developmental losses in young children from pre-primary program closures during the COVID-19 pandemic*. Consulté à l'adresse https://docs.iza.org/dp15179.pdf
Les pertes d'apprentissage et de développement dues à la fermeture des programmes préscolaires en raison de la COVID-19 peuvent être sans précédent. Les perturbations au début de la vie peuvent être de longue durée. Cet article figure parmi les premières publications portant sur l'impact réel des fermetures d'établissements sur le développement de l'enfant. S'appuyant sur un ensemble de données uniques collectée au Chili, où les écoles et garderies sont restées fermées pendant un an, les auteurs se penchent sur le développement des jeunes enfants. Par rapport aux enfants interrogés en 2017, l'article rend compte des impacts négatifs sur les enfants en 2020 dans la plupart des domaines du développement, en particulier celui du développement du langage.

Aktas, F. (2022). **The emergence of creativity as an academic discipline: Examining the institutionalization of higher education programs**. *Higher Education Quarterly*, 76(2), 460-477. https://doi.org/10.1111/hequ.12322
As a result of globalization and the digital revolution, the concept of creativity has become increasingly central to education policy and practice. On the one hand, the calls for creativity are driven by an economic imperative. The argument is that there has been a shift from an industrial-based economy to a knowledge-based economy to a creative economy. The calls for creativity are also driven by the social and personal development of individuals, approaching the concept more holistically. The increasing importance attached to the creativity concept has already resulted in the growth of the degree-, certificate- and award-bearing programs across higher education institutions. Building on a social constructivist perspective and adopting critical discourse analysis, this study examines how universities approach the conceptualization and institutionalization of the concept of creativity by undertaking content analysis of creativity related program mission statements and curriculum materials.

Allbright, T. N., & Marsh, J. A. (2022). **Policy Narratives of Accountability and Social-Emotional Learning**. *Educational Policy*, 36(3), 653-688. https://doi.org/10.1177/0895904820904729
The paradigm of test-based accountability has been a dominant force for decades, yet some argue that we have recently witnessed a dramatic change in the key beliefs influencing educational policy. To understand the extent of this transformation, we investigated the policy narrative supporting the adoption of a multiple measure accountability system in California's CORE Districts. Our data revealed a narrative integrating key beliefs about knowledge, accountability, and social-emotional learning. This narrative continues the major themes of the previous accountability paradigm, but with two notable differences regarding the use of measurement data and role of social-emotional learning.

Audet, G., Gosselin-Gagné, J., & Koubeissy, R. (2022). **Une compétence interculturelle et inclusive « en acte » : analyse de récits de pratique d'enseignant.e.s à propos de l'intervention en contexte de diversité ethnoculturelle**. *Formation et profession*, 30(1), 1. https://doi.org/10.18162/fp.2022.612

Beghetto, R. A., & Zhao, Y. (2022). **Democratizing Creative Educational Experiences**. *Review of Research in Education*, 46(1), vii-xv. https://doi.org/10.3102/0091732X221089872

Berthaud, J., & Duguet, A. (2022). **Interactions verbales enseignants-étudiants en cours magistral et compétences transversales des enseignants**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.17865
Au sein de l'enseignement supérieur français la pertinence du cours magistral fait régulièrement l'objet de débats, notamment en ce qui concerne les pratiques pédagogiques qui y sont mises en œuvre. Si la recherche s'est intéressée à plusieurs reprises à ce type de cours, peu de travaux se sont attachés à décrire de façon empirique les pratiques interactionnelles des enseignants durant ce type d'enseignements ni à identifier les facteurs qui influent sur ces pratiques. A partir des propos déclaratifs collectés auprès de 276 enseignants d'une université française, cet article vise à décrire la nature de ces pratiques mais également les liens qu'elles entretiennent avec des facteurs individuels et contextuels parmi lesquels sont considérées les compétences transversales des enseignants. Nos résultats conduisent notamment à reconsidérer l'idée selon laquelle le cours magistral interdit toute forme d'interactions entre enseignant et étudiants.

Blažič, B. J. (2022). **Changing the landscape of cybersecurity education in the EU: Will the new approach produce the required cybersecurity skills?** *Education and Information Technologies*, *27*(3), 3011-3036. https://doi.org/10.1007/s10639-021-10704-y
Recruiting, retaining, and maintaining sufficient numbers of cybersecurity professionals in the workplace is a constant battle, not only for the technical side of cybersecurity, but also for the overlooked area of non-technical, managerial-related jobs in the cyber sector. The problem is the lack of cybersecurity skills in the European labour force. This paper presents the results of a study carried out with the aim to identify how much the cybersecurity education system within the high-level educational institutions and the industrial sector meets the needs for graduate students to gain the required cybersecurity skills. The method applied in the study is based on data collected from surveys carried out by the European competence centres on cybersecurity and the European Cybersecurity organisation. The problem of common educational program accreditation in Europe is highlighted and discussed. The actions undertaken to improve the education in both sectors are described and the emerging educational landscape is commented. The main cybersecurity knowledge specified by the industrial needs is presented in the form of five knowledge pillars. The study's findings show that there are missing topics in high-level institution's cybersecurity programs and that that there is a need to re-shape the content of the courses provided by the professional education providers.

Bourqia, R. (2022). *Rapport national PISA 2018*. Consulté à l'adresse https://www.csefrs.ma/wp-content/uploads/2022/02/Rapport-National-PISA-2018.pdf
Ce rapport analyse les performances des élèves marocains dans l'enquête PISA 2018, qui porte sur l'évaluation des compétences des élèves de 15 ans en compréhension de l'écrit, en mathématiques et en sciences. Le Maroc a pris part, pour la première fois, avec la participation de 7218 élèves répartis sur 180 établissements de toutes les régions. Les résultats témoignent d'une faiblesse de performances. Le Maroc se positionne en bas de l'échelle avec les pays qui ont enregistré les scores les plus faibles, et ce, aussi bien

en compréhension de l'écrit qu'en mathématiques et sciences. Les écarts enregistrés par rapport à la moyenne de l'OCDE sont considérables (allant de 112 en sciences à 128 en compréhension de l'écrit, soit presque l'équivalent de quatre ans d'école).

Burnard, P., Colucci-Gray, L., & Cooke, C. (2022). **Transdisciplinarity: Re-Visioning How Sciences and Arts Together Can Enact Democratizing Creative Educational Experiences**. *Review of Research in Education*, *46*(1), 166-197. https://doi.org/10.3102/0091732X221084323
The movement from STEM to STEAM, with its emphasis on real-world applications, promises to meet the changing needs of a globally connected world. However, the potential of transdisciplinarity to inspire and deepen our understanding of who we are and how we make sense of a world in turmoil remains undertheorized. This article makes a case for repositioning STEAM education as democratized enactments of transdisciplinary education, where arts and sciences are not separate or even separable endeavors. Drawing upon posthumanist theorizing, three projects will exemplify transdisciplinarity across music, mathematics, and science education. Transgressing and transcending disciplinary boundaries, and attending to both human and nonhuman perspectives, we invite a rethink of the work of schools, going beyond democratizing creativity to fully enact posthumanist transdisciplinarity.

Cho, H. J., Wang, C., Bonem, E. M., & Levesque-Bristol, C. (2022). **How Can We Support Students' Learning Experiences in Higher Education? Campus Wide Course Transformation Program Systematic Review and Meta-Analysis**. *Innovative Higher Education*, *47*(2), 223-252. https://doi.org/10.1007/s10755-021-09571-9
The aims of this paper are to examine the breadth of scholarship that emerged from a large-scale university-wide course transformation program between 2011 and 2021, to investigate how the course transformation program influenced students' perceptions of their learning environment and learning achievement, and to discuss future directions for improving autonomy-supportive learning in higher education. We gathered all quantitative and qualitative publications related to the IMPACT course transformation program, and 35 articles were included in the study. Since the scope of the study topics in the course transformation program varied and program implementation was applied to various study contexts and disciplines, the findings were first summarized in a narrative manner. Additionally, a meta-analysis was conducted to examine the effectiveness of the course transformation based on 10 journal articles that adopted quasi-experimental designs. The findings revealed that the courses redesigned through the program supported students' positive learning experiences, including motivation, satisfaction regarding basic psychological needs, knowledge transferability, and academic performance. This paper discusses implications and future directions to enhance undergraduate students' academic success through course redesign. Further exploration is needed to determine the additional effect of course redesign in higher education.

D'Urso, G., Symonds, J., Sloan, S., & Devine, D. (2022). **Bullies, victims, and meanies: the role of child and classmate social and emotional competencies**. *Social Psychology of Education*, *25*(1), 293-312. https://doi.org/10.1007/s11218-021-09684-1
This study used a personal oriented approach to identify distinct combinations of children's experiences of bullying and victimisation in the Irish primary school context. The study investigated the social and emotional characteristics that predicted those profiles

at individual and classroom levels. The sample of 2,062 participants was drawn from the Irish national cohort study Children's School Lives. We analysed teacher reports of individual children's strengths and difficulties and neglect, and child reports of experiences of bullying, victimisation, and care from classmates. Latent profile analysis revealed five main profiles of bullying and victimisation in Irish primary schools. Approximately 40% of the children were distributed in the atypical profiles (i.e., bullies, meanies, victims, and bully-victims) with the other 60% of children reporting very low levels of bullying and victimisation. Multilevel modelling predicted the profile membership from a set of social and emotional predictors from individual and classroom levels. At the individual level, being a bully was predicted by higher child neglect, hyperactivity, conduct problems, and peer problems; being a meanie was predicted by hyperactivity, peer problems, and less caring classmates; being a victim was predicted by child neglect, conduct problems, and less caring classmates; and being a bully-victim was predicted by conduct problems and less caring classmates. At the classroom level, being a victim was predicted by being in a classroom comprised of younger children, and in classrooms where children were less caring on average. Theoretical and psycho-educational implications are discussed.

Erol, O., & Çırak, N. S. (2022). **The effect of a programming tool scratch on the problem-solving skills of middle school students**. *Education and Information Technologies*, *27*(3), 4065-4086. https://doi.org/10.1007/s10639-021-10776-w
Problem-solving is one of the most important twenty-first-century skills and should be acquired at an early age. Since programming is a kind of problem-solving process, it may be seen in the context of problem-solving skills development. Hence, this study aims to identify the effectiveness of one of the most popular programming tools "Scratch" on middle school students' problem-solving skills. For this purpose, this current study's implementation lasted for a period of 14 weeks, based on the 'Information Technologies and Software' course at 2 h per week. The course curriculum was conducted for both 18 middle school students in an experimental group and 16 middle school students in a control group at least one hour per week while in the second hour, the control group worked on the activities that the coursebook included and the experimental group engaged in game design activities using Scratch. The Problem Solving Inventory for Children (PSIC) was used as a data collection tool in order to examine the participants' self-perception with regard to their problem-solving skills. MANOVA, ANOVA, and t-tests were employed in the analysis of the obtained data. The study showed that game design activities with Scratch increased the problem-solving skills of the participants. In this context, game design activities with coding tools can be employed with children in order to help them gain problem-solving skills at an early age.

Fang, M., Tapalova, O., Zhiyenbayeva, N., & Kozlovskaya, S. (2022). **Impact of digital game-based learning on the social competence and behavior of preschoolers**. *Education and Information Technologies*, *27*(3), 3065-3078. https://doi.org/10.1007/s10639-021-10737-3
Digital gaming has become a regular part of life for today's pre-schoolers. Hence, there is a need to look at the integration of digital technology into the preschool education. The present study aims to examine the effect digital games have on children's behaviour and their social competence if played to reach an educational purpose (supervised play) and for fun (without educational aim). The study population consists of 54 pre-schoolers (26 girls and 28 boys), aged 4 to 6, who were recruited in Moscow, Russia. All

children were divided in two groups: children playing digital games with peers (n = 28) and children playing digital games at home (n = 28). The pre-schoolers' social competence and behaviour were assessed before and after the experiment using the Social Competence and Behavior Identification (SCBE-30) questionnaire. Findings revealed a higher level of social competence in the experimental group (+11.71, p < 0.05) as compared to children playing without being told what they were expected to achieve. The experimental group also scored lower on Anxiety-Withdrawal (−7.94, p < 0.05). A higher Anxiety-Withdrawal score normally means that a child experiences some degree of depression or anxiety, and exhibits overly dependent behaviour. At the same time, a higher Social Competence score suggests that a child is more joyful, tolerant, socially integrated, calm, and willing to collaborate with peers and that he or she exhibits a prosocial behaviour. The results of this study may help parents and teachers to use digital learning tools, in particular video games, effectively when working with young children.

Hanushek, E. A., Jacobs, B., Schwerdt, G., Van der Velden, R., Vermeulen, S., & Wiederhold, S. (2022). *The intergenerational transmission of cognitive skills: An investigation of the causal impact of families on student outcomes* (Working Paper N° 09). Consulté à l'adresse University of Konstanz, Cluster of Excellence « The Politics of Inequality. Perceptions, Participation and Policies » website: https://econpapers.repec.org/paper/zbwcexwps/09.htm
The extensive literature on intergenerational mobility highlights the importance of family linkages but fails to provide credible evidence about the underlying family factors that drive the pervasive correlations. We employ a unique combination of Dutch survey and registry data that links math and language skills across generations. We identify the connection between cognitive skills of parents and their children by exploiting within-family between-subject variation in these skills. A causal interpretation of the between-subject estimates is reinforced by novel IV estimation that isolates variation in parent cognitive skills due to teacher and classroom peer quality. The between-subject and IV estimates of the key intergenerational persistence parameter are strikingly similar and close at about 0.1. Finally, we show the strong influence of family skill transmission on children's choices of STEM fields.

Ho, J. C.-S., Hung, Y.-S., & Kwan, L. Y.-Y. (2022). **The impact of peer competition and collaboration on gamified learning performance in educational settings: a Meta-analytical study**. *Education and Information Technologies*, *27*(3), 3833-3866. https://doi.org/10.1007/s10639-021-10770-2
This study is a meta-analytical study that examines the effectiveness of gamification in learning performance in educational settings (n = 29; year-span = 2011–2019). Specifically, it aimed to investigate (a) whether gamification could improve learning performance, and (b) whether peer interaction (i.e., peer competition and peer collaboration) moderated the effectiveness of gamification in learning performance. Results from random-effects models showed significant effects of gamification in learning performance (g = .595, 95% CI [.432, .758], N = 3515). This effect remained robust after excluding outliers and was stable in a sub-split analysis that excludes studies with low methodological rigor (i.e., studies with pre-post test design). Subgroup analyses revealed a moderating effect of peer competition in gamification in learning, suggesting that competitive games were better than non-competitive games for promoting learning performance in educational settings. However, this effect was not robust and no

evidence of subgroup differences were found in the sub-split analysis. Peer collaboration did not moderate the effectiveness of gamification in learning as no subgroup differences were found between collaborative games and non-collaborative games. The effectiveness of games that were both competitive and collaborative did not differ from those that were only competitive. Other moderators such as education level and research design were also investigated. No subgroup differences were found for these two moderators. Educational implications and limitations were further discussed.

Huang, H.-L., Hwang, G.-J., & Chen, P.-Y. (2022). **An integrated concept mapping and image recognition approach to improving students' scientific inquiry course performance**. *British Journal of Educational Technology*, *53*(3), 706-727. https://doi.org/10.1111/bjet.13177
Scholars and researchers generally believe that scientific inquiry is an important activity for cultivating students' applied knowledge and high-level thinking ability. The process of scientific inquiry can promote students' learning motivation and trigger their higher-order thinking ability. However, students may not have enough prior knowledge or they may lack inquiry experience, which may influence the effectiveness of their inquiry learning. Besides, in a scientific inquiry environment assisted by technology, students must face abundant and diverse learning resources, and may not effectively organize and carry out advanced cogitation to solve problems. Therefore, this research proposed an integrated concept mapping and image recognition (IR) approach to help students effectively acquire and organize knowledge in the process of scientific inquiry. This study applied a quasi-experimental design to verify the effect of this proposed approach. The experimental group conducted the concept mapping-based IR (CM-IR) learning approach, whilst the control group conducted the conventional IR-based learning approach to evaluate the students' performance in terms of their learning motivation and learning achievements. The participants were two classes of 10th-grade students in northern Taiwan. One was the experimental group with 22 students, whilst the other was the control group with 22 students. The experimental results show that the students learning with the CM-IR learning approach had better learning achievement, attitudes and intrinsic motivation, as well as higher mental load than those learning with the conventional IR-based learning approach. Accordingly, several suggestions are provided for future research in this field. Practitioner notes What is already known about this topic With the development of information technology, AI has attracted the attention of researchers. Image recognition (IR) is one of the AI applications, and has been used to support learning in various educational fields. Researchers have indicated that concept mapping is an effective instructional strategy and promotes students' knowledge construction. What this paper adds A concept mapping-based IR (CM-IR) learning approach is proposed to improve students' scientific inquiry performance. A quasi-experimental design was conducted with 10th-grade students on the 'Plant identification' unit of the scientific inquiry course. The experimental results show that the proposed approach can significantly improve students' learning achievement, learning motivation and learning attitude. Implications for practice and/or policy The CM-IR learning approach could be an effective method to facilitate students' learning performances and motivation in scientific inquiry. It is worth promoting the CM-IR learning approach in school settings since it is low-cost and enables learning anywhere using mobile devices. Scholars and educators are encouraged to work on how AI technologies applications can be applied to support learning.

Karwowski, M., Zielińska, A., & Jankowska, D. M. (2022). **Democratizing Creativity by Enhancing Imagery and Agency: A Review and Meta-Analysis**. *Review of Research in Education*, 46(1), 229-263. https://doi.org/10.3102/0091732X221084337
Creativity is a vital topic of various educational discourses, yet the support it receives within the school system is insufficient. This chapter focuses on four particular ways of making creativity more democratized, salient, and accessible in school settings. We start by exploring the educational benefits of egalitarian theoretical approaches to creativity. Then, we posit that democratization requires an equal focus on the cognitive aspects of creative potential and the motivational sphere of self-perception and self-regulation. Third, analyzing cognitive characteristics, we pay special attention to creative imagery: an understudied yet critical aspect of creative potential. By meta-analyzing available evidence from interventional studies, we show that there are multiple effective approaches to enhancing creative imagery, so—in a sense—supporting creative potential might be democratized as well by going beyond creativity training. Fourth, and finally, we discuss the possibilities of adapting so-called wise interventions for the educational psychology of creativity. We review available evidence of how to strengthen creative confidence and the perceived value of creativity among students, and how to make their creative self-regulation more effective.

Koro, M., & Tanggaard, L. (2022). **Creative Methods for Creativity Research(ers)? Speculations**. *Review of Research in Education*, 46(1), 324-344. https://doi.org/10.3102/0091732X221090510
Creativity forms a part of educational curriculum and is an important element of education research. Clearly, creativity research of the past has made a great impact in the ways in which creativity has been integrated within education and educational practice. Yet how creativity has been studied and how the methodologies of these studies shape produced knowledge and impact educational practice are still rather limited and limiting. This chapter calls for methodological experimentation, various forms of performativity, and creativity in the context of research utilizing speculative wonderings. We situate our arguments in different trends in creativity research and discuss more methodologically diverse, speculative, and creative futures.

Lacey, G., Gozdzielewska, L., McAloney-Kocaman, K., Ruttle, J., Cronin, S., & Price, L. (2022). **Psychomotor learning theory informing the design and evaluation of an interactive augmented reality hand hygiene training app for healthcare workers**. *Education and Information Technologies*, 27(3), 3813-3832. https://doi.org/10.1007/s10639-021-10752-4
Hand hygiene is critical for infection control, but studies report poor transfer from training to practice. Hand hygiene training in hospitals typically involves one classroom session per year, but psychomotor skills require repetition and feedback for retention. We describe the design and independent evaluation of a mobile interactive augmented reality training tool for the World Health Organisation (WHO) hand hygiene technique. The design was based on a detailed analysis of the underlying educational theory relating to psychomotor skills learning. During the evaluation forty-seven subjects used AR hand hygiene training over 4 weeks. Hand hygiene proficiency was assessed at weekly intervals, both electronically and via human inspection. Thirty eight participants (81%) reached proficiency after 24.3 (SD = 17.8) two-minute practice sessions. The study demonstrated that interactive mobile applications could empower learners to develop hand hygiene skills independently. Healthcare organizations could improve hand

hygiene quality by using self-directed skills-based training combined with regular ward-based assessments.

Lewis, J. (2022). **Skills and post-16 education bill: progress of the bill**. In *https://veille-et-analyses.ens-lyon.fr/Rapports/DetailRapport.php?parent=actu&id=3575* [Report]. Consulté à l'adresse https://researchbriefings.files.parliament.uk/documents/CBP-9394/CBP-9394.pdf
The Skills and Post-16 Education Bill [HL] was introduced in the House of Lords on 18 May 2021 and received its first reading in the House of Commons on 26 October 2021. It passed its report stage and third reading in the Commons on 21 February 2022. Consideration of amendments took place between 24 March and 7 April 2022. The Bill is now awaiting Royal Assent. The Bill aims to improve how the skills and post-16 education system functions in England. It supports the Lifetime Skills Guarantee, announced by the Prime Minister in September 2020. The Bill would implement reforms set out in the Department for Education (DfE) White Paper, Skills for Jobs: Lifelong Learning for Opportunity and Growth (January 2021). These included giving employers a greater say in skills development and introducing a Lifelong Loan Entitlement. The Bill also includes measures to address some of the recommendations of the Independent Panel Report to the Review of Post-18 Education and Funding (the Augar report), published in May 2019, particularly around increasing opportunities for flexible, lifetime learning.

Long, H., Kerr, B. A., Emler, T. E., & Birdnow, M. (2022). **A Critical Review of Assessments of Creativity in Education**. *Review of Research in Education*, 46(1), 288-323. https://doi.org/10.3102/0091732X221084326
This chapter provides a systematic, synthesizing, and critical review of the literature related to assessments of creativity in education from historical, theoretical, empirical, and practical standpoints. We examined the assessments used in the articles focusing on education that are published from January 2010 to May 2021 in eight creativity, psychological, and educational journals. We found that the assessments of creativity in education are split between psychological and education research and have increased international participation. Additionally, these assessments are more general than specific and focus more on cognitive than noncognitive aspects. Like previous reviews of assessments of creativity in general, this review showed that creativity in education is still mainly assessed by divergent thinking or creativity tests, self-report questionnaires, and product-based subjective techniques. We analyzed the benefits and drawbacks of each approach and highlighted many innovations in the assessment. We further discussed how the major assessment approaches address race, ethnicity, class, and gender issues in education. We concluded the review with recommendations for how to better assess creativity in education and how assessments of creativity in education contribute to our understanding of the creative educational experience and democratizing education.

Main, J. B., Wang, Y., & Tan, L. (2022). **Preparing Industry Leaders: The Role of Doctoral Education and Early Career Management Training in the Leadership Trajectories of Women STEM PhDs**. *Research in Higher Education*, 63(3), 400-424. https://doi.org/10.1007/s11162-021-09655-7
While gender diversity in leadership has been shown to benefit organizations and promote innovations, women continue to be underrepresented in leadership positions in the industry sector. With increasing numbers of women pursuing PhDs in science, technology, engineering, and mathematics fields, it is critical to examine how PhD

programs contribute to the career paths of PhDs. This study examines the role of doctoral education preparation in communication, management, and technical skills, as well as post-PhD early career management training (ECMT), on PhDs' attainment of leadership positions in industry. Data come from the National Science Foundation Survey of Doctorate Recipients, National Science Foundation Survey of Earned Doctorates, and National Research Council Rankings of PhD programs. Using regression analyses, results indicate that ECMT is associated with a higher likelihood of attainment of leadership positions. PhD preparation in management skills also contributes to the attainment of leadership positions. Previous literature has shown that structural inequities and workplace bias contribute to limiting women's progress to leadership positions and that it is critical to address systemic and workplace biases. Research findings suggest that PhD program preparation and increased access to professional development opportunities can help contribute to the enhancement of women's pathways to leadership roles. Structural changes in doctoral education preparation in management skills and increases in ECMT opportunities offered by employers also have the potential to increase the participation of STEM PhDs in leadership roles in industry.

Mariss, A., Wenzel, K., Grünberg, C., & Reinhard, M.-A. (2022). **Who wants to learn harder? The relationship between conservatism and liberalism, desirable difficulties, and academic learning**. *Social Psychology of Education*, *25*(1), 209-248. https://doi.org/10.1007/s11218-021-09681-4
Previous work has shown that challenging learning strategies like desirable difficulties improve long-term learning. Nonetheless, because they might be regarded as strict and demanding learning strategies, they should not be perceived as positive by everyone. They should, however, fit conservative political attitudes since those are, among others, positively correlated with individuals' need for order and structure as well as with challenging learning environments. Hence, we hypothesized conservative political attitudes to be correlated with more positive attitudes towards desirable difficulties, towards the use of desirable difficulties at school, towards the preferred difficulty of the learning process, and towards deeper learning strategies. We conducted three online studies assessing US American students' political attitudes and their attitudes towards such difficult and challenging learning strategies: Study 1 found correlations among more conservative political attitudes and more positive attitudes towards difficult and challenging learning strategies, whereas Study 2 found no significant linkages among these variables. Study 3 then showed that a more conservative political attitude and favorable ratings of Republican politicians, but also more favorable ratings of Democratic politicians were linked to more positive attitudes towards our dependent variables. Self-reported interest in and importance of politics were also positively correlated with positive attitudes towards difficult learning. Our results indicate that students' political attitudes are generally linked to positive attitudes towards difficult and challenging learning strategies and are therefore important individual characteristics regarding applications and perceptions of these learning strategies. Future work focusing on these relationships, on causal effects, and on further related variables is valuable.

McCormick, K. I., & Hall, J. A. (2022). **Computational thinking learning experiences, outcomes, and research in preschool settings: a scoping review of literature**. *Education and Information Technologies*, *27*(3), 3777-3812. https://doi.org/10.1007/s10639-021-10765-z

When implemented appropriately, computational thinking (CT) experiences in early childhood settings build essential literacy skills and foster initial explorations of sequencing, engineering design principles, and cause-and-effect relationships. While existing research explores CT in K-12 settings, there is insufficient research documenting the true scope of CT skills for preschool-age children (ages 3–5 years old). Thus, the paucity of research in this emerging area warranted a scoping review approach. This scoping review surveys existing CT studies with preschool-age participants and maps what is known of CT learning experience design, intended educational outcomes, and CT study design. Evidence from the reviewed articles (n = 17) indicate most studies used physical kits, task-oriented activities, and varying experience timeframes and adult scaffolding. Most studies focused on learning sequencing and events with few embedding remixing and reusing skills. Additionally, studies primarily implemented pre-post research design approaches, and few utilized qualitative methods. The analysis of the reviewed articles indicates gaps exist in CT experience designs, scope of CT interventions, and CT tool research and development. We conclude with recommendations for closing the knowledge gaps by providing specific future research directions.

MD, S., & Krishnamoorthy, S. (2022). **Student performance prediction, risk analysis, and feedback based on context-bound cognitive skill scores**. *Education and Information Technologies*, *27*(3), 3981-4005. https://doi.org/10.1007/s10639-021-10738-2
In recent times, Educational Data Mining and Learning Analytics have been abundantly used to model decision-making to improve teaching/learning ecosystems. However, the adaptation of student models in different domains/courses needs a balance between the generalization and context specificity to reduce the redundancy in creating domain-specific models. This paper explores the predictive power and generalization of a feature - context-bound cognitive skill score- in estimating the likelihood of success or failure of a student in a traditional higher education course so that the appropriate intervention is provided to help the students. To identify the students at risk in different courses, we applied classification algorithms on context-bound cognitive skill scores of a student to estimate the chances of success or failure, especially failure. The context-bound cognitive skill scores were aggregated based on the learning objective of a course to generate meaningful visual feedback to teachers and students so that they can understand why some students are predicted to be at risk. Evaluation of the generated model shows that this feature is applicable in a range of courses, and it mitigates the effort in engineering features/models for each domain. We submit that overall, context-bound cognitive skill scores prove to be effective in flagging the student performance when the accurate metrics related to learning activities and social behaviors of the students are unavailable.

Mehta, R., & Henriksen, D. A. (2022). **To Democratize, First Decolonize: Approaches Beyond Eurocentric and Colonial Epistemologies in Creativity**. *Review of Research in Education*, 46(1), 105-133. https://doi.org/10.3102/0091732X221084324
In response to the special issue on democratizing creative educational experiences (CEE), we conducted a thematic analysis of recent scholarship on creativity and decolonization (2010–2021) and analyzed recurring tensions across literature grounded in Indigenous, Black, feminist, and non-western epistemological perspectives on creativity. We found themes that are not new but are yet to be taken up consistently and credibly in western creativity and education research and practice. For instance,

spirituality emerges as a valuable ingredient for creativity, body as inseparable from the mind, dialectic resistance and resilience as acts of creative existence, and non-human agency as essential to the creative process. Informed by these themes, we share implications for research and practice, seeking new spaces inclusive of historically ignored onto-epistemologies.

Mims, L. C., Rubenstein, L. D., & Thomas, J. (2022). **Black Brilliance and Creative Problem Solving in Fugitive Spaces: Advancing the BlackCreate Framework Through a Systematic Review**. *Review of Research in Education*, 46(1), 134-165. https://doi.org/10.3102/0091732X221084331
Traditional definitions and assessments of creativity often neglect to identify the complexity surrounding Black students' brilliance, leading to lack of access and funding. Further, even when recognized, Black students are often funneled into programs that do not facilitate positive development of their racial-ethnic identity. Through our systematic review of 155 publications, we developed the BlackCreate Framework to illustrate how effective Black creative educational experiences (BCEEs) create fugitive spaces for creative expression and education. Within these spaces, both societal oppression and community assets are explicitly discussed as a part of the creative process, providing students methods for adaptive coping and for addressing systemic inequities. Given these findings, we advocate for consistent funding and support for fugitive spaces to promote Black students' creativity.

Nunès, É. (2022, avril 26). **Des écoles d'ingénieurs insatisfaites du niveau en maths de leurs élèves**. *Le Monde.fr*. Consulté à l'adresse https://www.lemonde.fr/campus/article/2022/04/26/reforme-du-lycee-impact-de-la-crise-sanitaire-des-ecoles-d-ingenieurs-insatisfaites-du-niveau-en-maths-de-leurs-eleves_6123677_4401467.html
Le nouveau baccalauréat et deux années de crise liée au Covid-19 ont amplifié les difficultés en mathématiques de certains étudiants. Les écoles d'ingénieurs postbac et les classes préparatoires ont dû adapter leur programme et mettre en place des outils de rattrapage.

Ohagwu, O., Nwanesi, P. K., & Bala, P. (2022). **Skill acquisition (TVET) and employment in Sarawak**. *International Social Science Journal*, 72(243), 145-157. https://doi.org/10.1111/issj.12314
This paper examines the role of technical and vocational education and training (TVET) as a booster of employment opportunities in Sarawak, highlighting the importance of TVET as a catalyst that promotes individuals' chances to gain employment, with the ultimate goal of improving their socioeconomic living conditions and overall development. As a case study focusing on Tabung Ekonomi Gagasan Sarawak (TEGAS) TVET programmes and applying the qualitative research methodological approach, this paper gathered and analysed raw data from research participants and concluded that (1) TVET plays significant roles in facilitating individuals' or groups' employment chances, especially within tech-based industries, and (2) employments are rewarded with remunerations and thus facilitate individuals' socio-economic developments.

Özçakır, B., & Çakıroğlu, E. (2022). **Fostering spatial abilities of middle school students through augmented reality: Spatial strategies**. *Education and Information Technologies*, 27(3), 2977-3010. https://doi.org/10.1007/s10639-021-10729-3

In school mathematics, representations of solid figures and three-dimensional geometric objects generally rely on two-dimensional projective representation modes on students' textbooks. In learning environments, these representation modes create a kind of cognitive filter, which prevents students with low spatial ability to comprehend and envision three-dimensional objects. Studies showed that spatial ability could be improved by means of suitable concrete models and computer created models in learning settings. Thus, fostering students' spatial ability helps to overcome and eliminate negative effects of this cognitive filter. However, some studies suggest that this cognitive filter may even occur while working with computer created objects since computers generally rely on two-dimensional digitizer panels on screen technology. On the other hand, augmented reality interface allows a new way of learning environment which could help to overcome this cognitive filter by providing unique representation modes and opportunities to foster students' spatial ability. In this study, an intervention with an augmented reality interface to foster students' spatial understandings were reported in terms students' invented strategies for spatial concepts. In this sense, eight seventh graders worked on spatial tasks with an augmented reality interface in learning settings. Findings revealed that while proceeding on spatial tasks, students could invent, use and modify spatial strategies. Moreover, students' spatial understanding was fostered as they progressed on tasks with the designed augmented reality interface. This study is a part of an educational design research which was focused on design and development a proper augmented reality tool to foster spatial ability of students. As a result of this study, with the help of combination of augmented reality interface and spatial tasks, teachers will be provided with a new tool to visualize mathematical concepts and students could be supported with this new tool as a new learning material.

Patton, L. D., Jenkins, T. S., Howell, G. L., & Keith, A. R. (2022). **Unapologetically Black Creative Educational Experiences in Higher Education: A Critical Review**. *Review of Research in Education*, 46(1), 64-104. https://doi.org/10.3102/0091732X221084321
Black creative educational experiences (BCEEs) are participatory, performative cultural experiences created by or for students, centering Black artistic expression, aesthetics, and engagement. Using African-centered frameworks, we provide a methodological guide for examining BCEEs in education research, which includes centering Black "ways of knowing," validating creative expressions cultivated by and for Black people, acknowledging the influence of Black creative expression on research and practice, considering researcher positionalities as observers and cultivators of Black creative expression, and viewing Black creative expression as knowledge production. We found BCEEs are democratizing educational experiences rooted in intellectual and expressive freedom (freedom of movement/voice/tongue), and community building. BCEEs should be centered in education research, particularly postsecondary education, and prioritized in institutional programming, curricula, and high-impact practices.

Pearson, H. A., & Dubé, A. K. (2022). **3D printing as an educational technology: theoretical perspectives, learning outcomes, and recommendations for practice**. *Education and Information Technologies*, 27(3), 3037-3064. https://doi.org/10.1007/s10639-021-10733-7
3D printing is an emerging educational technology that is said to prepare learners for a more technologically designed world. In this review, 3D printing studies are analyzed to identify the dominant theoretical approaches and learning outcomes associated with 3D printing in education. Five theories are identified, including situated learning (Lave & Wenger, 1991), experiential learning (Kolb & Kolb Academy of Management Learning &

Education, 4, 193- 212, Kolb & Kolb, 2005), and critical making (Ratto in The Information Society, 27, 252-260, 2011), but concepts from constructionism (Papert & Harel Constructionism, 36, 1-11, 1991) and self-directed learning (Garrison Adult Education Quarterly, 48, 18-33, 1997; Knowles, 1975) are common amongst all approaches. Learning outcomes attributed to 3D printing include critical thinking, creativity, design thinking, and collaboration (Trust et al., 2018; Trust & Maloy Computers in the Schools: Interdisciplinary Journal of Practice, Theory, and Applied Research, 34, 253-266, 2017), with proponents arguing that the domain general outcomes go beyond knowing simply how to use a 3D printer. Given the identified, theoretical approaches, outcomes, and common barriers to use, recommendations are made for how educators approach and implement 3D printing in the classroom.

Peppler, K., Dahn, M., & Ito, M. (2022). **Connected Arts Learning: Cultivating Equity Through Connected and Creative Educational Experiences**. *Review of Research in Education*, 46(1), 264-287. https://doi.org/10.3102/0091732X221084322
This review brings together scholarship from creative educational experiences (CEE) and connected learning to describe a connected arts learning framework, reframing arts education in the 21st century with a focus on connecting youths' interest-driven art making to opportunities through supportive relationships. Such a framework pushes the arts education field to consider outcomes beyond artistic skill acquisition and academic achievement to include a broader range of opportunities, including those civic- and career-related; promote interest development through targeted exposure to new forms of art making; create and implement professional development and programming to emphasize networks and connections; and draw from culturally sustaining practices to bridge connections between spaces for learning. A connected learning lens applied to what we know about high quality arts education sharpens our focus on how CEE can cultivate equity and social/cultural connection for youth.

Prasad, A., Chaudhary, K., & Sharma, B. (2022). **Programming skills: Visualization, interaction, home language and problem solving**. *Education and Information Technologies*, 27(3), 3197-3223. https://doi.org/10.1007/s10639-021-10692-z
As a novice, learning computer programming is challenging. It requires learners to be inquisitive and acquire skills to analyze problems to get to solutions critically. Unfortunately, students drop out of programming courses because students think that programming is difficult to understand. The student's understanding of the problem definition is one of the drawbacks that hinder them from accepting to solve problems. In addition to that, students also find the terminologies difficult to grasp. This study aims to determine whether visualization, interactivity, affective teaching, and the use of home language improve students' understanding. In this study, an application is designed to allow students to learn coding and their pre and the post-exam result was analyzed. The application incorporates animation, interaction, and examples in the home language. The result was tested at a 95% Confidence Level. It was found that the use of visualization and home language in teaching improves students' results and enhances their critical thinking and problem-solving skills.

Querejeta, M. (2022). *Impact of female peer composition on gender norm perceptions and skills formation in secondary school* (WIDER Working Paper Series N° wp-2022-28). Consulté à l'adresse World Institute for Development Economic Research (UNU-WIDER) website: https://econpapers.repec.org/paper/unuwpaper/wp-2022-28.htm

This paper examines peer effects on students' gender norm perceptions and skills formation. I use a Uruguayan nationally representative survey of 9th grade students and exploit the quasi-random variation in the proportion of female peers across classes within schools for causal identification. Results show that a higher exposure to female peers in the class leads to more progressive gender norms. Furthermore, these effects in gender perceptions are driven mostly by male students.

Rani, N., & Chu, S. L. (2022). **Wearables can help me learn: A survey of user perception of wearable technologies for learning in everyday life**. *Education and Information Technologies*, *27*(3), 3381-3401. https://doi.org/10.1007/s10639-021-10726-6
Wearable devices are a popular class of portable ubiquitous technology. These devices are available in a variety of forms, ranging from smart glasses to smart rings. The fact that smart wearable devices are attached to the body makes them particularly suitable to be integrated into people's daily lives. Thus, we propose that wearables can be particularly useful to help people make sense of different kinds of information and situations in the course of their everyday activities, in other words, to help support learning in everyday life. Further, different forms of wearables have different affordances leading to varying perceptions and preferences, depending on the purpose and context of use. While there is research on wearable use in the learning context, it is mostly limited to specific settings and usually only explores wearable use for a specific task. This paper presents an online survey with 70 participants conducted to understand users' preferences and perceptions of how wearables may be used to support learning in their everyday life. Multiple ways of use of wearable for learning were proposed. Asking for information was the most common learning-oriented use. The smartwatch/wristband, followed by the smart glasses, was the most preferred wearable form factor to support learning. Our survey results also showed that the choice of wearable type to use for learning is associated with prior wearable experience and that perceived social influence of wearables decreases significantly with gain in the experience with a fitness tracker. Overall, our study indicates that wearable devices have untapped potential to be used for learning in daily life and different form factors are perceived to afford different functions and used for different purposes.

Richardot, S., & Vermunt, M.-F. (2021). **Faut-il toujours obéir à la maîtresse ? Soumission à l'autorité et autonomie de jugement chez les élèves de maternelle et d'élémentaire**. *Revue française de pédagogie. Recherches en éducation*, (213), 5-21. https://doi.org/10.4000/rfp.11034
Comment des élèves appréhendent-ils les situations dans lesquelles une autorité légitime (en l'occurrence une enseignante) leur demande d'agir contre un tiers ? Comment articulent-ils leur sentiment d'obligation à obéir à l'adulte avec leur souci, éventuel, de ne pas nuire à autrui ? L'étude a été menée auprès d'un échantillon d'élèves (5-6 ans et 9-10 ans) invités à réagir à un scénario mettant en scène deux situations d'« abus d'autorité ». Les résultats montrent que la propension à remettre en cause la parole de l'enseignante varie selon l'âge, le sexe et le niveau scolaire des élèves.

Román, D., Arias, J. M., Sedlacek, Q. C., & Pérez, G. (2022). **Exploring Conceptions of Creativity and Latinidad in Environmental Education Through the Lens of Culturally Sustaining Pedagogy**. *Review of Research in Education*, 46(1), 32-63. https://doi.org/10.3102/0091732X221084332

Environmental education seeks to foster meaningful connections to local and global environments through creative nature experiences. Responding to critiques of historical inequities, practitioners are prioritizing equitable access for historically marginalized youth, particularly from Black, Indigenous, and Latinx communities; this identity-centered prioritization, while essential, generates questions of normativity, diversity, relevance, and engagement within identity groups. Drawing on creativity as meaningful person-world encounters characterized by pluriperspective, future-oriented, nonlinear, and open-ended qualities, this chapter uses culturally sustaining pedagogy to explore how environmental education studies (a) operationalize Latinidad and associated constructs, (b) enact creative experiences in environmental education, and (c) qualify the roles of Latinx communities in shaping these creative experiences. We review studies of environmental education with Latinx youth in the United States that explicitly employ culturally sustaining approaches to engage these communities. We bring together these frameworks as a strategy to move beyond discrete notions of Latinidad in environmental education and toward nuanced conceptions of what it means to acknowledge and cultivate environmental literacies in these diverse comunidades.

Rousell, D., Harris, D. X., Wise, K., MacDonald, A., & Vagg, J. (2022). **Posthuman Creativities: Democratizing Creative Educational Experience Beyond the Human**. *Review of Research in Education*, 46(1), 374-397. https://doi.org/10.3102/0091732X221084316
This chapter explores the urgent relevance of posthumanist theory and practice for democratizing creative educational experiences in 21st-century schools, universities, and informal learning environments. Posthumanism challenges the myopic centering of the human in creative education in an age of climate change, artificial intelligence, and zoonotic disease, where nonhuman agencies are intricately imbricated in human cultures and lives. Using a cartographic methodology, the chapter critically maps key theories and debates in posthumanist creativity studies across four substantive fields of inquiry: (a) process philosophy, (b) affect studies, (c) place-based education, and (d) creative ecology. Drawing links between theoretical concepts and practical examples of creative experience across formal and informal education contexts, the chapter scopes an alternative agenda for critical studies of creativity in light of the posthuman turn.

Rousset, P. (2022). **Le digital choisit la formation en situation de travail, catalyseur d'innovation**. *Céreq Bref*, (421), 1-4. https://doi.org/10.57706/CEREQBREF-0421
La formation en situation de travail est souvent perçue comme une alternative au cadre traditionnel des cours et stages, particulièrement adaptée aux salariés les moins qualifiés ou aux petites entreprises. Elle est pourtant très largement utilisée par les entreprises innovantes du numérique pour former des salariés hautement qualifiés. Pourquoi ces entreprises font-elles le choix de ce mode de formation ? Dans quelle mesure est-il lié à l'innovation ? Une étude du Céreq propose des éléments de réponse.

Simungala, G., Ndalama, D., & Jimaima, H. (2022). **Communicative Practices from the Margins: The Multilingual and Multicultural Repertoires on University Spaces**. *Journal of Asian and African Studies*, 57(4), 712-724. https://doi.org/10.1177/00219096211035416
We draw from the meaning-making practices on the margins, the communicative repertoires of the multilingual and multicultural students at two Southern African universities: the University of Zambia in Lusaka, Zambia; and the University of Malawi in Zomba, Malawi. As our locus, we are interested in the unique linguistic/semiotic coinages

which constitute the students? linguistic repertoires as multilingual innovations amenable to placemaking. In an attempt to do this, we purposefully unearth lexical innovations which we analyse within the broader framework of translanguaging. Thus, we show the emergence of (new) lexical items through the (re-)invention and disinvention of communicative resources, and the deployment of material artefacts of place as a basis for the creativity and innovation through repurposing of lexical items for new uses. Thus, we privilege students as active manipulators of their communicative practices by showing the semiotic/linguistic creativity and innovation inherent in their repertoires.

Souto-Manning, M., Emerson, A. C., Marcel, G., Rabadi-Raol, A., & Turner, A. (2022). **Democratizing Creative Early Educational Experiences: A Matter of Racial Justice**. *Review of Research in Education*, 46(1), 1-31. https://doi.org/10.3102/0091732X221084327
Inquiring into the democratization of creative early educational experiences through the lens of the politics of belonging, this review of research asks: What does research reveal about creative early educational experiences as they pertain to history, race, and justice? Seeking to better understand the racialization of creative early educational experiences, this review undertakes a transformative justice in education approach, attending to the historical roots of the contemporary racialized politics of belonging. Despite the creativity, improvisation, and imagination displayed historically by Black, Indigenous, and other Communities of Color, findings underscore how creative educational experiences prioritize Eurocentric onto-epistemologies, (re)inscribing inequitable schooling. Creative disruption and Black futurities offer two possible pathways to disrupt the legacy of racism in U.S. early schooling.

Stanfield, E., Slown, C. D., Sedlacek, Q., & Worcester, S. E. (2022). **A Course-Based Undergraduate Research Experience (CURE) in Biology: Developing Systems Thinking through Field Experiences in Restoration Ecology**. *CBE—Life Sciences Education*, 21(2), ar20. https://doi.org/10.1187/cbe.20-12-0300
Course-based undergraduate research experiences (CUREs) introduce research leading to skills acquisition and increased persistence in the major. CUREs generate enthusiasm and interest in doing science and serve as an intervention to increase equity and participation of historically marginalized students. In the second-semester laboratory of our introductory sequence for biology and marine science majors at California State University Monterey Bay (CSUMB), instructors updated and implemented a field-based CURE. The goals of the CURE were to promote increased scientific identity, systems thinking, and equity at a Hispanic-serving institution (HSI). Through the CURE, students engaged in scientific writing through a research paper with a focus on information literacy, critical thinking, and quantitative reasoning as important elements of thinking like a scientist. Course exams also revealed that students showed gains in their ability to evaluate a new biological system using systems thinking. More broadly, because such field-based experiences demonstrate equity gains among Latinx students and a much greater sense of scientific identity, they may have impacts beyond introductory biology including in students' personal and professional lives.

Tian, J., Koh, J. H. L., Ren, C., & Wang, Y. (2022). **Understanding higher education students' developing perceptions of geocapabilities through the creation of story maps with geographical information systems**. *British Journal of Educational Technology*, 53(3), 687-705. https://doi.org/10.1111/bjet.13176

The technical skills of using geographical information systems (GIS) are often taught in different higher education disciplines apart from geocapabilities or geographic disciplinary expertise. Theorised to include capabilities such as spatial thinking, geographical imagination and structured ways to explore places, the concept of geocapabilities has been developed from educator perspectives but student perspectives have yet to be empirically examined. Drawing upon recommendations that students can better acquire geocapabilities through research and authentic problem-solving, this study examines how 27 higher education students' perceptions of geocapabilities evolved as they learnt technical skills of web mapping through investigating real-world issues with ArcGIS StoryMaps. Content analyses of students' pre- and post-class reflections suggest that students' perceptions aligned with existing theorisations of geocapabilties in areas such as spatial thinking and geographical imagination. However, students also perceived that geographers need curiosity, interest, enthusiasm, and love for geography, and generic skills for working and living in the world that are not geography-related. Through making story maps with GIS, students' perceptions of geocapabilities shifted significantly in the areas of geographical practice and application, geographical imagination and interdisciplinarity. The implications of these findings for higher education teaching of GIS and how it informs the theorisation of geocapabilities are discussed. Practitioner notes What is already known about this topic Walkington et al. conceptualized geocapabilities from educator perspectives, characterizing it by geographical imagination, ethical subject-hood, integrative thinking about society and environment, spatial thinking, and structured exploration of place. This has not been investigated empirically from students' perspectives. There is preponderant evidence that the use of geographical information systems (GIS) such as ArcGIS Online and other geospatial technologies can improve students' spatial thinking skills and subject knowledge but how it may develop other geocapabilities have not been examined. What this paper adds There were shifts in undergraduates' conceptions of geocapabilities as they learnt ArcGIS StoryMaps by researching and producing story maps about real-world issues through flipped classrooms. Like Walkington et al., students conceived geocapabilities to include spatial thinking and geographical imagination but they perceived the other geocapabilities as interdisciplinarity and geographical practice and application. Students also perceived geographers as needing curiosity, interest, enthusiasm and love for geography, and generic capabilities to manoeuvre different tools and skills for working, ways of thinking and ways of working. Implications for practice and/or policy Students' and educators' view could be synthesized and better defined to create a more comprehensive and inclusive framework of geocapabilties. Students can better develop insights about different geocapabilities when they learn GIS technologies through researching real-world issues. GIS teachers can use flipped classrooms to synthesize teaching and learning about GIS and teaching and learning with GIS.

Tsoni, R., Panagiotakopoulos, C. T., & Verykios, V. S. (2022). **Revealing latent traits in the social behavior of distance learning students**. *Education and Information Technologies*, *27*(3), 3529-3565. https://doi.org/10.1007/s10639-021-10742-6
This paper proposes a multilayered methodology for analyzing distance learning students' data to gain insight into the learning progress of the student subjects both in an individual basis and as members of a learning community during the course taking process. The communication aspect is of high importance in educational research. Additionally, it is difficult to assess as it involves multiple relationships and different levels

of interaction. Social network analysis (SNA) allows the visualization of this complexity and provides quantified measures for evaluation. Thus, initially, SNA techniques were applied to create one-mode, undirected networks and capture important metrics originating from students' interactions in the fora of the courses offered in the context of distance learning programs. Principal component analysis and clustering were used next to reveal latent students' traits and common patterns in their social interactions with other students and their learning behavior. We selected two different courses to test this methodology and to highlight convergent and divergent features between them. Three major factors that explain over 70% of the variance were identified and four groups of students were found, characterized by common elements in students' learning profile. The results highlight the importance of academic performance, social behavior and online participation as the main criteria for clustering that could be helpful for tutors in distance learning to closely monitor the learning process and promptly interevent when needed.

Vuorikari, R., Kluzer, S., & Punie, Y. (2022). ***DigComp 2.2: The digital competence framework for citizens - with new examples of knowledge, skills and attitudes***. Consulté à l'adresse https://publications.jrc.ec.europa.eu/repository/bitstream/JRC128415/JRC128415_01.pdf
Le cadre européen des compétences numériques pour les citoyens, également connu sous le nom de DigComp, propose une langue commune pour identifier et décrire les domaines clés en matière de compétences numériques. Cet outil doit améliorer les compétences numériques des citoyens, aider les décideurs à formuler des politiques qui soutiennent l'acquisition des compétences numériques et permettre de préparer des projets éducatifs et de formation visant à faire progresser les compétences numériques de certains publics. Ce rapport présente la version 2.2 du cadre européen des compétences numériques pour les citoyens. La première partie fournit plus de 250 nouveaux exemples de connaissances, compétences et comportements qui aident les citoyens à prendre en main les technologies numériques – par exemple des systèmes gérés grâce à l'intelligence artificielle. La seconde partie donne un aperçu des supports de référence existants pour DigComp en vue d'étayer des publications et des références.

Zhan, Q., Chen, X., & Retnawati, E. (2022). **Exploring a construct model for university makerspaces beyond curriculum**. *Education and Information Technologies*, *27*(3), 3467-3493. https://doi.org/10.1007/s10639-021-10761-3
Makerspaces aim to revolutionize the current higher education by providing a means for students to be directly involved in many scientific projects and develop various kinds of skills. While researchers have made progress in understanding different makerspaces and the increase of making in education, the reality is that a specific makerspace may be rather different from many other contexts. As makerspace programs expand around universities in Tianjin, China, it needs a robust framework and a construct model to set the foundation for understanding key makerspace elements beyond curriculum, and to be used for research and verification of these experiences to advance work. Therefore, this paper provides the development and explanation of a construct model of influencing factors for makers in the universities applied beyond curriculum. Methods of questionnaire survey, descriptive statistics, multiple linear regression, and correlation analysis were used to explore the influencing factors of makerspace. The results are as follows: the innovation awareness of the maker subject is positively correlated with

teamwork; the innovation awareness and teamwork are positively related to the effect feedback of the makerspace; Activating interest in maker activities is positively related to deep research, putting into practice, and precise creation; deep research has a positive correlation with putting into practice, and putting into practice has a direct correlation with precision creation. In maker resources, Internet resources positively correlate with the sharing of university resources, and Internet resources and university resources positively correlate with enterprise resources. In this paper, a novel theoretical framework and a construct model of makerspaces beyond curriculum offered enables us to analyze future practices and the resulting development of future-making.

Ziols, R., Davis, N. R., Holbrook, T., & Bridges, S. (2022). **Creativity as a Racializing and Ableizing Scientific Object: Disentangling the Democratic Impulse From Justice-Oriented Futures**. *Review of Research in Education*, 46(1), 345-373. https://doi.org/10.3102/0091732X221089973
In this review of literature, we attend to some of the ways that well-intentioned hopes for fostering creativity and encouraging greater inclusion may also rely on problematic premises that work to reify exclusionary logics and practices. More specifically, we historicize and critically examine how creativity studies—often despite explicit efforts to broaden notions of creativity, include marginalized populations, and democratize education—have differently reanimated racializing and ableizing discourses over seven decades of efforts to scientifically study, define, and/or cultivate creativity. In our emphasis on the relationship between past and present designs, we attend to more pernicious tensions and concerns that continue to hold implications for scholarship, research, policy, and practice.

Aspects économiques de l'éducation

Adamecz-Völgyi, A., Henderson, M., & Shure, N. (2022). *The labor market returns to « first in family » university graduates* (GLO Discussion Paper Series N° 1057). Consulté à l'adresse Global Labor Organization (GLO) website: https://econpapers.repec.org/paper/zbwglodps/1057.htm
The labor market returns to « first in family » university graduates We examine how first in family (FiF) graduates (those whose parents do not have university degrees) fare on the labor market. We find that among women, FiF graduates earn 7.4% less on average than graduate women whose parents have a university degree. For men, we do not find a FiF wage penalty. A decomposition of the wage difference between FiF and non-FiF graduates reveals two interesting findings. First, two-thirds of the female FiF penalty are explained by certain characteristics, including: having lower attainment in school, attending an elite university, selecting particular degree courses, working in smaller firms, working in jobs that do not require their degree, and motherhood. Second, FiF graduate men also differ in their endowments from non-FiF graduate men; however, FiF men earn higher returns on their endowments than non-FiF men and thus compensate for their relative social disadvantage, while FiF women do not. We also estimate the returns to graduation for potential FiF and non- FiF young people. We find that the wage returns to graduation are not lower among FiF graduates compared to those who match their parents with a degree. The effects of coming from a lower educated family are large and positive for men and large and negative for women in general, irrespective of

graduation. We provide some context, offer explanations, and suggest implications of these findings.

Agüero, J., Galarza, F., & Yamada, G. (2022). *Do Inclusive Education Policies Improve Employment Opportunities? Evidence from a Field Experiment* (Working Paper N° 2022-07). Consulté à l'adresse University of Connecticut, Department of Economics website: https://econpapers.repec.org/paper/uctuconnp/2022-07.htm
We study the employment opportunity of a college scholarship for high-achieving, low-income students in a labor market where disadvantaged groups are discriminated against. Using a correspondence audit-study we find that including information of being a scholarship recipient in a resume increases the likelihood of getting a callback for a job interview by 20%. However, the effects are much smaller in jobs and careers where the poor are under-represented. We show that this is consistent with the scholarship also sending a negative signal to employers and helps explain why actual beneficiaries almost never mention the scholarship in their resumes.

Angelov, N., Johansson, P., Pihl, A., & Lindahl, M. (2022). *Earnings expectations and educational sorting. An ex-ante perspective on returns to university education* (Working Paper Series N° 2022:5). Consulté à l'adresse IFAU - Institute for Evaluation of Labour Market and Education Policy website: https://econpapers.repec.org/paper/hhsifauwp/2022_5f005.htm
We estimate means and distributions of ex-ante treatment effects for obtaining university education relative to high school. To achieve this, we conducted a survey which elicited earnings expectations associated with counterfactual educational choices for a sample of high-school students in Stockholm. We find average ex-ante returns to university to be 36%, with higher returns for females, those with high SES backgrounds, and high math scores. The returns vary considerably and are highest for those that choose university, but also positive and sizable for those who do not. Our results imply that students sort into education based on their comparative advantage. Nevertheless, our results suggest that an OLS estimator of the returns to university education should be expected to be quite similar to the average treatment on the treated effect for university education. Additionally, we find evidence that the positive ex-ante earnings returns to high paying fields, among those that do not choose these fields, can (partly) be reconciled by individuals expecting to be compensated through higher non-pecuniary returns to those fields.

Baron, E. J., Hyman, J., & Vasquez, B. N. (2022). *Public School Funding, School Quality, and Adult Crime* (NBER Working Paper N° 29855). Consulté à l'adresse National Bureau of Economic Research, Inc website: https://econpapers.repec.org/paper/nbrnberwo/29855.htm
This paper asks whether improving the quality of public schools can be an effective long-run crime-prevention strategy in the U.S. Specifically, we examine the effect of school quality improvements early in children's lives on the likelihood that they are arrested as adults. We exploit quasi-experimental variation in school quality due to increases in public school funding, leveraging two natural experiments in Michigan and a novel administrative dataset linking the universe of Michigan public school students to adult criminal justice records. The first research design exploits variation in operating expenditures due to Michigan's 1994 school finance reform, Proposal A. The second design exploits variation in capital spending by leveraging close school district capital

bond elections in a regression discontinuity framework. In both cases, we find that students exposed to additional funding during elementary school were substantially less likely to be arrested in adulthood. We show that the Marginal Value of Public Funds of improving school quality (via increases in funding) is greater than one, even when considering only the crime-reducing benefits.

Beg, S., Halim, W., Lucas, A. M., & Saif, U. (2022). **Engaging Teachers with Technology Increased Achievement, Bypassing Teachers Did Not**. *American Economic Journal: Economic Policy*, *14*(2), 61-90. https://doi.org/10.1257/pol.20200713
Using two RCTs in middle schools in Pakistan, we show that brief, expert-led, curriculum-based videos integrated into the classroom experience improved teaching effectiveness: student test scores in math and science increased by 0.3 standard deviations, 60 percent more than the control group, after 4 months of exposure. Students and teachers increased their attendance, and students were more likely to pass the high-stakes government exams. By contrast, providing similar content to students on personal tablets decreased student scores by 0.4 SD. The contrast between the two effects shows the importance of engaging teachers and the potential for technology to do so.

Bizopoulou, A., Megalokonomou, R., & Simion, S. (2022). *Do Second Chances Pay Off? Evidence from a Natural Experiment with Low-Achieving Students* (IZA Discussion Paper N° 15139). Consulté à l'adresse Institute of Labor Economics (IZA) website: https://econpapers.repec.org/paper/izaizadps/dp15139.htm
In several countries, students who fail end-of-high-school high-stakes exams are faced with the choice of retaking them or forgoing postsecondary education. We explore exogenous variation generated by a 2006 policy that imposed a performance threshold for admission into postsecondary education in Greece to estimate the effect of retaking exams on a range of outcomes. Using a fuzzy regression discontinuity design and novel administrative data, we find that low-achieving students who retake national exams improve their performance by half a standard deviation, but do not receive offers from higher quality postsecondary placements. The driving mechanism for these results stems from increased competition.

Bregvadze, T., & Medjad, K. (2022). **A case of post-Soviet dissidence: Georgia's free doctorate**. *European Journal of Education*, *57*(2), 168-180. https://doi.org/10.1111/ejed.12503
After the collapse of the Soviet Union, the universities of the former Soviet states faced a lack of public funding that left them with tuition fees as their main—and sometimes only—source of revenue. In a context where universities were exclusively focused on their economic survival, the decision of Ilia State University (ISU) to introduce in 2008 a tuition-free doctoral programme in Georgia was thus a striking exception. This free PhD programme still exists and more than a decade later, its rationale and hence, the question of whether its objectives have been achieved, remain controversial. The purpose of this article is to clarify these two aspects, using the perspective of stakeholders as primary data. Our findings challenge the dominant consensus on free higher education, in the sense that they show that the motives behind tuition-free programmes may be more diverse and ambiguous than what the literature suggests. Therefore, they also question the relevance of a standard analytical framework to assess the performance of such programmes. Thus, although local and limited in scope, our study

offers directions from various disciplinary perspectives for further analyses of the drivers and results of free education.

Briole, S., Gurgand, M., Maurin, E., McNally, S., Ruiz-Valenzuela, J., & Santín, D. (2022). *The Making of Civic Virtues: A School-Based Experiment in Three Countries* (IZA Discussion Paper N° 15141). Consulté à l'adresse Institute of Labor Economics (IZA) website: https://econpapers.repec.org/paper/izaizadps/dp15141.htm
With the rise of polarization and extremism, the question of how best to transmit civic virtues across generations is more acute than ever. In this paper, we test the hypothesis that schools can be the place for this transmission by empowering students and gathering them around concrete and democratically chosen objectives. We draw on an RCT implemented in a large sample of middle schools in three European countries. The evaluated program leads students to carry out collective citizenship projects in their immediate communities under the supervision of teachers trained in student-centered teaching methods. The program significantly increases student altruism, their political self-efficacy as well as the quality of their relationship with their classmates and their respect for the rules of school life (less sanctions and absenteeism). In all three countries, the benefits are greater for students with the highest level of altruism and interest in politics at baseline. Investments made at an early age appear to be complement to those made during adolescence for the production of civic virtues.

Cabrera, N. L., Karaman, A. K., Ballysingh, T. A., Oregon, Y. G., Gonell, E. A., Lopez, J. D., & Deil-Amen, R. (2022). **Race Without Gender? Trends and Limitations in the Higher Education Scholarship Regarding Men of Color**. *Review of Educational Research*, 92(3), 331-369. https://doi.org/10.3102/00346543211054577
The underrepresentation and underperformance of men of color relative to women of color within institutions of higher education have been extensively studied the past 20 years. The purpose of this study is to understand trends in how this research has been conducted rather than understand "best practices" to support this student population. To achieve this, we reviewed 153 pieces of scholarship from 1999 to 2019 using an intersectional and critical content analysis approach. Findings revealed that the bulk of scholarship involved onetime interviews for its empirical foundations, and the overwhelming majority centered the racial experiences of Black and Latinx men. In contrast, few analyses critically explored gender, sexual orientation, or social class. Additionally, scholarship that centered Asian American, Indigenous, multiracial, and trans* men of color was scant or nonexistent. Given these large gaps in the knowledge base, we offer guidance for the next generation of men of color in higher education scholarship in terms of analytical foci, theoretical frameworks, and methodologies.

Cattan, S., Kamhöfer, D. A., Karlsson, M., & Nilsson, T. (2022). *The long-term effects of student absence: Evidence from Sweden* (DICE Discussion Paper N° 383). Consulté à l'adresse Heinrich Heine University Düsseldorf, Düsseldorf Institute for Competition Economics (DICE) website: https://econpapers.repec.org/paper/zbwdicedp/383.htm
Despite the relatively uncontested importance of promoting school attendance in the policy arena, little evidence exists on the causal effect of school absence on long-run socio-economic outcomes. We address this question by combining historical and administrative records for cohorts of Swedish individuals born in the 1930s. We find that primary school absence significantly reduces contemporaneous academic performance, final educational attainment and labor income throughout the life-cycle.

The findings are consistent with a dynamic model of human capital formation, whereby absence causes small immediate learning losses, which cumulate to larger human capital losses over time and lead to worse labor market performance.

Collins, M. (2022). *Sibling Gender, Inheritance Customs and Educational Attainment: Evidence from Matrilineal and Patrilineal Societies* (Working Paper N° 2022:5). Consulté à l'adresse Lund University, Department of Economics website: https://econpapers.repec.org/paper/hhslunewp/2022_5f005.htm
Using data from 27 sub-Saharan African countries, I identify the causal effect of sibling gender on education and how it varies according to inheritance customs. Boys who inherit their father's property experience no effect of sibling gender, while boys who do not inherit experience a significant negative effect of having a brother. Having a brother has a small negative effect on the education of girls, regardless of inheritance customs. The effect of sibling gender converges after the introduction of laws guaranteeing that children inherit from their parents, suggesting that parents substitute between transferring inheritance and investing in their children's education.

Cultrera, L., Mahy, B., Rycx, F., & Vermeylen, G. (2022a). *Educational and Skills Mismatches: Unravelling Their Effects on Wages Across Europe* (GLO Discussion Paper Series N° 1059). Consulté à l'adresse Global Labor Organization (GLO) website: https://econpapers.repec.org/paper/zbwglodps/1059.htm
This paper is among the firsts to investigate the impact of overeducation and overskilling on workers' wages using a unique pan-European database covering twenty-eight countries for the year 2014, namely the CEDEFOP's European Skills and Jobs (ESJ) survey. Overall, the results suggest a wage penalty associated with overeducation. When interacting educational mismatch with skills mismatch into apparent overeducation and genuine overeducation, the results suggest that the highest wage penalty is reached for workers that are both overeducated and overskilled.

Cultrera, L., Mahy, B., Rycx, F., & Vermeylen, G. (2022b). *Educational and Skills Mismatches: Unravelling Their Effects on Wages Across Europe* (Working Papers CEB N° 22-004). Consulté à l'adresse ULB -- Universite Libre de Bruxelles website: https://econpapers.repec.org/paper/solwpaper/2013_2f340172.htm
This paper is among the firsts to investigate the impact of overeducation and overskilling on workers' wages using a unique pan-European database covering twenty-eight countries for the year 2014, namely the CEDEFOP's European Skills and Jobs (ESJ) survey. Overall, the results suggest a wage penalty associated with overeducation. When interacting educational mismatch with skills mismatch into apparent overeducation and genuine overeducation, the results suggest that the highest wage penalty is reached for workers that are both overeducated and overskilled.

Dench, D., & Joyce, T. (2022). *Information and Credible Sanctions in Curbing Online Cheating Among Undergraduates: a Field Experiment* (NBER Working Paper N° 29755). Consulté à l'adresse National Bureau of Economic Research, Inc website: https://econpapers.repec.org/paper/nbrnberwo/29755.htm
The rapid increase in online instruction in higher education has heightened concerns about cheating. We use a randomized control design to test whether informing students that we can detect plagiarism reduces cheating. We further test whether informing students they have been caught cheating reduces subsequent cheating. We find

informing students about our capability to detect plagiarism has little effect on cheating. Notifying students that they have been caught cheating and are on a watch list reduces subsequent cheating attempts by at least 65 percent depending on the class and sample. We test for peer effects but conclude we cannot credibly identify peer effects distinct from own-cheating propensities.

Eberle, M., & Oberrauch, L. (2022). ***What a difference three years of economics education make: Evidence from lower-track schools in Germany*** [EconStor Preprints]. Consulté à l'adresse ZBW - Leibniz Information Centre for Economics website: https://econpapers.repec.org/paper/zbwesprep/250909.htm
A large body of literature documents that school-based financial education generally improves financial knowledge, yet little is known about the effect of instruction in the broader economic domain. This paper evaluates the effect of a curriculum reform introducing mandatory economic education on economic competence and knowledge in German lower-track schools, in which students have lower socio-economic status and end up having lower incomes when entering the workforce. While we find small but positive effects on basic economic knowledge and interest in economic matters, we observe no effects on competences, i.e., factual and procedural knowledge in the economic domain. Quantile regressions reveal that the effect on students' knowledge is widely consistent across the entire distribution. With regard to socio-demographic characteristics, we observe strong gender differences already before adulthood.

Ecton, W. G., & Dziesinski, A. B. (2022). **Using Punctuated Equilibrium to Understand Patterns of Institutional Budget Change in Higher Education**. *The Journal of Higher Education*, 93(3), 424-451. https://doi.org/10.1080/00221546.2021.1985884
In this paper, we employ Punctuated Equilibrium Theory to consider institutions' shifting goals, priorities, and constraints, and to explore the nature of change at colleges and universities in the United States. By exploiting annual changes in institutional budget decisions over a 29-year period, we seek to understand the extent to which institutions exhibit patterns of punctuated equilibrium, which are characterized by long periods of relative equilibrium (stasis) and of occasional extreme changes (punctuations). Broadly, we find that institutions of higher education allocate funds in a pattern characteristic of Punctuated Equilibrium, and that certain types of institutions are more likely than others to exhibit this pattern. Taken in whole, this paper calls into question a prevailing perspective on change in higher education — that change is slow-moving, moderate, and incremental. Instead, we posit that a framework of Punctuated Equilibrium may better describe how researchers and practitioners should consider institutional change within higher education.

Espino, M. L., Rodriguez, S. L., & Le, B. D. (2022). **A Systematic Review of Literature: Engineering Identity and Students with Financial Need in Community Colleges**. *Community College Journal of Research and Practice*, 46(5), 352-363. https://doi.org/10.1080/10668926.2020.1856218
A review of studies published between 2000 and 2017 was conducted to understand students' engineering identity and their financial need within the community college setting. The review found that research studies used a variety of frameworks and methodologies to investigate community college engineering identity and financial need. In addition, scholars focused on investigating engineering identity across

disciplines, rather than engineering identity within distinct sub-disciplines. Overall, studies focused on the importance of engineering transfer support and engagement. The review of current literature implicates that additional work is needed on engineering identity in relation to community college students with financial need, particularly in terms of more diverse methods and sampling. This study also points to the need of support and services that can understand, engage, and support students from community colleges with financial need passed on their identities.

Fadda, N., Marinò, L., Pischedda, G., & Ezza, A. (2022). **The effect of performance-oriented funding in higher education: evidence from the staff recruitment budget in Italian higher education**. *Higher Education*, *83*(5), 1003-1019. https://doi.org/10.1007/s10734-021-00725-4
This study, which aims to investigate some potential effects derived from the adoption of performance-oriented funding in the higher education system, is focused on competitive allocative mechanism to provide universities with the staff recruitment budget in the Italian Higher Education System using panel data spanning the period 2012–2018 for 58 public universities. Results show that the geographical area in which universities operate influences their capacity to increase performance and thus financial resources. Indeed, universities located in Northern areas, the wealthier part of Italy, received a higher amount of resources than those located in the rest of the country. These findings reveal the key role played by external factors, which are beyond the control of management, in universities' capacity to achieve better performance. Results also suggest that policy-makers should identify the correct trade-off between the quest for higher performance within the Italian Higher Education System and equity in resource allocation.

Figinski, T., Lloro, A., & Moorthy, A. (2022). *Revisiting the Effect of Education on Later Life Health* (Finance and Economics Discussion Series N° 2022-007). Consulté à l'adresse Board of Governors of the Federal Reserve System (U.S.) website: https://econpapers.repec.org/paper/fipfedgfe/2022-07.htm
We provide new evidence on the effect of education on later life health. Using variation in state compulsory schooling laws, we examine education's effect on a range of outcomes encompassing physical health, decision-making, and life expectancy. We employ under-utilized Health and Retirement Study data linked to restricted geographic identifiers, allowing us to match individuals more accurately to compulsory schooling laws. While positively related to educational attainment, compulsory schooling laws have no significant effect on later life health outcomes. Our results suggest that increased educational attainment has no significant causal effect on health.

Hanushek, E. A., Jacobs, B., Schwerdt, G., Van der Velden, R., Vermeulen, S., & Wiederhold, S. (2022). *The intergenerational transmission of cognitive skills: An investigation of the causal impact of families on student outcomes* (Working Paper N° 09). Consulté à l'adresse University of Konstanz, Cluster of Excellence « The Politics of Inequality. Perceptions, Participation and Policies » website: https://econpapers.repec.org/paper/zbwcexwps/09.htm
The extensive literature on intergenerational mobility highlights the importance of family linkages but fails to provide credible evidence about the underlying family factors that drive the pervasive correlations. We employ a unique combination of Dutch survey and registry data that links math and language skills across generations. We identify the connection between cognitive skills of parents and their children by exploiting within-

family between-subject variation in these skills. A causal interpretation of the between-subject estimates is reinforced by novel IV estimation that isolates variation in parent cognitive skills due to teacher and classroom peer quality. The between-subject and IV estimates of the key intergenerational persistence parameter are strikingly similar and close at about 0.1. Finally, we show the strong influence of family skill transmission on children's choices of STEM fields.

Hernandez, M., Pellerano, J. A., & Sanchez, G. (2022). ***Conditional cash transfers and high school attainment: Evidence from a large-scale program in the Dominican Republic*** (IFPRI Discussion Paper N° 2109). Consulté à l'adresse International Food Policy Research Institute (IFPRI) website: https://econpapers.repec.org/paper/fprifprid/2109.htm
Conditional cash transfer (CCT) programs are widely implemented in developing countries but evidence of their medium- and long-term effects on educational achievements is still relatively scarce. This paper examines the impact of a large-scale CCT program on high school attainment in the Dominican Republic. We implement a quasi-experimental approach combining extensive educational, administrative, and household records from program participants across the country and exploiting variations in the scheme (amount) of school transfers received among program participants. We find that receiving additional transfers specific for high school education is, on average, associated with an 11.7-13.2 percentage points higher probability of completing high school relative to not receiving these transfers. We do not find major differences across urban and rural areas nor between female and male students. The transfers seem to play an important role during the last high school year of targeted students. The estimated impacts point to non-negligible effects on employment, salaries, and delayed parenthood. Several robustness checks support our findings.

Holvio, A. (2022). ***Impact of teacher content knowledge on student achievement in a low-income country*** (WIDER Working Paper Series N° wp-2022-23). Consulté à l'adresse World Institute for Development Economic Research (UNU-WIDER) website: https://econpapers.repec.org/paper/unuwpaper/wp-2022-23.htm
This paper estimates the causal impact of teacher content knowledge on student achievement in Mozambique, a low-income country where a large share of fourth-graders fail to meet the minimum requirements of literacy and numeracy. I use nationally representative data from the Service Delivery Indicator survey, and exploit within-student across-subject variation in a sample of students taught by the same teacher in maths and Portuguese, thus circumventing bias caused by unobserved student and teacher heterogeneity.

Kapor, A. (2020). ***Distributional Effects of Race-Blind Affirmative Action*** [Working Paper]. Consulté à l'adresse Princeton University. Economics Department. website: https://econpapers.repec.org/paper/prieconom/2020-51.htm
This paper compares the impacts of providing information about college admissions and financial aid at scale to those of large-scale policies which directly impact admissions and financial aid offers. It uses variation induced by the « Top Ten Percent » policy in Texas, which guaranteed admissions to each in-state public university to all students ranking in the top decile of their high school class, to estimate a model of college applications, admissions, and achievement. Texas Top Ten caused more students from high-poverty schools to enroll at the flagship universities. Moreover, students who enrolled under it achieved higher GPAs than those who would have enrolled at flagships in its

absence, primarily because the admissions guarantee induced strong students to submit applications. Texas Top Ten had small effects on minority enrollment. An expansion of a targeted scholarship program would enroll more students from high-poverty schools than would purely-informative interventions.

Kofoed, M. S. (2022). *Pell Grants and Labor Supply: Evidence from a Regression Kink* (Upjohn Working Paper N° 22-363). Consulté à l'adresse W.E. Upjohn Institute for Employment Research website: https://econpapers.repec.org/paper/upjweupjo/22-363.htm
A concern in higher education policy is that students are taking longer to graduate. One possible reason for this observation is an increase in off-campus labor market participation among college students. Financial aid may play a role in the labor/study choice of college students—as college becomes more affordable, students my substitute away from work and toward increased study. I use data from the National Postsecondary Student Aid Study (NPSAS) to exploit nonlinearity in the Pell Grant formula to estimate a regression kink and regression discontinuity designs. I find that conditional on receiving the minimum of $550, students reduce their labor supply by 0.4 hours per week, which translates to a 2.4 percent decrease in hours worked. Students who receive the average Pell Grant of $2,250 are 7.6 percentage points (or around 12 percent) less likely to work and, if working, supply 5.10 less hours per week, or around 30.67 percent reduction. I find Pell Grants do increase academic achievement, implying that students substitute study time for work.

Levine, P. B. (2022). *A Problem of Fit: How the Complexity of College Pricing Hurts Students—and Universities*. Consulté à l'adresse https://press.uchicago.edu/ucp/books/book/chicago/P/bo141660399.html
A critical examination of the complex system of college pricing—how it works, how it fails, and how fixing it can help both students and universities. How much does it cost to attend college in the United States today? The answer is more complex than many realize. College websites advertise a sticker price, but uncovering the actual price—the one after incorporating financial aid—can be difficult for students and families. This inherent uncertainty leads some students to forgo applying to colleges that would be the best fit for them, or even not attend college at all. The result is that millions of promising young people may lose out on one of society's greatest opportunities for social mobility. Colleges suffer too, losing prospective students and seeing lower enrollments and less socioeconomic diversity. If markets require prices to function well, then the American higher-education system—rife as it is with ambiguity in its pricing—amounts to a market failure. In A Problem of Fit, economist Phillip B. Levine explains why institutions charge the prices they do and discusses the role of financial aid systems in facilitating—and discouraging—access to college. Affordability issues are real, but price transparency is also part of the problem. As Levine makes clear, our conversations around affordability and free tuition miss a larger truth: that the opacity of our current college-financing systems is a primary driver of inequities in education and society. In a clear-eyed assessment of educational access and aid in a post-COVID-19 economy, A Problem of Fit offers a trenchant new argument for educational reforms that are well within reach.

Lewis, J. (2022). **Higher education (freedom of speech) bill: progress of the bill**. In *https://veille-et-analyses.ens-lyon.fr/Rapports/DetailRapport.php?parent=actu&id=3574*

[Report].   Consulté   à   l'adresse
https://researchbriefings.files.parliament.uk/documents/CBP-9295/CBP-9295.pdf
The Higher Education (Freedom of Speech) Bill was introduced in the House of Commons on 12 May 2021. It would implement legislative proposals included in a Department for Education policy paper published in February 2021, which set out the Government's view that freedom of speech was under threat across higher education. The Bill would extend and strengthen existing legislation intended to uphold freedom of speech and academic freedom in registered higher education providers and students'unions. The Bill passed its second reading in the House of Commons on 12 July 2021 and its committee stage on 21 September 2021. A date for report stage and third reading has not been announced. A carry-over motion has been tabled by the Government for 25 April 2022. If agreed, the Bill would continue its progress in the 2022-23 parliamentary session. SOMMAIRE 1 Background 1.1 The current legal framework 1.2 The issues the Government wants to address 1.3 What the Bill would do 2 Second reading debate 2.1 Support for the Bill 2.2 Opposition to the Bill 2.3 Vote on the Bill 3 Committee stage 3.1 Summary 3.2 Evidence sessions 3.3 Detailed consideration of the Bill 4 Carry-over motion

Lima, G., Nunes, L., Reis, A., & Seabra, M. do C. (2022). **No country for young kids? The effects of school starting age throughout childhood and beyond** [Nova SBE Working Paper Series]. Consulté à l'adresse Universidade Nova de Lisboa, Nova School of Business and Economics website: https://econpapers.repec.org/paper/unlunlfep/wp639.htm
Being the youngest in a cohort entails many penalties. Using administrative data of every public-school student in Portugal, we show that although performance gains from being 1-year older fade quickly from primary education to high school, age-related penalties persist through a combination of grade retention, educational tracking and testing policies. Those that start school younger are more likely to repeat grades and ultimately drop out from school. Older entrants are more likely to enroll in scientific curricula in high school, are more successful at accessing public higher education and enroll in more selective undergraduate courses.

Linder, A., Nordin, M., Gerdtham, U.-G., & Heckley, G. (2022). **Grading Bias and Young Adult Mental Health** (Working Paper N° 2022:7). Consulté à l'adresse Lund University, Department   of   Economics   website:
https://econpapers.repec.org/paper/hhslunewp/2022_5f007.htm
Various grading reforms and trends of more lenient grading have contributed to grade inflation in Sweden and other countries. Previous research shows that over-grading increases higher education enrolment, achievements and earnings, but no study has yet addressed the potential impact of grading bias on health. In this paper, we hypothesize that over-grading has a protective impact on mental health, either through a direct effect of performance feedback, or through mechanisms such as self-efficacy and university admission distortions. We test this hypothesis using Swedish individual-level register data for individuals graduating from upper secondary school in the years 2001-2004. Grading bias, which we interpret as over-grading, is constructed as the residual of final upper secondary school grades having controlled for results in a standardised test, itself not subject to grading leniency. Over-grading is further isolated by considering only within-school variation in over-grading and controlling for prior grades and school production. We show that over-grading has substantial significant protective impacts on the mental health of young adults, but only among female students. That grades themselves, independent of knowledge, substantially impact the production of health

highlights an important health production mechanism, and also implies that any changes to the design of grading systems must consider these wider health implications.

McKendrick, A. (2022). ***Paying Students to Stay in School*** (Working Paper N° 352591296). Consulté à l'adresse Lancaster University Management School, Economics Department website: https://econpapers.repec.org/paper/lanwpaper/352591296.htm
I examine the impact of the Education Maintenance Allowance, a conditional cash transfer in England that was available nationally from 2004 to 2011, on a range of short- and long-term outcomes. Average treatment effects are identified, assuming unconfoundedness, using Inverse Probability Weighting Regression Adjustment. Treatment effect heterogeneity is examined using Causal Forests, a new machine learning approach. I find beneficial impacts of EMA on retention, university attendance and, for the first time, insecure work, as measured by the probability of being on a â€œzero hoursâ€ contract. Other outcomes (educational attainment, risky behaviours, and labour market outcomes) are found not to be impacted.

Millemaci, E., & Patti, A. (2022). ***Nemo Propheta in Patria: Empirical Evidence from Italy*** (FEEM Working Paper N° 319966). Consulté à l'adresse Fondazione Eni Enrico Mattei (FEEM) website: https://econpapers.repec.org/paper/agsfeemwp/319966.htm
In recent years, young brain drain within Italian provinces has increased at higher speed than ever. While is premature to assess whether this process is transitory or permanent, it should be analysed and monitored by researchers and policy makers for its many socio-economic consequences. Previous empirical studies have demonstrated that Italian net skilled migration is influenced by economic factors, such as income per capita and employment, and, with a less extent, by the search of places endowed with more amenities. In the crossroad between these factors, this paper investigates corruption as key element of the Italian skilled mobility. To this end, a comprehensive framework with Zero-Inflated Poisson and Pseudo-Poisson Maximum Likelihood with High Dimensional Fixed Effects models for bilateral data on the Italian students' flows is used. Results suggest the dual role of push and pull mechanisms at play, as high corruption incentivizes Italian skilled mobility to destinations that, instead, exhibit lower corruption. Moreover, sensitivity of the prospective tertiary students to corruption varies according to their field of study of interest. Finally, empirical evidence on skilled flows from the lagging Mezzogiorno to the North of Italy, suggests that the push and pull effects of corruption stir up the endurance of the well-known socio-economic dualism between these two parts of the country.

Nano, E. (2022). ***Electrifying Nigeria: the Impact of Rural Access to Electricity on Kids' Schooling*** (IHEID Working Paper N° 03-2022). Consulté à l'adresse Economics Section, The Graduate Institute of International Studies website: https://econpapers.repec.org/paper/giigiihei/heidwp03-2022.htm
As of 2020, 770 million people still lack access to electricity worldwide and 10% of this population is in Nigeria. Nevertheless, the country has received so far little attention in this respect from the academic community. The economic literature also does not generally agree on the impact of access to electricity on education outcomes, despite being the object of several programmes and policies, and one of the key SDGs of the 2030 Agenda. This paper aims at filling these gaps in the literature by providing a medium-term analysis of the effect of village-level electricity access on kids' schooling in rural Nigeria. It also contributes to the methodological debate using a novel instrument in this context,

namely the frequency of lightning strikes in the area surrounding households. The results show that electricity access leads to an increase in school enrolment and a decrease in the grade-for-age (GFA) gap, a measure of educational performance. The paper also discusses some of the mechanisms that can lead to the observed findings, their robustness and heterogeneity, as well as the role of the quality of electricity received.

Neilson, C., Gallegos, S., Calle, F., & Karnani, M. (2022). *Screening and Recruiting Talent at Teacher Colleges Using Pre-College Academic Achievement* (Working Paper N° 2022-004). Consulté à l'adresse Human Capital and Economic Opportunity Working Group website: https://econpapers.repec.org/paper/hkawpaper/2022-004.htm
This paper studies screening and recruiting policies that restrict or incentivize entry to teacher-colleges. Using historical records of college entrance exam scores since 1967 and linking them to administrative data on the population of teachers in Chile, we first document a robust positive and concave relationship between precollege academic achievement and several short and long run measures of teacher productivity. We use an RD design to evaluate two recent policies that increased the share of high-scoring students studying to become teachers. We then show how data-driven algorithms and administrative data can enhance similar teacher screening and recruiting policies.

Rodriguez, A., Rodriguez-Wilhelm, D., Lebioda, K., Kapp, R., & Wilson, N. (2022). **Skin in the Game: A Policy Implementation Study of How School-Level Bureaucrats Set and Rationalize Advanced Placement Exam Fees for Low-Income Students**. *Research in Higher Education*, 63(3), 369-399. https://doi.org/10.1007/s11162-021-09652-w
As part of their strategies to increase college readiness and reduce educational inequalities, at least 29 states subsidize Advanced Placement (AP) exam fees for low-income students. However, while Michigan's state-level policy subsidized low-income student exams to $5 per exam, we found wide-ranging fee structures at high schools—from $0 to $50. Through a lens of policy implementation theory and using an embedded case study approach, this study examined this disjuncture between the state and school policies using interview data from 33 school personnel—counselors, AP Coordinators, administrators—in 31 high schools and state personnel in Michigan; state policy artifacts; and publicly available school data. We identified three major challenges—many schools hedged and set higher fees because they were unsure how much the legislature would approve each year; the state subsidy did not account for additional exam costs (e.g., exam proctors) that were passed down to the student; and the policy as written lacked enforceability and accountability. Policymakers were largely unaware of the amount schools ultimately charged low-income students. In the presence of an ambiguous policy and constrained resources, school personnel relied on their personal perspectives on fees and behavior (e.g., the need to reduce moral hazard and increase "skin in the game") to rationalize low-income students fees. Together, these findings help explain how low-income students pay vastly different AP exam fees depending on the high school they attend in Michigan—with some schools severely impeding low-income students' college preparatory opportunities.

Slungaard Mumma, K. (2022). **The Effect of Charter School Openings on Traditional Public Schools in Massachusetts and North Carolina**. *American Economic Journal: Economic Policy*, 14(2), 445-474. https://doi.org/10.1257/pol.20190457
The Effect of Charter School Openings on Traditional Public Schools in Massachusetts and North Carolina by Kirsten Slungaard Mumma. Published in volume 14, issue 2, pages 445-

74 of American Economic Journal: Economic Policy, May 2022, Abstract: The rapid expansion of charter schools has fueled conce...

Wang, S., Yu, X., Zhang, K., Pei, J., Rokpelnis, K., & Wang, X. (2022). **How does education affect intergenerational income mobility in Chinese society?** *Review of Development Economics*, 26(2), 774-792. https://doi.org/10.1111/rode.12863
Education has been proved to be one of the most important variables influencing intergenerational income mobility. Existing literature decomposes the indirect effect of education on intergenerational income mobility into two components: the effect of the correlation between a parents' income and their children's education, and the effect of the return to education. Basing on the framework of existed studies, this paper explores a beneficial application to measure the two components, and checks which effect is more important in explaining the inter-generational income mobility in Chinese society. Using data from the China Health and Nutrition Survey (CHNS), the research analyzes how education affects inter-generational income mobility, and estimates the respective contributions of the two effects of education. The empirical results show that the effect of education is of importance in explaining the increase in the intergenerational income correlation for 1960s, 1970s and 1980s of Chinese age groups. Meanwhile, after decomposing the effect of education, we find that the return on education has stronger explanatory power on intergenerational income mobility than the correlation between a father's income and his child's education. Therefore, the return to education should be the center of policy design for the Chinese government.

Weißmüller, K. S., & De Waele, L. (2021). *Would you Bribe your Lecturer? A Quasi-experimental Study on Burnout and Bribery in Higher Education* (OSF Preprints N° csvkd). Consulté à l'adresse Center for Open Science website: https://econpapers.repec.org/paper/osfosfxxx/csvkd.htm
Bribery is a complex and critical issue in higher education (HE), causing severe economic and societal harm. Traditionally, most scholarship on HE corruption has focused on institutional factors in developing countries and insights into the psychological and motivational factors that drive HE bribery on the micro-level mechanisms are virtually non-existent. To close this research gap, this study investigates the connection between study-related burnout and university students' willingness to offer bribes to their lecturers to pass important exams. Conducting a vignette-based quasi-experimental replication study with 624 university students in Germany, Belgium, and the Netherlands we find that university students in three countries differentiate sharply between different shades of bribery and that a majority accept using emotional influence tactics to pass (failed) exams. In contrast, offering a helping hand or money (i.e., darker shades of bribery) to their lecturer was less acceptable. Study-related burnout is associated with a higher likelihood of engaging in these darker shades of bribery and students' commitment to the public interest is but a weak factor in preventing unethical behavior. In summary, this study provides solid empirical evidence that university students are likely to use emotional influence tactics violating both the ethical codes of conduct and the formalized bureaucratic procedures of HE examination, particularly if they suffer from study-related burnout. However, the accelerating effect of burnout on bribery is conditional in that it only holds for darker shades of bribery. HE institutions may benefit from implementing the four-eye principle and from launching awareness campaigns that enable lecturers to better recognize these tactics and engage students in creating a transparent environment for testing, grading, and collaboration that is resistant to bribery.

Williams, J., & Usher, A. (2022). ***2022 World higher education: institutions, students and funding***. Consulté à l'adresse https://higheredstrategy.com/wp-content/uploads/2022/03/HESA_World-Higher-Education-2022_Main-Report-2.pdf
Le rapport présente un panorama complet de l'enseignement supérieur mondial, fournissant des données détaillées sur 56 systèmes nationaux d'enseignement supérieur (inscriptions, établissements, financements, mobilités). L'enseignement supérieur mondial a connu une croissance énorme depuis 2006, mais peu de tendances sont véritablement mondiales, avec des distinctions entre et au sein des régions. Alors que le nombre d'établissements d'enseignement supérieur a à peine changé dans le Nord, restant autour de 20 000 entre 2006 et 2018, dans le Sud, le nombre a presque doublé, passant d'un peu plus de 40 000 pour atteindre un total de 90 000 établissements, situés majoritairement en Inde. Il a y eu des augmentations de financement à travers le monde sur la majeure partie de la période couverte par la recherche (de 2005-06 à 2018). Cependant, lorsque les gouvernements du Nord augmentent les financements, c'est pour un nombre constant d'étudiants et les financements supplémentaires sont consacrés à la qualité, l'équité et la recherche. Dans le Sud, les financements sont principalement consacrés à l'augmentation de la capacité et de l'accès

Wondra, T. K., & McCrea, S. M. (2022). **Collective self-doubt: does subjective SES predict behavioral self-handicapping tendency in college students?** *Social Psychology of Education*, *25*(1), 129-167. https://doi.org/10.1007/s11218-021-09678-z
Self-handicapping is a defensive response to self-doubt about one's abilities to perform well on an upcoming task. It involves the creation via behavior, or claiming, of obstacles prior to the performance in order to excuse potential failure. Although past research has focused on individual-level threats to identity, self-doubt could also result from being a member of a stigmatized group. As a result, groups that experience stigmatization may report a heightened tendency to self-handicap. We specifically examined whether subjectively lower socioeconomic status (SES) associates with reports of engaging in self-handicapping behavior. Across four samples of college students, we observed consistent associations between subjective SES (but not objective SES) and self-reported tendency to behaviorally self-handicap. Controlling for aspects of susceptibility to stereotype threat (namely, disidentification with college and doubts about academic ability) statistically eliminated this association. The findings are consistent with a process whereby low subjective SES fosters self-doubt and domain disidentification, increasing the appeal of defensive behaviors like self-handicapping.

Zheng, A. (2022). **The Valuation of Local School Quality under School Choice**. *American Economic Journal: Economic Policy*, *14*(2), 509-537. https://doi.org/10.1257/pol.20200678
The Valuation of Local School Quality under School Choice by Angela Zheng. Published in volume 14, issue 2, pages 509-37 of American Economic Journal: Economic Policy, May 2022, Abstract: School choice programs break the link between residential location and school attendance, and should weaken the...

Aspects psychologiques de l'éducation

Bakonga, J. B. (2021). ***Usages pédagogiques des outils numériques en classe, compétences technologiques et motivation scolaire dans l'enseignement secondaire au***

Cameroun : Étude comparée des caractéristiques institutionnelles et individuelles.
(Phdthesis, CY Cergy Paris Université). Consulté à l'adresse https://tel.archives-ouvertes.fr/tel-03633583

L'étude du triplet, pratiques numériques, compétences et motivation, inhérente à une intégration efficace des TIC en classe, est centrale dans les programmes de discipline, via l'approche par compétence, mise en place au lycée au Cameroun depuis plus de 7 ans. Cette révolution pédagogique intervient plus de dix ans plus tard après des innovations technologiques, dans les établissements scolaires, et actuellement avec la mise en œuvre de plusieurs initiatives d'usage des outils numériques pour la formation continue et le développement professionnel des enseignants (Mian B. S., 2013), notamment la formation de nombreux enseignants fonctionnaires et auditeurs libres, formés en TIC ou en informatique fondamentale, dans les sept écoles normales supérieures , que compte le Cameroun. Cependant, des écarts demeurent entre les volontés des politiques numériques éducatives et la situation réelle d'utilisation des outils numériques en classe, observées sur le terrain. Cette étude, menée dans le contexte camerounais pluriculturel et bilingue, permet d'obtenir un éclairage plus parfait sur des facteurs qui stimulent le triplet pratiques pédagogiques, compétences et motivation des outils numériques. La question de recherche est donc de savoir quelles sont les usages éducatifs des outils numériques qui influenceraient la compétence en TIC et la motivation scolaire chez les élèves dans l'enseignement secondaire au Cameroun. L'objectif est d'identifier les usages pédagogiques des outils numériques des élèves inspirés des modèles de (Mian B. A., 2010; Touré, Mbangwana, & Sène, 2009), les types de compétences technologiques selon Desjardins (2005), les types et les profils de motivation scolaire selon la théorie d'auto-détermination de Deci et Ryan (2002) ; et ensuite analyser et mieux comprendre les similitudes et les différences qui existeraient entre les dimensions institutionnelles des établissements scolaires, les dimensions sociologiques ainsi que ethnoculturelles des élèves. Cette analyse est effectuée à partir du regard des élèves eux-mêmes et devrait constituer en soi un moyen de corroborer (ou non) les constats faits auprès des enseignants (Coen, Rey, Monnard, & Jauquier, 2013), d'une part, et des directions d'écoles, d'autre part. C'est une recherche inductive à caractère exploratoire, qui porte sur trois échantillons non probabilistes constitués respectivement de 18 écoles secondaires, 71 enseignants et 1525 élèves au titre des deux années scolaires, 2017 – 2018 et 2018 – 2019. Le choix méthodologique porte sur une étude multi-cas inspirée de (Yin, 1994 ; in (Tchameni Ngamo S. , 2007, p. 78)). La collecte des données s'est effectuée par le canal de trois questionnaires, des entretiens informels, semi-dirigés et de groupes, des observations des situations de terrain, et des analyses de documents divers. Les principaux résultats de cette présente étude, semblent mettre en valeur trois familles de facteurs qui se recoupent : le milieu social, l'origine sociale des élèves, et les études suivies ou facteur pédagogique. Ce qui nous a permis d'élaborer des hypothèses conclusives. Primo, les élèves de milieu social plus aisé, ont plus de familiarité avec les TICE en classe, un plus fort sentiment de compétence en TIC, et ont également une plus forte motivation autodéterminée à l'égard du numérique éducatif à l'école. Secundo, les études suivies jouent un rôle discriminant entre les lycéens, dans le contexte des trois phénomènes mesurés (usages éducatifs des outils numériques, compétences technologiques et motivation). Tertio, l'origine sociale telle que les facteurs personnels de l'élève jouent un rôle discriminant entre les lycéens, dans le contexte des trois phénomènes mesurés.

Barth, J. M., Masters, S. L., & Parker, J. G. (2022). **Gender stereotypes and belonging across high school girls' social groups: beyond the STEM classroom**. *Social Psychology of Education*, 25(1), 275-292. https://doi.org/10.1007/s11218-021-09683-2
Previous research on the impact of gender stereotypes on female adolescents' feeling of belonging to peer groups has focused on STEM classrooms and activities. This study expands this research and examines if perceptions of group-held gender stereotypes are related to adolescent girls' feelings of belonging to other social groups. Girls (N = 110) in advanced science and math classes (primarily 9th grade) completed an online survey that included questions about three groups: their science class, their close friendship group, and another peer group of their choosing, classified as their most important group (MIG). Questions about the groups included belonging, their perceptions of the group's gender stereotypical beliefs, and additional social contextual variables that are associated with belonging for girls—presence of close friends, presence of a best friend, and the number of girls relative to boys. Results indicated that girls perceived the different groups to hold different levels of gender stereotypical beliefs. Perceptions that a group held more traditional stereotypical beliefs was negatively correlated with belonging to each of the three groups. Regression analyses indicated the number of friends and perceptions of more traditional stereotypes predicted belonging to MIGs and science classes. Findings suggest that gender stereotypes may be an important factor in how adolescent girls perceive their belonging in many adolescent groups.

Brouwer, J., & Engels, M. C. (2022). **The role of prosocial attitudes and academic achievement in peer networks in higher education**. *European Journal of Psychology of Education*, 37(2), 567-584. https://doi.org/10.1007/s10212-020-00526-w
After the transition to university, students need to build a new peer network, which helps them to adapt to university life. This study investigated to what extent students' prosocial attitudes and academic achievement facilitate the embeddedness in friendship and help-seeking networks, while taking structural network characteristics into account. Participants were 95 first-year bachelor's degree students and were part of learning communities consisting of 12 students at a university in the Netherlands. Measures included student-reports of prosocial attitudes, peer nominations of friendship and help-seeking networks, and officially registered grades (GPA). Longitudinal social network analysis, stochastic actor-based modeling with the package RSiena, revealed that both students' own prosocial attitudes and achievement played a role in their friendship formation, whereas only students' own achievement made the formation of their help-seeking relationships more likely. When students were friends, it was more likely that they approached each other for help and vice versa. Similarity in achievement level contributed to relationship formation in friendship and help-seeking networks. Overall, the results underscore the importance of both student' prosocial attitudes and achievement for their social adjustment (i.e., making friends) and only achievement for their academic adjustment (i.e., seeking help) during the first year of university within the context of small-scale teaching.

Busch, C. A., Supriya, K., Cooper, K. M., & Brownell, S. E. (2022). **Unveiling Concealable Stigmatized Identities in Class: The Impact of an Instructor Revealing Her LGBTQ+ Identity to Students in a Large-Enrollment Biology Course**. *CBE—Life Sciences Education, 21*(2), ar37. https://doi.org/10.1187/cbe.21-06-0162
Sharing personal information can help instructors build relationships with students, and instructors revealing concealable stigmatized identities (CSIs) may be particularly

impactful. One CSI is the LGBTQ+ identity, but there has been no research on the student-perceived impact of an instructor revealing this identity. In this exploratory study conducted at an institution in the U.S. Southwest, an instructor revealed that she identifies as LGBTQ+ to her undergraduate biology course in less than 3 seconds. We surveyed students (n = 475) after 8 weeks to assess whether they remembered this, and if so, how they perceived it affected them. We used regression models to assess whether students with different identities perceived a disproportionate impact of the reveal. Most students perceived the instructor revealing her LGBTQ+ identity positively impacted them; regression results showed LGBTQ+ students and women perceived greater increased sense of belonging and confidence to pursue a science career. Students overwhelmingly agreed that instructors revealing their LGBTQ+ identities to students is appropriate. This study is the first to indicate the perceived impact of an instructor revealing her LGBTQ+ identity to students in the United States and suggests that a brief intervention could positively affect students.

Caqueo-Urízar, A., Atencio, D., Urzúa, A., & Flores, J. (2022). **Integration, Social Competence and Life Satisfaction: the Mediating Effect of Resilience and Self-Esteem in Adolescents**. *Child Indicators Research*, *15*(2), 617-629. https://doi.org/10.1007/s12187-021-09907-z
The association between life satisfaction, resilience, self-esteem, and social competence has been scarcely studied in developing countries, despite the existing literature regarding its effects on youth mental health. This study aimed to analyze the mediating role of self-esteem and resilience in the relationship between social competence and life satisfaction in adolescents from northern Chile. The sample consisted of 2277 students aged 12–18 years. Self-report scales were used to measure levels of self-esteem and social competence (System of Evaluation of Children and Adolescents; Sistema de Evaluación de Niños y Adolescentes, SENA), resilience (Child and Youth Resilience Measure, CYRM-12), and life satisfaction (Satisfaction with Life Scale-Child, SWLS-C). The data were analyzed using Structural Equation Modeling. The results show that self-esteem and resilience have a direct effect on life satisfaction, while resilience acts as a mediating variable in the relationship between self-esteem and life satisfaction. Social competence has a direct effect on self-esteem, and an indirect effect on life satisfaction. These results suggest that interventions on social competence contribute to enhancing self-esteem and life satisfaction, and that self-esteem and resilience levels are a source of information for the design of intervention programs with the aim of increasing child and youth satisfaction.

Chen, J., & Cheng, T. (2022). **Review of research on teacher emotion during 1985–2019: a descriptive quantitative analysis of knowledge production trends**. *European Journal of Psychology of Education*, *37*(2), 417-438. https://doi.org/10.1007/s10212-021-00537-1
This current review of research tells a richly detailed story of the evolving intellectual structure of teacher emotion research during 35 years starting from 1985 until 2019, through identifying 812 articles and using a descriptive quantitative analysis approach. The developmental trend reveals a substantial change in the volume of publications recently, although the overall volume of research is still relatively low. Findings identify that, although quantitative methods were the most commonly used, qualitative and mixed methods of research have undergone a marked increase in the past ten years. However, as the majority of articles have been exploratory-oriented, intervention and experimental studies are largely lacking, resulting in the "so-what" story being missing. A

functionalist perspective suggests that knowledge production in teacher emotion research is either at a late first stage or an emerging second stage. This effort lays a foundation on which to interpret the evolution of the teacher emotion literature.

Corwin, L. A., Ramsey, M. E., Vance, E. A., Woolner, E., Maiden, S., Gustafson, N., & Harsh, J. A. (2022). **Students' Emotions, Perceived Coping, and Outcomes in Response to Research-Based Challenges and Failures in Two Sequential CUREs**. *CBE—Life Sciences Education*, 21(2), ar23. https://doi.org/10.1187/cbe.21-05-0131
The ability to navigate scientific obstacles is widely recognized as a hallmark of a scientific disposition and is one predictor of science, technology, engineering, and mathematics persistence for early-career scientists. However, the development of this competency in undergraduate research has been largely underexplored. This study addresses this gap by examining introductory students' emotional and behavioral responses to research-related challenges and failures that occur in two sequential research-based courses. We describe commonly reported emotions, coping responses, and perceived outcomes and examine relationships between these themes, student demographics, and course enrollment. Students commonly experience frustration, confusion, and disappointment when coping with challenges and failures. Yet the predominance of students report coping responses likely to be adaptive in academic contexts despite experiencing negative emotions. Being enrolled in the second course of a research-based course sequence was related to several shifts in response to challenges during data collection, including less reporting of confusion and fewer reports of learning to be cautious from students. Overall, students in both the first and second courses reported many positive outcomes indicating improvements in their ability to cope with challenge and failure. We assert that educators can improve research-based educational courses by scaffolding students' research trials, failures, and iterations to support students' perseverance.

De Diesbach-Dolder, S. (2022). ***Apprentissage scolaire : lorsque les émotions s'invitent en classe…***. Consulté à l'adresse https://www.alphil.com/livres/1193-1353-apprentissage-scolaire-lorsque-les-emotions-sinvitent-en-classe-.html
Une analyse socioculturelle des pratiques d'enseignement en éducation interculturelle

Demir, F. (2022). **The effect of different usage of the educational programming language in programming education on the programming anxiety and achievement**. *Education and Information Technologies*, 27(3), 4171-4194. https://doi.org/10.1007/s10639-021-10750-6
The abstract structure, logic, negative perceptions, and anxiety of programming are seen as obstacles to novice programmers. The importance of educational programming languages is increasing day by day in overcoming these obstacles. In this study, it was aimed to investigate the effect of educational programming language integration on academic achievement and programming anxiety level. The pretest–posttest test design without control group, which is one of the experimental methods, was used in the study, which was carried out on three groups consisting of the theory, practice and integration of the course into both theory and practice part. The groups determined by random sampling method consist of 87 people, 61 boys and 26 girls. Pretest–posttest method was used to determine academic success. During the application process, five performance tests were used to determined the change in success. The scale developed by Cheung (1990) in determining computer programming anxiety was adapted to Turkish by the

validity and reliability study by the researcher and was used as pre-test and post-test. Variance and covariance analyzes were used to determine anxiety about academic success and programming, and the results of Kruskal–Wallis test analyzes were used for analysis of performance tests. It is concluded that educational programming languages can be used by integrating both the theory and practice of the course in order to increase academic success and in-class performance and reduce anxiety about computer programming.

Desmarais, M.-É., Rocque, R., & Sims, L. (2022). **Comment faire face à l'éco-anxiété : 11 stratégies d'adaptation en contexte éducatif**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.8267
Les défis soulevés par les changements climatiques sont de plus en plus importants et préoccupent un nombre grandissant d'individus. Certains ressentent une urgence d'agir, comme une responsabilité sociale : il faut mener dès maintenant des actions concrètes dans l'espoir de gérer la crise. En raison du fait que les actions individuelles, bien que pertinentes et nécessaires, n'ont pas les effets espérés par la personne qui les mènent, plusieurs vivent de l'éco-anxiété. Afin de canaliser cette écoanxiété, cet article présente onze stratégies d'adaptation, en fonction de trois axes prioritaires : les émotions, le problème et la signification.

Dockrell, J. E., Papadopoulos, T. C., Mifsud, C. L., Bourke, L., Vilageliu, O., Bešić, E., … Gerdzhikova, N. (2022). **Teaching and learning in a multilingual Europe: findings from a cross-European study**. *European Journal of Psychology of Education*, *37*(2), 293-320. https://doi.org/10.1007/s10212-020-00523-z
School classrooms within the EU are multilingual learning environments. The diversity of pupils in classrooms raises significant challenges for teachers, but to date, there are no data from large-scale surveys that compare views within and across European countries. A bespoke questionnaire was designed to examine views of current classroom learning environments with respect to the multilingualism. The questionnaire was piloted and subsequently completed by 2792 teachers across different European countries. Eleven countries provided sufficient data for analyses. Results from structural equation modelling showed that teachers' attitudes could be reliably measured across Europe with the use of carefully devised questionnaire, whose loading and factor structure remained invariant across countries. Teachers' views about multilingualism were most challenged by the numbers of children in their classes, not the percentage of multilingual pupils in the class. Countries differed in how they perceived multilingualism, with their differences leading to distinctive country clusters. Gender and education level (elementary vs. secondary) differences were also observed irrespective of country. These findings enhance our understanding of the role that the characteristics of teachers and their classrooms play in a multilingual setting across diverse European settings. The practical relevance of the results and new opportunities for teacher training are discussed.

Dotterer, A. M. (2022). **Parent involvement, expectancy values, and STEM outcomes among underrepresented adolescents**. *Social Psychology of Education*, *25*(1), 113-127. https://doi.org/10.1007/s11218-021-09677-0
Racial and ethnic achievement gaps contribute to the lack of underrepresented minorities in STEM-related careers. This research is grounded in the expectancy-value model of achievement motivation which posits that motivation is influenced by social-cognitive variables such as self-efficacy and beliefs about the usefulness or utility of the

task. These social-cognitive variables (self-beliefs and task beliefs), in turn, are influenced by numerous ecological factors such as parental involvement. Parent involvement can promote children's self-efficacy and task beliefs which is important for STEM interest and persistence. This study utilized data from the High School Longitudinal Study: 2009 (HLS: 2009) to examine links among parent involvement and underrepresented students' STEM self-efficacy, utility, interest and achievement. Concurrent and longitudinal models conducted in MPlus tested whether parent involvement in 9th grade predicted STEM interest and achievement directly and indirectly via self-efficacy and utility. Concurrent models showed that parent involvement in STEM was significantly related to adolescents' STEM self-efficacy which in turn was significantly related to STEM interest and achievement. Longitudinal models showed that parents' STEM involvement in 9th grade predicted adolescents' STEM efficacy in 11th grade which in turn predicted adolescents' cumulative GPA in STEM courses. Parent involvement in STEM was more strongly and consistently linked to self-efficacy than to utility. These results suggest that parent involvement in STEM helps adolescents to feel more confident in their STEM abilities but it does not necessarily contribute to adolescents' STEM utility values.

D'Urso, G., Symonds, J., Sloan, S., & Devine, D. (2022). **Bullies, victims, and meanies: the role of child and classmate social and emotional competencies**. *Social Psychology of Education*, *25*(1), 293-312. https://doi.org/10.1007/s11218-021-09684-1
This study used a personal oriented approach to identify distinct combinations of children's experiences of bullying and victimisation in the Irish primary school context. The study investigated the social and emotional characteristics that predicted those profiles at individual and classroom levels. The sample of 2,062 participants was drawn from the Irish national cohort study Children's School Lives. We analysed teacher reports of individual children's strengths and difficulties and neglect, and child reports of experiences of bullying, victimisation, and care from classmates. Latent profile analysis revealed five main profiles of bullying and victimisation in Irish primary schools. Approximately 40% of the children were distributed in the atypical profiles (i.e., bullies, meanies, victims, and bully-victims) with the other 60% of children reporting very low levels of bullying and victimisation. Multilevel modelling predicted the profile membership from a set of social and emotional predictors from individual and classroom levels. At the individual level, being a bully was predicted by higher child neglect, hyperactivity, conduct problems, and peer problems; being a meanie was predicted by hyperactivity, peer problems, and less caring classmates; being a victim was predicted by child neglect, conduct problems, and less caring classmates; and being a bully-victim was predicted by conduct problems and less caring classmates. At the classroom level, being a victim was predicted by being in a classroom comprised of younger children, and in classrooms where children were less caring on average. Theoretical and psycho-educational implications are discussed.

Fielding, J., Geiger, V., Miller, J., Bruder, R., Towara, U., & Ratnayake, I. (2022). **Using situated expectancy value theory to explore initial teacher education students' motivation to engage with challenging mathematical tasks**. *Teaching and Teacher Education*, *113*, 103663. https://doi.org/10.1016/j.tate.2022.103663
Strengthening Initial Teacher Education (ITE) students' capabilities to implement challenging mathematical tasks is a focus for policy and curriculum internationally. In this article, we report on motivational aspects of ITE students' engagement with challenging mathematical tasks as an outcome of an explorative study involving 41 Australian ITE

students in their third year of a four-year program. Data collection instruments consisted of pre- and post-surveys and a focus group interview. The study was interpretive, utilizing both quantitative and qualitative techniques. Findings suggest ITE student motivation was most closely associated with situational interest and challenge served to both motivate and demotivate students.

Filippou, D., Buchs, C., Quiamzade, A., & Pulfrey, C. (2022). **Understanding motivation for implementing cooperative learning methods: a value-based approach**. *Social Psychology of Education*, 25(1), 169-208. https://doi.org/10.1007/s11218-021-09666-3
The implementation of cooperative learning methods remains disparate in primary schools despite their widely recognised benefits. To explain this paradox, we first examined whether teachers' inclination towards cooperative methods is motivated by their values. Second, we tested whether motivational connections between personal values and cooperative methods are undermined when conflictual values are activated in context. Study 1 demonstrated that pre-service teachers strongly endorsed self-transcendence (ST) values (expressing compatible motivations with cooperation) relative to self-enhancement (SE) values (expressing conflictual motivations with cooperation). Adherence to ST values was also positively associated with their beliefs and attitudes regarding cooperative methods. In Studies 2, 3 and 4, educational sciences students were experimentally exposed to different contexts, wherein ST, SE or neutral values were promoted. Our findings indicate that when SE values were emphasised in the context, the positive association between ST values and beliefs/attitudes regarding cooperative methods disappeared. Although the results of Study 4 regarding the intention to use cooperative methods were not statistically significant, the pattern was similar. Finally, Study 5 showed that primary school teachers' ST values positively predicted the self-reported use of cooperative methods when they perceived their school to weakly endorse SE values, but not when they perceived it to strongly endorse them.

Floyd, R. G., Lewis, E. K., Walker, K. A., McNicholas, P. J., & Jones, K. L. (2022). **A Historical Review and Analysis of Impact Factors Across School Psychology Journals from 1977 to 2019**. *Canadian Journal of School Psychology*, 37(2), 139-159. https://doi.org/10.1177/08295735211045548
School psychology journals yield hundreds of articles each year. As these journals are often evaluated based on the impact factors they produce, the aim of this study was to provide a historically complete record of the five impact factor values for the generalist school psychology journals that yield them. This study identified impact factors beginning in 1977, 20 years earlier than previously reported, and ending in 2019. Across all years and journals, the average Journal Impact Factor (JIF) was about 1.0, the average Immediacy Index was less than 0.4, the average 5-year Impact Factor was about 2.3, the average original CiteScore was 1.8, and the average new CiteScore was about 3.0. Increases in values were evident across time, and the highest recorded values across journals are held by the Journal of School Psychology (for the JIF, 5-year Impact Factor, and both CiteScore metrics) and School Psychology Review (for the Immediacy Index). Most impact factors, with the exception of the Immediacy Index, were moderately to highly correlated. The new CiteScore values were always the highest, and Immediacy Index values were always the lowest. School psychology has added journals to the list of those indexed by major databases, and these journals have increased their impact over time.

Forrester, C., Schwikert, S., Foster, J., & Corwin, L. (2022). **Undergraduate R Programming Anxiety in Ecology: Persistent Gender Gaps and Coping Strategies**. *CBE—Life Sciences Education*, 21(2), ar29. https://doi.org/10.1187/cbe.21-05-0133

The ability to program in R, an open-source statistical program, is increasingly valued across job markets, including ecology. The benefits of teaching R to undergraduates are abundant, but learning to code in R may induce anxiety for students, potentially leading to negative learning outcomes and disengagement. Anecdotes suggest a gender differential in programming anxiety, with women experiencing greater anxiety. Currently, we do not know the extent to which programming anxiety exists in our undergraduate biology classrooms, whether it differs by gender, and what instructors can do to alleviate it. Instructor immediacy has been shown to mediate related anxieties such as quantitative and computer anxiety. Likewise, students' use of adaptive coping strategies may mitigate anxieties. We investigated students' R anxiety within a lower-division ecology course and explored its relationships with gender, instructor immediacy, classroom engagement, and reported coping strategies. Women reported significantly higher R anxiety than men, a gap that narrowed, yet persisted over the semester. In addition, several specific coping skills were associated with decreases in R anxiety and increases in self-concept and sense of control; these differed by gender identity. Our findings can guide future work to identify interventions that lessen programming anxiety in biology classes, especially for women.

Gousse-Lessard, A.-S., & Lebrun-Paré, F. (2022). **Regards croisés sur le phénomène « d'écoanxiété » : perspectives psychologique, sociale et éducationnelle**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.8159

Le vocable « écoanxiété » a récemment fait son entrée dans le discours médiatique, celui des mouvements sociaux et au sein des milieux éducatifs. Si le milieu de la recherche n'est pas en reste, trop peu d'écrits, particulièrement en français, se sont penchés sur le phénomène que le terme « écoanxiété » tente de saisir et sa prise en compte en éducation. En vue de contribuer à combler cet écart, cet article mobilise des perspectives ancrées en psychologie et en sociologie critique, fondées sur une recension d'écrits et les résultats d'une recherche empirique exploratoire. Il a pour objectifs 1) de clarifier les contours de cette notion, 2) d'exposer certaines stratégies de régulation de l'écoanxiété et les enjeux qui y sont associés, et 3) de fournir des pistes de réflexion pour l'intervention en éducation relative à l'environnement (ERE).

Harris, B., Sullivan, A. L., Embleton, P., Shaver, E., Nguyen, T., Kim, J., … Williams, S. (2022). **Exploratory Investigation of Gender Differences in School Psychology Publishing Before and During the Initial Phase of COVID-19**. *Canadian Journal of School Psychology*, *37*(2), 204-211. https://doi.org/10.1177/08295735221074473

Although many disciplines saw increases in manuscript submissions coinciding with lockdown measures, numerous studies have documented widening gender gaps in academic productivity. Chi-squared analyses of gendered trends in first author manuscript submission in three school psychology journals during the initial phase of COVID-19 compared to the same time frame in the preceding 3 years did not reveal any significant associations. There was a significant increase over time in the gender gap, with a trend of more female authors than male authors. Women school psychology researchers may not have experienced similar detriments to productivity as in other

disciplines, or such detriments were not reflected in submission patterns during this time frame. Limitations of the study and implications for school psychology are provided.

Herrera, N., Castellanos, J., & Gloria, A. M. (2022). **Mi Conexión Cultural al Ambiente Educativo: Cultural Congruity as a Mediator within a Psychosociocultural Examination of Californian Latinx High School Students' Coping**. *Education and Urban Society*, *54*(4), 487-510. https://doi.org/10.1177/00131245211020482
As California is one of the primary states with the highest influx of Latinxs, the rise of Latinx enrollment in California high schools calls to the importance of understanding methods to increase academic and overall wellness. Cultural congruity (i.e., match of one's cultural values with those of the educational setting) is hypothesized to influence positive academic and psychological outcomes for Latinx students. However, no study to date has examined the role cultural congruity in further explaining psychological outcomes for high schoolers. Using the psychosociocultural framework, the study's purpose was to examine if cultural congruity further explains the relationships between academic self-efficacy, family support, and ethnic identity with coping, respectively. For a sample of 104 Latinx Californian high school students, results revealed that cultural congruity partially explained the relationships of academic self-efficacy and ethnic identity with coping, respectively. Educators and mental health practitioners may benefit from implementing a curriculum that is culturally validating, as it may support positive psychological functioning and coping strategies.

Huang, H.-L., Hwang, G.-J., & Chen, P.-Y. (2022). **An integrated concept mapping and image recognition approach to improving students' scientific inquiry course performance**. *British Journal of Educational Technology*, *53*(3), 706-727. https://doi.org/10.1111/bjet.13177
Scholars and researchers generally believe that scientific inquiry is an important activity for cultivating students' applied knowledge and high-level thinking ability. The process of scientific inquiry can promote students' learning motivation and trigger their higher-order thinking ability. However, students may not have enough prior knowledge or they may lack inquiry experience, which may influence the effectiveness of their inquiry learning. Besides, in a scientific inquiry environment assisted by technology, students must face abundant and diverse learning resources, and may not effectively organize and carry out advanced cogitation to solve problems. Therefore, this research proposed an integrated concept mapping and image recognition (IR) approach to help students effectively acquire and organize knowledge in the process of scientific inquiry. This study applied a quasi-experimental design to verify the effect of this proposed approach. The experimental group conducted the concept mapping-based IR (CM-IR) learning approach, whilst the control group conducted the conventional IR-based learning approach to evaluate the students' performance in terms of their learning motivation and learning achievements. The participants were two classes of 10th-grade students in northern Taiwan. One was the experimental group with 22 students, whilst the other was the control group with 22 students. The experimental results show that the students learning with the CM-IR learning approach had better learning achievement, attitudes and intrinsic motivation, as well as higher mental load than those learning with the conventional IR-based learning approach. Accordingly, several suggestions are provided for future research in this field. Practitioner notes What is already known about this topic With the development of information technology, AI has attracted the attention of researchers. Image recognition (IR) is one of the AI applications, and has

been used to support learning in various educational fields. Researchers have indicated that concept mapping is an effective instructional strategy and promotes students' knowledge construction. What this paper adds A concept mapping-based IR (CM-IR) learning approach is proposed to improve students' scientific inquiry performance. A quasi-experimental design was conducted with 10th-grade students on the 'Plant identification' unit of the scientific inquiry course. The experimental results show that the proposed approach can significantly improve students' learning achievement, learning motivation and learning attitude. Implications for practice and/or policy The CM-IR learning approach could be an effective method to facilitate students' learning performances and motivation in scientific inquiry. It is worth promoting the CM-IR learning approach in school settings since it is low-cost and enables learning anywhere using mobile devices. Scholars and educators are encouraged to work on how AI technologies applications can be applied to support learning.

Kannengiesser, V. (2021). **Un dispositif à médiation avec des élèves de CM2 pour comprendre par un effet d'après-coup des processus à l'œuvre lors de l'entrée en petite section**. *Revue française de pédagogie. Recherches en éducation*, (213), 23-40. https://doi.org/10.4000/rfp.10984
Cet article présente une recherche où, dans une démarche clinique d'orientation psychanalytique en sciences de l'éducation et de la formation et s'appuyant sur les effets de l'après-coup, l'auteure a proposé un dispositif à médiation à des enfants en classe de CM2, se préparant à entrer au collège, pour comprendre des processus à l'œuvre lors de l'entrée en petite section de l'école maternelle. Pour initier cette médiation, un groupe de parole avait été mis en place. La demande des enfants d'instituer ce dispositif clinique en début de chaque séance permet de comprendre quelque chose du processus d'autonomie de l'enfant. Le verbatim groupal éclaire le rapport à l'institution et à l'enseignant qui s'exprime dans cette parole et fait apparaître la violence symbolique, parfois nécessaire, que peut exercer inconsciemment l'enseignant dans sa relation avec l'élève en classe de petite section.

Khattab, N., Madeeha, M., Samara, M., Modood, T., & Barham, A. (2022). **Do educational aspirations and expectations matter in improving school achievement?** *Social Psychology of Education*, 25(1), 33-53. https://doi.org/10.1007/s11218-021-09670-7
The main objective of this paper is to examine the role of students' aspirations and expectations in affecting school achievement among 7th and 8th grade students in Qatar's schools. The study draws on data collected in Qatari schools from a randomly selected sample of 841 students and their parents. The findings indicate that students' educational aspirations have a stronger effect on students' school performance when compared to students' educational expectations, even when controlling for demographic factors, school attitude, and parental expectations. This finding directly contributes to the debate in the literature about the relative importance of aspirations and expectations, while also confirming what other studies have suggested- that the meaning and the way in which both aspirations and expectations operate is contextually relative. Context plays a significant role here, and consequently, leaves the debate over what matters more, aspirations or expectations, widely open.

Kikas, E., Mädamürk, K., Hennok, L., Sigus, H., Talpsep, T., Luptova, O., & Kivi, V. (2022). **Evaluating the efficacy of a teacher-guided comprehension-oriented learning strategy**

intervention among students in Grade 4. *European Journal of Psychology of Education*, *37*(2), 509-530. https://doi.org/10.1007/s10212-021-00538-0
This study examined the effects of a teacher-led learning-strategy intervention program on fourth-grade students' reported use and perceived effectiveness of rehearsal and comprehension-oriented learning strategies. During 18 program units, teachers taught about learning and various learning strategies, including visualisation, elaboration and categorisation. Strategies were practised in math, language and science classes. Participants were comprised of 82 fourth-grade students in the intervention group and 387 fourth-grade students in the control group. Students' reported use and perceived effectiveness of learning strategies were assessed before and at least 4 months after intervention using a web-based word-memorisation task and associated reflection questions. The intervention group tended to use more comprehension-oriented learning strategies in post-tests, and the intervention group also showed an increase in perceived effectiveness of comprehension-oriented learning strategies. Still, rehearsal was evaluated as the most effective strategy in both the control group and the intervention group. Explanations for these findings and possible future directions are discussed.

King, S., Khalil, M., & McGonnell, M. (2022). **School Psychology Practice in Nova Scotia: An Update and Implications for Role Diversification**. *Canadian Journal of School Psychology*, *37*(2), 189-203. https://doi.org/10.1177/08295735211037810
A survey of school psychology practice in Nova Scotia was conducted to update and extend previous work. Thirty-one school psychologists completed a survey about their practice across the six areas of competency identified by the Canadian Psychological Association (CPA) and their current versus preferred time in various areas of psychology practice. Results indicated that most participants currently practice across all areas of competency to some degree but spend most of their time engaged in assessment and evaluation. Findings suggest that the role of the school psychologist in Nova Scotia has changed very little since the previous work was completed and that school psychologists would like to diversify their practice to include more intervention and professional development. With appropriate training and supervision, the time is right to expand school psychology services to provide much-needed mental health services to a broader range of children and families. Recommendations for training and role diversification are discussed.

Kloetzer, L., Clarke-Habibi, S., Mehmeti, T., & Zittoun, T. (2022). **Welcoming mobile children at school: institutional responses and new questions**. *European Journal of Psychology of Education*, *37*(2), 459-488. https://doi.org/10.1007/s10212-021-00534-4
Switzerland, like other countries in Europe, has long depended on migration and mobility for its economy. Facilitating the integration of migrant children in school, primarily through the acquisition of the local language, has therefore been a priority for policymakers. In recent years, mobility has been on the increase and mobility trajectories have become more diverse. A growing percentage of families arriving in the country have experienced repeated mobility and may not plan to settle in Switzerland for good. This paper examines institutional responses to the increasing number of mobile children in Swiss public schools, in particular, the manner in which such children are welcomed. It presents the main findings of an exploratory research project focused on children in repeated mobility, defined as having lived in multiple countries before their arrival in Switzerland, regardless of family background or legal status. Adopting a sociocultural psychological approach, the paper examines the macro-social level of cantonal educational policies regarding

welcome processes, the meso-social level of local school policies, and the microsocial level of teachers' practices and interactions in classrooms that welcome mobile children. Data include documentary analysis, interviews, and observations. Our analysis shows that a deficit view of mobile children and the preoccupation with language proficiency dominate policies and practices, resulting in the diversion of mobile children into special integration classes (so called "classes d'accueil" in the French speaking region, and "Integrationsklasse" in the Swiss German-speaking region). Mobility is conceptualized by Swiss policymakers, school directors, and teachers in terms of its challenges. In particular, school directors and teachers conceptualize mobility as increasing heterogeneity of the classroom. However, the situation varies greatly according to the personal orientations of school directors and teachers' personal engagement. The paper emphasizes the ambiguous role of the integration classes: while they may impair the long-term chances of educational success by reducing academic expectations for non-native-speaking mobile children, they may also be used as "third spaces" which afford pedagogical freedom for dedicated teachers, potentially of benefit for children. The paper examines these propositions in the light of sociocultural educational literature and draws upon the case of welcoming mobile children to question a series of assumptions about the ultimate purposes of public schooling in Europe today.

Kobayashi, K. (2022). **Learning by teaching face-to-face: the contributions of preparing-to-teach, initial-explanation, and interaction phases**. *European Journal of Psychology of Education*, *37*(2), 551-566. https://doi.org/10.1007/s10212-021-00547-z
Teaching other students in a face-to-face manner has been shown to effectively foster both one's own and their learning. This study experimentally investigated whether and how tutors and tutees academically benefit from three phases of face-to-face teaching: preparing-to-teach, initial-explanation, and interaction phases. Japanese undergraduates (n = 80) acted as tutors or tutees in peer tutoring. After studying with the expectation of teaching face-to-face or taking a test (the preparing-to-teach phase), tutor participants provided tutee participants with initial instructional explanations, without asking or answering questions (the initial-explanation phase), and then engaged in a question-and-answer period (the interaction phase). Tutor and tutee participants learned better by providing and receiving higher-quality explanations in the initial-explanation and interaction phases. Face-to-face teaching vs. test expectancy had no effects on the quality of tutor participants' explanations or their learning outcomes. The results suggest that both the initial-explanation and interaction phases contribute to learning by teaching face-to-face, whereas the preparing-to-teach phase does not.

Kong, S.-C., & Lai, M. (2022). **Computational identity and programming empowerment of students in computational thinking development**. *British Journal of Educational Technology*, *53*(3), 668-686. https://doi.org/10.1111/bjet.13175
The participatory view of learning emphasises students' identity construction. However, identity research in the context of programming education to cultivate students' computational thinking is scarce. In this study, an instrument of computational identity with components of engagement, imagination and affiliation, was developed and validated. Convenience sampling was used to select 1066 senior primary school students studying programming to respond to the instrument, and to a programming empowerment instrument developed previously with components of meaningfulness, self-efficacy and impact. The two instruments' factor structure was confirmed to have acceptable discriminant validity and support gender invariance. There was a positive

relationship between programming empowerment and computational identity. Specifically, students' perceived meaningfulness and self-efficacy of programming related to all aspects of computational identity. The perceived impact of programming is related only to the imaginative aspect of computational identity. The establishment of the instrument enables researchers to investigate further factors related to students' computational identity development. The results also indicate that the programming curriculum should be carefully designed so that students can realise the meaning of the activities and foster their programming self-efficacy. This, in turn, is critical to enable these primary school students to participate in and become a member of the digital community. Practitioner notes What is already known about this topic Cultivating students' computational thinking (CT) has become an educational goal in various countries around the world. It is necessary to develop appropriate tools to assess students' CT development. Founded on a participatory view of learning, identity has been employed in different subject areas to assess students' development, but identity research in CT is scarce. What this paper adds An instrument of computational identity with components of engagement, imagination and affiliation is developed and validated with a sample of senior primary students. This study shows the importance of empowerment in developing primary students' computational identity. Students' perceived meaningfulness of programming and self-efficacy relate to all aspects of identity, but the impact of programming only relates to the imaginative aspect of identity. Implications for practice and/or policy The curriculum for CT should be designed carefully to foster the development of students' computational identity. The curriculum should allow students to see the meaning of programming activities and how young people can make an impact by means of CT. The programming tasks should be designed at an optimal level of difficulty so that students' self-efficacy can be fostered.

Koppenborg, M., & Klingsieck, K. B. (2022). **Social factors of procrastination: group work can reduce procrastination among students**. *Social Psychology of Education*, *25*(1), 249-274. https://doi.org/10.1007/s11218-021-09682-3
Research on procrastination covers a variety of individual factors (e.g., conscientiousness) and this focus is reflected in interventions against procrastination. Less emphasis is put on situational and social factors that may help students reduce procrastination, such as social interdependence. Therefore, this study investigates the relationship between interdependence with academic procrastination and affective variables. Two vignette studies with student samples (N1 = 320, N2 = 193) were conducted and data was analyzed with regression analyses and analyses of covariance. Results of both studies show lower state procrastination in group work with interdependence compared to individual work, especially in participants with high trait procrastination. This difference is more pronounced when interdependence is accompanied by an active commitment to finish the task on time. Further, interdependent group work is related to increased positive affect and decreased negative affect. The results demonstrate the relevance of situational and social factors for academic procrastination, and point toward new approaches for intervention.

Kuhn, C., Hagenauer, G., & Gröschner, A. (2022). **"Because you always learn something new yourself!" An expectancy-value-theory perspective on mentor teachers' initial motivations**. *Teaching and Teacher Education*, *113*, 103659. https://doi.org/10.1016/j.tate.2022.103659

A teacher's decision to become a mentor teacher affects mentoring quality and the practicum experience of student teachers respectively. However, little systematic knowledge about teachers' motivations to become mentors exists to date. Based on expectancy-value theory (EVT), this interview study among 23 secondary school mentor teachers explores which aspects motivate teachers to undertake the task of mentoring. In line with EVT, teachers choose to become mentors due to a combination of expectancy and value beliefs, and socialisation influences, which can be further categorised into competence beliefs, intrinsic values, social utility values, intrinsic and extrinsic personal utility values, and social influences.

Lee, K., Ashton, M. C., & Novitsky, C. (2022). **Academic Majors and HEXACO Personality**. *Journal of Career Assessment*, *30*(2), 345-366. https://doi.org/10.1177/10690727211044765 Self-reports on the HEXACO-PI-R scales were examined in relation to academic majors in post-secondary education (N > 73,000). Openness to Experience showed the largest mean differences across academic major areas, with the Visual/Performing Arts and Humanities areas averaging higher and Health Sciences and Business/Commerce averaging lower. Emotionality showed the second largest differences, with the Engineering and Physical Sciences/Math areas averaging lower and Visual/Performing Arts averaging higher; these differences in Emotionality became smaller in within-sex analyses. In addition, Extraversion tended to be higher for Business/Commerce and lower for Physical Sciences/Math, while Honesty-Humility was lower for Business/Commerce. The facet-level analyses provided additional detail, as facet scales in the same domain sometimes showed considerably different means within a given academic major area. In one case, Visual/Performing Art majors averaged lower in Prudence, but higher in Perfectionism, even though both facets belong to the Conscientiousness domain.

Linder, A., Nordin, M., Gerdtham, U.-G., & Heckley, G. (2022). ***Grading Bias and Young Adult Mental Health*** (Working Paper N° 2022:7). Consulté à l'adresse Lund University, Department of Economics website: https://econpapers.repec.org/paper/hhslunewp/2022_5f007.htm Various grading reforms and trends of more lenient grading have contributed to grade inflation in Sweden and other countries. Previous research shows that over-grading increases higher education enrolment, achievements and earnings, but no study has yet addressed the potential impact of grading bias on health. In this paper, we hypothesize that over-grading has a protective impact on mental health, either through a direct effect of performance feedback, or through mechanisms such as self-efficacy and university admission distortions. We test this hypothesis using Swedish individual-level register data for individuals graduating from upper secondary school in the years 2001-2004. Grading bias, which we interpret as over-grading, is constructed as the residual of final upper secondary school grades having controlled for results in a standardised test, itself not subject to grading leniency. Over-grading is further isolated by considering only within-school variation in over-grading and controlling for prior grades and school production. We show that over-grading has substantial significant protective impacts on the mental health of young adults, but only among female students. That grades themselves, independent of knowledge, substantially impact the production of health highlights an important health production mechanism, and also implies that any changes to the design of grading systems must consider these wider health implications.

Longobardi, C., Ferrigno, S., Gullotta, G., Jungert, T., Thornberg, R., & Marengo, D. (2022). **The links between students' relationships with teachers, likeability among peers, and bullying victimization: the intervening role of teacher responsiveness**. *European Journal of Psychology of Education*, *37*(2), 489-506. https://doi.org/10.1007/s10212-021-00535-3
Highly responsive teachers tend to foster behaviors that are low in conflict and high in prosociality, among their students, leading to a positive classroom climate and to a decrease in bullying victimization. However, little is known about the interaction between teacher responsiveness and both student–teacher, and student–student relationship characteristics, in influencing students' bullying victimization at school. Here, we examined student–teacher relationship quality and students' likeability among peers as predictors of in-school victimization. Additionally, we investigated the moderating role of teacher responsiveness over this link. Study sample consisted of 386 early-adolescent students (55.2% female, mean age [SD] = 12.17 [0.73]) and 19 main teachers (females, n = 14). Findings indicated that students' exposure to victimization was positively associated with student–teacher conflict and negatively associated with likeability among classroom peers. Teacher responsiveness did not show a significant direct association with bullying victimization. However, when teachers showed high responsiveness, the strength of the association between student–teacher conflict and students' likelihood of bullying victimization was slightly increased. The present study highlights the importance of considering the role of teacher responsiveness when modeling the link between student and teacher relationship quality and in school bullying victimization.

Luque-Reca, O., García-Martínez, I., Pulido-Martos, M., Lorenzo Burguera, J., & Augusto-Landa, J. M. (2022). **Teachers' life satisfaction: A structural equation model analyzing the role of trait emotion regulation, intrinsic job satisfaction and affect**. *Teaching and Teacher Education*, *113*, 103668. https://doi.org/10.1016/j.tate.2022.103668
Teaching is an emotionally demanding profession that can negatively affect teacher well-being. This cross-sectional study aimed to test a comprehensive structural equation model of both the direct and indirect (through affect and intrinsic job satisfaction) relationships between trait emotion regulation and life satisfaction in a sample of 404 Spanish teachers. The model obtained good fit (S–B $\chi2$ = 319.142, df = 201, p < .001; CFI = 0.957; RMSEA = 0.038). Outcomes suggested that: i) positive and negative affect mediates the relationship between trait emotion regulation and both life and job satisfaction; ii) job satisfaction is the main determinant of life satisfaction. Practical implications and limitations are also discussed.

Mariss, A., Wenzel, K., Grünberg, C., & Reinhard, M.-A. (2022). **Who wants to learn harder? The relationship between conservatism and liberalism, desirable difficulties, and academic learning**. *Social Psychology of Education*, *25*(1), 209-248. https://doi.org/10.1007/s11218-021-09681-4
Previous work has shown that challenging learning strategies like desirable difficulties improve long-term learning. Nonetheless, because they might be regarded as strict and demanding learning strategies, they should not be perceived as positive by everyone. They should, however, fit conservative political attitudes since those are, among others, positively correlated with individuals' need for order and structure as well as with challenging learning environments. Hence, we hypothesized conservative political attitudes to be correlated with more positive attitudes towards desirable difficulties, towards the use of desirable difficulties at school, towards the preferred difficulty of the

learning process, and towards deeper learning strategies. We conducted three online studies assessing US American students' political attitudes and their attitudes towards such difficult and challenging learning strategies: Study 1 found correlations among more conservative political attitudes and more positive attitudes towards difficult and challenging learning strategies, whereas Study 2 found no significant linkages among these variables. Study 3 then showed that a more conservative political attitude and favorable ratings of Republican politicians, but also more favorable ratings of Democratic politicians were linked to more positive attitudes towards our dependent variables. Self-reported interest in and importance of politics were also positively correlated with positive attitudes towards difficult learning. Our results indicate that students' political attitudes are generally linked to positive attitudes towards difficult and challenging learning strategies and are therefore important individual characteristics regarding applications and perceptions of these learning strategies. Future work focusing on these relationships, on causal effects, and on further related variables is valuable.

Mata, L., Monteiro, V., Peixoto, F., Santos, N. N., Sanches, C., & Gomes, M. (2022). **Emotional profiles regarding maths among primary school children – A two-year longitudinal study**. *European Journal of Psychology of Education*, *37*(2), 391-415. https://doi.org/10.1007/s10212-020-00527-9
Learning maths is challenging for many primary school students, and teachers must understand students' learning and emotional processes specific to learning maths. The current research, grounded in control-value theory, focused on achievement emotions regarding maths. Primary school students (N = 71) were studied with the primary objective of examining the longitudinal trajectories of achievement emotions of third graders over two years. The Portuguese Achievement Emotions Questionnaire for Elementary Students was administered biannually to assess enjoyment, anxiety, and boredom regarding maths. The results indicate that enjoyment decreased and boredom increased over time, revealing three emotional profiles: positive, negative and moderate. The positive profile showed the highest scores in maths achievement. Profile membership was moderately stable and became increasingly stable and structured. In examining the complexity of students' emotional profiles and processes, the importance of understanding them to enhance educational support, development, and learning was highlighted.

Mendoza, N. B., & King, R. B. (2022). **The social contagion of work avoidance goals in school and its influence on student (dis)engagement**. *European Journal of Psychology of Education*, *37*(2), 325-340. https://doi.org/10.1007/s10212-020-00521-1
Work avoidance goals, which refer to wanting to do as little as possible in school, are detrimental to school success. Given its maladaptive nature, studies have investigated the antecedents of work avoidance, such as the role of personal characteristics and social-contextual factors. The influence of one's classmates, however, remains under-explored. Drawing from social contagion research, we examined whether work avoidance goals spread among classmates. Questionnaires were administered to 1524 adolescent students nested within 50 classes. Two waves of data were collected one semester apart. Multilevel modeling was used to analyze the data. Results showed that a student's work avoidance in Time 2 was predicted by his/her classmates' work avoidance in Time 1. These results held even after controlling for one's own Time 1 work avoidance. Moreover, work avoidance goals led to higher levels of disengagement and lower levels of engagement. The findings demonstrate that work avoidance goals are socially contagious and that they have negative consequences for students'

engagement. This study extends our theoretical understanding of work avoidance by highlighting the vital role played by one's classmates in shaping students' avoidance of schoolwork and the deleterious consequences that come with it.

Mohammed, T. F., Gin, L. E., Wiesenthal, N. J., & Cooper, K. M. (2022). **The Experiences of Undergraduates with Depression in Online Science Learning Environments**. *CBE—Life Sciences Education*, *21*(2), ar18. https://doi.org/10.1187/cbe.21-09-0228
Depression is one of the top mental health concerns among undergraduates and disproportionately affects students who are underrepresented in science. As such, understanding how emerging science learning environments, such as online science courses, affect students with depression is integral to creating a more inclusive scientific community. In this exploratory study, we interviewed 24 undergraduates with depression who were pursuing an online BS degree in biological sciences at a research-intensive institution. We assessed how students perceived depression affected their learning, and in turn, how online science courses affected their depression. Using a hybrid approach of deductive and inductive coding, we found that students reported depression negatively affected an array of cognitive domains when learning science online, including students' effort, focus, and time management. Students reported that the fast pace of online courses, the lack of needing to show up to a class in person, and difficulty developing relationships with other students commonly exacerbated their depression. Conversely, the flexibility of completing course work when and where students wanted, developing a relationship with the instructor, and the ease of having questions answered online positively affected students' depression. This study provides insight into ways to create inclusive online learning environments for students with depression.

Nelekar, S., Abdulrahman, A., Gupta, M., & Richards, D. (2022). **Effectiveness of embodied conversational agents for managing academic stress at an Indian University (ARU) during COVID-19**. *British Journal of Educational Technology*, *53*(3), 491-511. https://doi.org/10.1111/bjet.13174
Stress has become one of the major reasons for many mental health related issues among students of all age groups, which has resulted in devastating personal losses including suicide. Societal and familial pressure to succeed is high, particularly in developing countries where education is highly valued as a key enabler. As part of stress management during the COVID-19 pandemic, demand for online intelligent virtual advisors has risen and, consequently, the need for personalised explanation that is culturally sensitive to the user's context is essential to improve the user's understanding of and trust in the recommendations provided by the virtual advisor. This paper presents the mAnaging stRess at University embodied conversational agent (ECA) that has been adapted for Indian university students from an explainable agent that was found to help Western students reduce their stress by providing study tips with explanations based on the student's beliefs and/or goals. We conducted a research study with sixty students which measured the impact of providing three different patterns of tailored explanations (belief-based, goal-based, and belief and goal-based explanation) on the students' intentions to change the recommended behaviours and the relationship built with the ECA. The experimental results indicate that there was stress reduction across all student groups provided with different types of explanations. Further, the students showed trust and a good working alliance with the conversational agent, along with an intention to change behaviour across all types of explanations. However, it was observed that the user context played an important role in behaviour change intention and hence

explanations could be tailored further, making them culturally more relevant to Indian students. Practitioner notes What is already known about this topic Embodied conversational agents (ECAs) have been mostly developed, applied and shown to be effective in developed countries. Hence, their design and development are mostly guided by the intended user's needs and preferences. In a Western context, ECAs have been found to be beneficial for reducing study stress in university students. There is a pertinent need for use of low cost, effective technology that can aid academic stress reduction in higher educational institutions in developing countries owing to their high youth populations, lack of adequate mental healthcare facilities and associated social stigma. What this paper adds The adaptation and use of ECAs to reduce study stress in higher education students in a developing country is evaluated. The ECA technology is adapted for an Indian context in terms of its physical appearance, colour, speech dialect and dialog content so that it is culturally more aligned to the target population. The ECA engages in an empathic conversation tailored for the Indian students and their COVID-19 context providing them with explanation-backed behaviour recommendations that take their beliefs and goals into account. The ECA provides three types of explanation: belief-only; goal-only; and both belief and goal. Results of a study carried out in an Indian university with 61 students, randomly assigned to one of the explanation types, to capture their demographics, study stress statistics, behaviour change intentions and trust/working alliance with the conversational agent. The major findings include stress reduction across all explanation groups, development of a positive relationship between the ECA and the students regardless of its explanation pattern, and changes in behaviour intentions across all types of explanations for all recommended behaviours. However, differences in change intentions for certain behaviours indicate further tailoring of explanations is required based on the user context. Implications for practice and/or policy The ECA technology has shown promise in terms of stress reduction amongst Indian students. Higher Education Institutions in developing countries could utilise low-cost and widely accessible ECAs to overcome lack of access to human-based support and reluctance to use available services due to stigmatized attitudes to mental health issues. This technology can be further improved and deployed into a larger number of Indian educational institutions leading to a widespread impact on overall student health and wellbeing. Digital technologies to support mental health have become more prominent during the COVID-19 pandemic, at least in Western countries. The ECA technology evaluated in our study demonstrates its viability and potential value for use in developing countries, with appropriate tailoring.

Nishen, A. K., & Kessels, U. (2022). **Non-communicated judgements of, versus feedback on, students' essays: Is feedback inflation larger for students with a migration background?** *Social Psychology of Education*, 25(1), 1-31. https://doi.org/10.1007/s11218-021-09674-3
When providing feedback, teachers are concerned not only with the simple transmission of information, but also with motivational and interpersonal dynamics. To mitigate these concerns, teachers may inflate feedback by reducing negative or increasing positive content. The resulting difference between initial judgments and feedback may be even more drastic for ethnic minority students: In non-communicated judgments, negative stereotypes may result in more negative judgments, whereas in feedback, concerns about being or appearing prejudiced may inflate feedback towards ethnic minority students. These hypotheses were tested in a sample of 132 German teacher students in a 2 (between subjects: feedback vs. non-communicated judgment) × 2 (within subjects:

target student's migration background: Turkish vs. none) design in which participants read supposed student essays and provided their written impressions to the research team or the supposed student. Findings revealed that teacher students' feedback was more positive than their non-communicated judgments on a multitude of dimensions. Contrary to expectations, these effects were not stronger when the student had a Turkish migration background. Instead, teacher students rated the essay of the student with a Turkish migration background more favorably both in the judgment and feedback conditions. Our results suggest that teachers adapt their initial judgments when giving feedback to account for interpersonal or motivational dynamics. Moreover, ethnic minority students may be especially likely to receive overly positive feedback. While the motivational/interpersonal dynamics may warrant some inflation in feedback, negative consequences of overly positive feedback, for which ethnic minority students may be especially vulnerable, are discussed.

Oyama, A. D., & Oyama, G. A. (2022). **Assessment of Anxiety on Tests Dishonesty among Undergraduate Students in University of Calabar, Cross River State Nigeria**. *British Journal of Education*, *10*(4), 1-27. https://doi.org/10.37745/bje.2013/vol10no4pp.1-27
The major aim of this study was to assess the influence of anxiety on tests dishonesty among undergraduate students in University of Calabar, Cross River State in Nigeria. Literature review of both theoretical and empirical studies was done according to the variable under study. The sample for the study was drawn from the population of seven hundred and thirty-five (735) undergraduates' students from year, 2, 3 and 4, comprising three hundred and two (302) females and one hundred and ninety-eight (198) males were used for the study. The data were collected using an eight (8) item research instrument. The data were analyzed with the use of independent t-test. The result of the analysis reviewed that anxiety influences test dishonesty among undergraduate students in university of Calabar, Cross River State in Nigeria. Based on the findings of the study it was recommended that all stakeholders in education should play their parts through educating and forming tests ethics club for students, parents and lecturers among others. The school authority should ensure that lecturers perform their duty effectively and should also pay staff earning as at when due in order to reduce corruption within the educational system.

Ruthig, J. C., Kroke, A. M., & Holfeld, B. (2022). **Anticipating academic performance and feedback: unrealistically optimistic temporal shifts in performance estimates and primary and secondary control strategies**. *Social Psychology of Education*, *25*(1), 55-73. https://doi.org/10.1007/s11218-021-09675-2
Students typically overestimate how well they will perform on future academic events, then lower those expectations as the event and performance feedback approach. According to control theories, individuals also shift from primary control strategies to secondary control strategies when the opportunity to exert direct influence over a performance event passes. However, temporal patterns of control strategies have not been examined to determine whether they correspond with shifts in performance estimates during a performance opportunity cycle. To obtain a thorough view of congruence in patterns of performance estimates and control strategy use, the current study spanned multiple performance cycles. Participants were 50 college students, who estimated their performance on three course exams, both prior to and after completing each exam. In addition, they completed measures of primary and secondary control strategies prior to the exam and after feedback, when they also reported their level of

motivation and general sense of control in the course. Initial performance estimates were unrealistically optimistic (compared to actual scores), then declined prior to receiving performance feedback. Performance estimates reverted to unrealistically optimistic levels in anticipation of the next performance event. Likewise, the primary control strategy of goal persistence and secondary control strategy of positive reappraisal declined from pre-exam performance to post-exam feedback then rebounded by pre-exam performance. Conversely, the secondary control strategy of lowering aspirations increased from pre-exam to post-exam feedback, then declined prior to the next exam. The current findings show temporal shifts in control strategy use that accompany similar patterns in performance estimates.

Sağkal, A. S., & Sönmez, M. T. (2022). **The effects of perceived parental math support on middle school students' math engagement: the serial multiple mediation of math self-efficacy and math enjoyment**. *European Journal of Psychology of Education*, *37*(2), 341-354. https://doi.org/10.1007/s10212-020-00518-w
The present study explored the direct and indirect (serial multiple mediation of math self-efficacy and math enjoyment) effects of perceived parental math support on middle school students' math engagement. A total of 374 middle school students ranging the age of 11 to 15 years completed a set of questionnaires assessing perceived parental math support, math self-efficacy, math enjoyment, and math engagement. In the analysis of structural model, a multiple-step multiple mediation analysis was employed. The findings indicated that perceived parental math support was directly and positively associated with math engagement. Additionally, math self-efficacy and math enjoyment sequentially mediated the relationship between parental math support and math engagement. The limitations and implications of the results are discussed and suggestions for future research are proposed.

Salas-Pilco, S. Z., Yang, Y., & Zhang, Z. (2022). **Student engagement in online learning in Latin American higher education during the COVID-19 pandemic: A systematic review**. *British Journal of Educational Technology*, *53*(3), 593-619. https://doi.org/10.1111/bjet.13190
The COVID-19 pandemic has forced higher education institutions to implement online learning activities based on virtual platforms, allowing little time to prepare and train faculty members to familiarize students with digital technologies. While previous studies have looked at how students engaged with digital technologies in their learning activities, the characteristics of the student engagement in online learning remain underexplored. Therefore, a systematic review of the literature on student engagement in online learning in higher education is much needed. This article synthesizes the findings on student engagement in Latin American higher education institutions during the COVID-19 pandemic. After reviewing the studies on online learning activities, this review examines student engagement from behavioural, cognitive and affective dimensions and identifies the main characteristics of student engagement from these tripartite dimensions. The implications of the findings for online learning in Latin American higher education are as follows: (a) to transform higher education, (b) to provide adequate professional training, (c) to improve Internet connectivity, (d) to ensure quality online learning in higher education and (e) to provide emotional support. These findings will provide valuable guidance for teachers, educational authorities and policy makers and help them make informed decisions to use effective strategies to support online learning in higher education institutions. Practitioner notes What is already known about this topic

The COVID-19 pandemic has disrupted the normal operation of higher education institutions across Latin America, impelling a shift from face-to-face instruction to online teaching and learning. Research on online learning in Latin American higher education has been conducted, but the findings and their implications are yet to be widely disseminated among researchers, practitioners and decision-makers. What this paper adds Providing a systematic review of research on student engagement in online learning in Latin American higher education institutions. Analyzing the construct of student engagement in online learning from tripartite dimensions—behavioral, cognitive and affective—in the Latin American higher education context. Identifying the characteristics associated to each dimension of student engagement in online learning. Implications for practice and/or policy The need to transform the higher education system in Latin America and beyond, at two levels: to improve Internet connectivity at the technological level and to ensure the quality of online education at the pedagogical level. The urgency to offer an adequate professional training regarding the use of new technologies in online learning environments. The significance for higher education institutions to provide emotional support for students during the COVID-10 pandemic.

Sas, M., Hardyns, W., Reniers, G., & Ponnet, K. (2022). **Unravelling College Students' Fear of Crime: The Role of Perceived Social Disorder and Physical Disorder on Campus**. *British Journal of Educational Studies*, *70*(1), 65-85. https://doi.org/10.1080/00071005.2020.1870658
The current study explores the role of individual and environmental determinants on students' fear of crime. Based on a large-scale survey among students of a Belgian university (n = 1,463), the relationship between perceived social and physical disorder and the three dimensions of fear of crime (perceived risk of victimization, feelings of anxiety, avoidance behaviour) is examined. Support was found for a relationship between perceived social and physical disorder and perceived risk of victimization. Moreover, a relationship was found between students' perception of social disorder and anxiety and students' perception of physical disorder and avoidance behaviour. Based on the results, this study suggests that preventing or reducing visible signs of disorder on campus should inevitably be included in the university's security policy. This research offers universities more insight in the determinants of students' fear of crime and potential measures to increase their (perception of) safety.

Schotte, K., Rjosk, C., Edele, A., Hachfeld, A., & Stanat, P. (2022). **Do teachers' cultural beliefs matter for students' school adaptation? A multilevel analysis of students' academic achievement and psychological school adjustment**. *Social Psychology of Education*, *25*(1), 75-112. https://doi.org/10.1007/s11218-021-09669-0
Based on two large-scale studies from Germany, we examined how different types of teachers' cultural beliefs are related to immigrant students' school adaptation. Specifically, we investigated the relationship of teachers' multicultural beliefs appreciating cultural diversity, their egalitarian beliefs focusing on all students' similarities and their assimilationist beliefs that immigrant students should conform to the mainstream context with immigrant students' academic achievement and psychological school adjustment as indicators of their school adaptation. We also explored all of these associations for non-immigrant students. Study 1 used data on the multicultural, egalitarian, and assimilationist beliefs of German language (NTeachers = 220) and mathematics (NTeachers = 245) teachers and on students' achievement and feelings of helplessness in German language classes (NStudents = 2606) and mathematics classes

(NStudents = 2851) as well as students' school satisfaction. Study 2 analyzed data on teachers' multicultural and egalitarian beliefs (NTeachers = 456) and students' achievement and self-concept in mathematics (NStudents = 4722). Overall, multilevel analyses revealed no relationship between teachers' cultural beliefs and any of the indicators of immigrant and non-immigrant students' school adaptation. These findings challenge the notion that overall, teachers' cultural beliefs effectively translate into students' school adaptation.

Sidwell, M. D., Gadke, D. L., Farmer, R., Ripple, H., & Tritley, J. (2022). **Evaluating the Potential for Correspondence Between Brief Functional Analysis and Interview-Informed Synthesized Contingency Analysis Procedures**. *Canadian Journal of School Psychology*, *37*(2), 160-174. https://doi.org/10.1177/08295735211041815
School Psychologists regularly conduct Functional Behavior Assessment (FBA), though, most FBA are completed using indirect procedures, which are inadequate for creating function-based interventions relative to experimental measures, such as functional analysis (FA). However, traditional FA may be considered arduous in the school setting. Alternative procedures like brief functional analysis (BFA) and interview informed synthesized contingency analysis (IISCA), may be as effective and more efficient than FA. Limited research exploring the correspondence of these procedures exists. The current study used an alternating treatment design across eight school aged children to compare control and test conditions for each measure. A within subjects approach was also used to compare the results of BFA and IISCA. Correspondence across the two measures was 54.17%. With average correspondence yielding just over half, the results indicate the two FA methods did not reliably identify the same function. Implications for practice are discussed.

Simard, C., & Deneault, J. (2022). **Introduire un animal en classe primaire : état de la situation au Québec**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.593

Steuer, G., Tulis, M., & Dresel, M. (2022). **Is dealing with errors in the classroom specific for school subjects? A study of the error climate in mathematics, German, and English**. *European Journal of Psychology of Education*, *37*(2), 355-373. https://doi.org/10.1007/s10212-020-00525-x
A frequent observation in the school context is that opportunities to learn from errors are often missed. However, a positive error climate may support learning from errors. For the school subject of mathematics, some findings about characteristics of the error climate already exist. But, a comparison of the error climate between different school subjects is still pending. In the present study, it is analyzed whether the error climate differs in different school subjects and whether the same interrelations between the ways in which individuals deal with errors can be found in these different school subjects. In a study with 937 students from 48 classrooms from grades 5 to 7, in different secondary schools in Germany and Austria, we assessed the error climate and individual reactions following errors in mathematics, German, and English. Small mean differences between mathematics and the two language subjects were yielded. In addition, we found medium-sized correlations between the error climate measures in the three school subjects. However, the same pattern of interrelations between error climate and the way individuals deal with errors for all three school subjects could be shown. The results suggest

that the perception of the error climate is rather similar in different school subjects. This has implications, for instance, for interventions that aim at fostering the error climate.

St-Pierre, S., Tardif-Grenier, K., & Villatte, A. (2022). **Which Anxiety Symptoms are Associated with Perceived Ethnic Discrimination in Adolescents With an Immigrant Background?** *Canadian Journal of School Psychology*, *37*(2), 175-188. https://doi.org/10.1177/08295735211039944
This study assesses the specific anxiety symptoms that are present in the context of perceived ethnic discrimination in 696 (M age = 13.3, σ = .77, 57% girls) seventh and eighth-grade students with immigrant backgrounds from four different Canadian high schools. Multiple hierarchical linear regressions were conducted to determine the association between perceived ethnic discrimination and specific anxiety symptoms. Results demonstrate that perceived ethnic discrimination is significantly associated with more anxiety symptoms, such as panic/somatic, generalized anxiety, social phobia, and school phobia. Findings provide a better understanding of the association between perceived ethnic discrimination and anxiety symptoms reported by adolescents with an immigrant background. These findings could help school-based mental health professionals in the implementation of prevention and intervention measures aimed at reducing specific anxiety symptoms that are often present in the context of perceived ethnic discrimination.

Tao, V. Y. K., Li, Y., & Wu, A. M. S. (2022). **Do not despise failures: students' failure mindset, perception of parents' failure mindset, and implicit theory of intelligence**. *European Journal of Psychology of Education*, *37*(2), 375-389. https://doi.org/10.1007/s10212-020-00524-y
This study was the first to investigate the prospective effects of failure mindsets on implicit theories of intelligence (ITI), whose profound effects on learning, motivation, and academic achievement have found increasing support. Participants were 240 Chinese university students (180 females, Mage = 19.13) who completed a baseline and a 1-year follow-up survey. The cross-lagged panel model supported the study's hypothesis that students' perception of their parents' view of failure as debilitating at baseline predicted their own failure-is-debilitating mindset and entity theory of intelligence at follow-up. However, students' failure-is-debilitating mindset at baseline did not predict their entity theory of intelligence at follow-up. A reciprocal relationship was found between students' perception of their parents' failure-is-debilitating mindset and their entity theory of intelligence. We recommend programs be implemented to educate parents of the value of failure and how their conveying positive views of failure can be constructive to students' trajectory of learning and intellectual growth.

Tejada-Gallardo, C., Blasco-Belled, A., & Alsinet, C. (2022). **Impact of a School-Based Multicomponent Positive Psychology Intervention on Adolescents' Time Attitudes: A Latent Transition Analysis**. *Journal of Youth and Adolescence*, *51*(5), 1002-1016. https://doi.org/10.1007/s10964-021-01562-5
Time attitudes, which refer to positive and negative feelings towards the past, present, and future, are a salient phenomenon in the developmental stage of adolescence and have been related to better well-being. Positive feelings towards time can be promoted in the school setting through empirically validated positive psychology interventions. However, the extent to which these interventions impact the time attitudes of adolescents remains unknown. The current study investigated the influence of a

multicomponent positive psychology intervention on adolescents' transitions between time attitude profiles and how these transitions are related to their emotional, social, and psychological well-being. Participants consisted of 220 ($M = 14.98$; 47.3% female) adolescents from two Spanish high schools who participated in the six-week Get to Know Me+ program. Adolescents' time attitudes and well-being were measured via the Adolescents and Adult Time Inventory–Time Attitudes and the Mental Health Continuum–Short Form, respectively, at pre- and postintervention. Participants were clustered in different profiles through a latent profile analysis, and the transitions were analyzed using a latent transition analysis. Five profiles were identified (negative, present/future negative, past negative, optimistic, and positive), and results indicated that adolescents who participated in the intervention were more likely to transition to positive profiles (optimistic and positive) and generally reported higher well-being, especially those in the negative, present/future negative, and optimistic profiles. Preliminary evidence showed that school-based multicomponent positive psychology interventions can have a positive impact on adolescents' feelings towards time and well-being.

Vettori, G., Vezzani, C., Bigozzi, L., & Pinto, G. (2022). **Multidimensional profiles of learning orientations and school achievement: a person-oriented approach in middle-school students**. *European Journal of Psychology of Education*, *37*(2), 439-458. https://doi.org/10.1007/s10212-021-00536-2
A person-oriented approach was applied to the study of early adolescents' learning orientations to identify different profiles and their association with school achievement. A total of 244 middle-school students (male: 128; female: 116; M-age ± SD = 12.51 ± .93) completed a self-report questionnaire to explore cognitive, metacognitive, and affective dimensions of learning orientations. School achievements were collected in a range of school subjects. Cluster analyses and one-way MANOVA were carried out to verify the existence of profiles. Chi-square tests were used to test the association between profiles of learning orientations and school achievement. The results showed two profiles differently associated with school achievement: students "Dragged by the current" (Profile 1) showed low school achievement across school subjects, meanwhile students "At the helm" (Profile 2) reached excellent school achievement. In promoting middle-school students' achievement, it is important for teachers to consider students' profiles of learning orientations.

Wagner, I., Loesche, P., & Bißantz, S. (2022). **Low-stakes performance testing in Germany by the VERA assessment: analysis of the mode effects between computer-based testing and paper-pencil testing**. *European Journal of Psychology of Education*, *37*(2), 531-549. https://doi.org/10.1007/s10212-021-00532-6
The German school system employs centrally organized performance assessments (some of which are called "VERA") as a way of promoting lesson development. In recent years, several German federal states introduced a computer-based performance testing system which will replace the paper-pencil testing system in the future. Scores from computer-based testing are required to be equivalent to paper-pencil testing scores so that the new testing medium does not lead to disadvantages for students. Therefore, the current study aimed at investigating the size of the mode effect and the moderating impact of students' gender, academic achievement and mainly spoken language in everyday life. In addition, the variance of the mode effect across tasks was investigated. The study was conducted in four German federal states in 2019 using a field experimental design. The test scores of 5140 eighth-graders from 165 schools in the subject German

were analysed. The results of multi-level modelling revealed that students' test scores in the computerized version of the VERA test were significantly lower than in the paper-pencil version. Students with a lower academic achievement were more disadvantaged by the VERA computerized test. The results were inconsistent regarding the interactions between testing mode and students' gender and mainly spoken language in everyday life. The variance of the mode effect across tasks was high. Research into different subjects and in other federal states and countries under different testing conditions might yield further evidence about the generalizability of these results.

Weißmüller, K. S., & De Waele, L. (2021). ***Would you Bribe your Lecturer? A Quasi-experimental Study on Burnout and Bribery in Higher Education*** (OSF Preprints N° csvkd). Consulté à l'adresse Center for Open Science website: https://econpapers.repec.org/paper/osfosfxxx/csvkd.htm
Bribery is a complex and critical issue in higher education (HE), causing severe economic and societal harm. Traditionally, most scholarship on HE corruption has focused on institutional factors in developing countries and insights into the psychological and motivational factors that drive HE bribery on the micro-level mechanisms are virtually non-existent. To close this research gap, this study investigates the connection between study-related burnout and university students' willingness to offer bribes to their lecturers to pass important exams. Conducting a vignette-based quasi-experimental replication study with 624 university students in Germany, Belgium, and the Netherlands we find that university students in three countries differentiate sharply between different shades of bribery and that a majority accept using emotional influence tactics to pass (failed) exams. In contrast, offering a helping hand or money (i.e., darker shades of bribery) to their lecturer was less acceptable. Study-related burnout is associated with a higher likelihood of engaging in these darker shades of bribery and students' commitment to the public interest is but a weak factor in preventing unethical behavior. In summary, this study provides solid empirical evidence that university students are likely to use emotional influence tactics violating both the ethical codes of conduct and the formalized bureaucratic procedures of HE examination, particularly if they suffer from study-related burnout. However, the accelerating effect of burnout on bribery is conditional in that it only holds for darker shades of bribery. HE institutions may benefit from implementing the four-eye principle and from launching awareness campaigns that enable lecturers to better recognize these tactics and engage students in creating a transparent environment for testing, grading, and collaboration that is resistant to bribery.

Willems, J., Coertjens, L., & Donche, V. (2022). **First-year students' social adjustment process in professional higher education: key experiences and their occurrence over time**. *European Journal of Psychology of Education*, *37*(2), 585-604. https://doi.org/10.1007/s10212-021-00530-8
The social adjustment process is a prominent factor in the literature on the transition to higher education (HE). This vast body of research, however, has predominantly focussed on academically oriented first-year higher education (FYHE) contexts, leaving professionally oriented programs (providing vocational education that prepares students for a particular occupation) rather underexamined. Therefore, this study set out to explore what first-year students in professional HE contexts perceive to be the most important social experiences associated with their adjustment process in the first semester of FYHE. Furthermore, this study examines the extent to which the uncovered key experiences associated with social adjustment are reported at different times. Hereto,

drawing on the critical incidents technique, qualitative data were collected from 104 purposively selected freshmen, enrolled in a Flemish (Dutch-speaking part of Belgium) university college which offers professional HE programs, such as social work and nursing. At the start of the second semester of FYHE, these respondents completed 'reflective logs' wherein they reflected on three critical social experiences during their first semester in HE. Firstly, a qualitative content analysis revealed that students report on five overarching themes: (1) dealing with the unknown, (2) establishing a first connection, (3) establishing a deeper connection, (4) support from peers and others, and (5) loneliness. Secondly, a quantitative analysis of code occurrence suggests that these five uncovered themes seem to be more significant at different times in the first semester of FYHE. Implications of the findings for the development of guidance and coaching initiatives are discussed.

Wondra, T. K., & McCrea, S. M. (2022). **Collective self-doubt: does subjective SES predict behavioral self-handicapping tendency in college students?** *Social Psychology of Education*, *25*(1), 129-167. https://doi.org/10.1007/s11218-021-09678-z
Self-handicapping is a defensive response to self-doubt about one's abilities to perform well on an upcoming task. It involves the creation via behavior, or claiming, of obstacles prior to the performance in order to excuse potential failure. Although past research has focused on individual-level threats to identity, self-doubt could also result from being a member of a stigmatized group. As a result, groups that experience stigmatization may report a heightened tendency to self-handicap. We specifically examined whether subjectively lower socioeconomic status (SES) associates with reports of engaging in self-handicapping behavior. Across four samples of college students, we observed consistent associations between subjective SES (but not objective SES) and self-reported tendency to behaviorally self-handicap. Controlling for aspects of susceptibility to stereotype threat (namely, disidentification with college and doubts about academic ability) statistically eliminated this association. The findings are consistent with a process whereby low subjective SES fosters self-doubt and domain disidentification, increasing the appeal of defensive behaviors like self-handicapping.

Wright, S., Dean, K. L., & Forray, J. M. (2022). **Negative student emotions and educator skill in experiential education: a taxonomy of classroom activities**. *Higher Education*, *83*(5), 987-1002. https://doi.org/10.1007/s10734-021-00720-9
Experiential teaching practices can provide transformative learning opportunities for students. However, thus far the experiential education literature considers "experiential activities" monolithically, without acknowledging differences in emotions, particularly negative emotions, students may experience or educator skill in facilitating them. We hypothesized and assessed a "step up" taxonomy that differentiates activities by the negative emotions that students may experience and the educator skill required to run the activity effectively. We mapped 18 representative experiential activities onto four different levels, each requiring increased educator facilitation skill in managing potential student emotional distress. We proposed that as levels of student emotional risk and engagement increase, so do required educator disciplinary knowledge and facilitation skill in using different activities. Using survey data, a principal component analysis indicated a four-level taxonomy populated by different teaching activities. After sharing our hypothesized taxonomy and discussing how we modified it after empirical examination, we end the article with avenues for future research and practical

considerations for experiential educators in any discipline that integrates experiential activities.

Xiao, J., Lin, T.-H., & Sun-Lin, H.-Z. (2022). **The role of different levels of multichannel multimodal learning experience delivery in student engagement**. *Education and Information Technologies*, *27*(3), 2939-2954. https://doi.org/10.1007/s10639-021-10731-9
This study aimed to explore the pedagogical dimension of multichannel multimodal learning (MML) and its association with student engagement. Forty-three students from Shanghai Open University participated in the study and their behavioural, emotional, cognitive learning engagement were investigated. Although teaching in the same space, the three instructors developed different MML-integrated pedagogies and delivered different levels of MML experience (i.e., different numbers of modes and channels used and incorporated). A one-factor-three-level ANOVA with a Tukey HSD test was conducted to examine whether students' behavioural, emotional, or cognitive learning engagement on three different levels of MML experience were different. The results showed behavioural and emotional engagement was significantly positively correlated (p = .020 and .026 respectively) to different MML-integrated pedagogies, and students' perception of levels of MML experience was significantly correlated (p = .048) to the levels the present study identified. The present study pointed out the importance of instructors' integrating pedagogies into MML environments. More modes and channels used and incorporated by instructors can better teaching quality by increasing learners' behavioural and emotional engagement.

Yilmaz, M. B., Orhan, F., & Zeren, S. G. (2022). **Adolescent emotion scale for online lessons: A study from Turkey**. *Education and Information Technologies*, *27*(3), 3403-3420. https://doi.org/10.1007/s10639-021-10734-6
People's day-to-day routines have changed drastically since the outbreak of the COVID-19 pandemic. One of the changes to take place has been the transition to online learning due to the changing conditions in learning environments. One of the factors that guide students through learning environments is their emotions. The few existing scales that measure the emotions of adolescents in learning environments have been developed with consideration of face-to-face learning environments and their items do not adequately express the state of online environments. For this reason, this study aimed to develop a scale which reveals the emotions of adolescents that may affect their academic success with regard to this transition of learning environments as they attend online lessons. A total of 3,655 middle and high school students living in Istanbul, Turkey, participated in the study. The scoring system was designed with regard to the frequency with which each student reading an item experiences the relevant emotion for the item in the online learning environment. Exploratory and confirmatory factor analyses conducted show the scale to possess a four-dimensional structure. These dimensions are enjoyment-pride, boredom-hopelessness, loneliness and anxiety. For all dimensions of the scale, Cronbach alpha values range between .93 and .83. 'Positive and Negative Affects Schedule-Children' was used to confirm the scale's criterion-related validity, and correlations between dimensions were examined. After validity and reliability studies, the Adolescent Emotion Scale for Online Lessons was found to be sufficient. The scale can be used by experts and teachers who wish to determine adolescents' emotions during a period of online learning.

Zembylas, M. (2022). **Affective Pedagogies in Civic Education: Contesting the Emotional Governance of Responses to Terrorist Attacks**. *British Journal of Educational Studies*, *70*(1), 21-38. https://doi.org/10.1080/00071005.2020.1870929

This paper analyses the emotional governance of responses to terrorist attacks and examines the extent to which affective pedagogies in civic education may contest the emotional norms that are institutionalised in society. This analysis is important, not only because it makes visible how forms of violence (especially terrorism) have an emotional impact on school life, but also in that it adds a crucial dimension to the struggle against sentimental education as a form of political education that governs youth's affects and emotions. The analysis explores these tensions and theorises how affective pedagogies can elicit creative and productive rather than normative becomings within youth practices in the classroom. In particular, the paper discusses how affective pedagogies in civic education may be reframed to cultivate critical affective skills that resist sentimental responses and challenge superficial interpretations of terrorist events. Re-articulating and re-imagining affective responses to terrorist attacks in the civics classroom will open pedagogical spaces that pay more attention to the kind of emotional governance that takes place in schools, politics and the society.

Aspects sociaux de l'éducation

Azuka Onyido, J., & Nwaogu, O. A. (2022). **Technology in Secondary Education: Sociological Implications for the 21st Century Nigeria Adolescents**. *British Journal of Education*, *10*(4), 35-42. https://doi.org/10.37745/bje.2013/vol10no4pp.35-42

Change is inevitable in the society and in the 21st Century. This assertion cannot be overemphasized in the sense that the advent of technology has seen unprecedented levels of change. The application of technology in every aspect of today's society has become the order of the day in the 21st Century, influencing every sector of modern society. The educational sector is not left in this wave of technological application as the introduction and employment of technological gadgets and approaches in the educational process has impacted the teaching and learning processes comprised of distant learning, cognitive development, collaborative teaching and learning to mention. Scholars have highlighted that the application of technological approaches to learning has been observed to impact the educational performance of students. It is therefore important that this approach be inculcated in the educational sector, particularly the secondary educational level because of its strategic position in the educational sector, its target population and the need to secure and guarantee the future of generations to come. It however, has a number of positive and negative implications for the adolescents such exemplified in cyber-bullying, pornography and the acquisition of improper use of language, among others. Cyber bullying, for instance, has the potential to impact the educational performance of students. This paper therefore seeks to explore the employment of technology in secondary in Nigeria and its sociological implication on adolescents. it establishes that education remains a critical drive of societal advancement and growth as it continues to adjust to meet the educational expectations of the modern-day society. The paper therefore makes a number of recommendations which include that parents and teachers should provide pupils with good orientation on the application and dangers of technology and its devices as well as the need for government and other organization to provide ICT equipment in schools.

Barnhardt, C. L., Halilaj, F., Bytyqi, H., & Stroup, N. R. (2022). **Educational success in a new democracy: modeling university student persistence and completion in Kosovo**. *Higher Education*, 83(5), 1039-1061. https://doi.org/10.1007/s10734-021-00727-2
In the context of a new democracy, the success of Kosovo university students is crucial to improving the material conditions and long-term stability of the youth in the country. Using the burgeoning data infrastructure from the public higher education sector, this analysis utilizes a sample of 67,618 to examine college student persistence and degree completion from 32 faculties. Findings demonstrate that persistence and completion are highly gendered phenomena, and that completion is largely dependent on a student's major field of study.

Barth, J. M., Masters, S. L., & Parker, J. G. (2022). **Gender stereotypes and belonging across high school girls' social groups: beyond the STEM classroom**. *Social Psychology of Education*, 25(1), 275-292. https://doi.org/10.1007/s11218-021-09683-2
Previous research on the impact of gender stereotypes on female adolescents' feeling of belonging to peer groups has focused on STEM classrooms and activities. This study expands this research and examines if perceptions of group-held gender stereotypes are related to adolescent girls' feelings of belonging to other social groups. Girls (N = 110) in advanced science and math classes (primarily 9th grade) completed an online survey that included questions about three groups: their science class, their close friendship group, and another peer group of their choosing, classified as their most important group (MIG). Questions about the groups included belonging, their perceptions of the group's gender stereotypical beliefs, and additional social contextual variables that are associated with belonging for girls—presence of close friends, presence of a best friend, and the number of girls relative to boys. Results indicated that girls perceived the different groups to hold different levels of gender stereotypical beliefs. Perceptions that a group held more traditional stereotypical beliefs was negatively correlated with belonging to each of the three groups. Regression analyses indicated the number of friends and perceptions of more traditional stereotypes predicted belonging to MIGs and science classes. Findings suggest that gender stereotypes may be an important factor in how adolescent girls perceive their belonging in many adolescent groups.

Bastedo, M. N., Bell, D., Howell, J. S., Hsu, J., Hurwitz, M., Perfetto, G., & Welch, M. (2022). **Admitting Students in Context: Field Experiments on Information Dashboards in College Admissions**. *The Journal of Higher Education*, 93(3), 327-374. https://doi.org/10.1080/00221546.2021.1971488
In this paper, we address whether the provision of contextual information about where students live and learn has the potential to expand postsecondary opportunities to students from disadvantaged neighborhoods and high schools. To examine this question, we describe the results of field experiments with admissions officers working in eight universities who re-read real applications from previous admissions cycles with a dashboard of contextual data about the applicant's neighborhood and high school. In this low-stakes context, admissions officers from institutions utilizing holistic admissions practices were more likely to recommend admitting low-SES applicants when provided with contextual data. The experiment also primed admissions readers to treat students from highly disadvantaged high school and neighborhood contexts more favorably relative to the results of the high-stakes official read, even when the dashboard was not shown to study participants. The results of this experiment suggest that contextualized

data can improve equity in admissions, but fidelity to holistic admissions practices is crucial.

Bowman, N. A., & Denson, N. (2022). **Institutional Racial Representation and Equity Gaps in College Graduation**. *The Journal of Higher Education*, 93(3), 399-423. https://doi.org/10.1080/00221546.2021.1971487
College graduation rates for racially minoritized students are adversely affected by structural barriers and hostile campus racial climates, which lead to notable equity gaps within and across institutions. Theory and prior literature suggest that the representation of racially minoritized students and instructors may play a role in shaping these disparities, but the evidence to date is limited and has yielded divergent findings. Therefore, the present study directly explored the link between the representation of several minoritized racial groups and equity gaps in six-year graduation rates. The results indicate that same-race representation and the representation of students and instructors from other racially minoritized groups were associated with greater racial equity in graduation outcomes; in fact, no Black-White and Latinx-White gaps were present when Black or Latinx students, respectively, comprised at least half of undergraduates at that institution. Moreover, these patterns occurred predominantly at institutions with virtually no fully online students, which suggests the importance of face-to-face interactions that facilitate situational racial cues and interpersonal experiences that may foster success for racially minoritized students.

Brière, L., Moreau, G., Prud'homme, M., Orellana, I., Marleau, M.-È., & Chatelain, M. (2022). **Soutenir la justice épistémique par la formation réciproque au cœur d'initiatives citoyennes de transition énergétique porteuse de justice sociale**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18638
Le mouvement écocitoyen pour une transition énergétique travaille à transformer le système économico-énergétique dominant dans une visée de justice sociale et de respect de l'environnement. En collaborant avec les acteurs et actrices de cette mobilisation dans le cadre d'une recherche-action, nous avons soulevé les enjeux de justice épistémique inhérents à ce projet politique. Nous avons aussi voulu créer des espaces de formation réciproque qui mettent en valeur la diversité des types de savoirs. Nous avons réfléchi aux besoins cruciaux et aux possibles vecteurs d'intensification de la collaboration et du partage de savoirs entre les différents groupes d'acteurs composant le mouvement : associations syndicales, groupes écologistes et communautaires, comités citoyens et milieux universitaires. Nous avons en outre proposé un cadre conceptuel innovant de la justice énergétique, qui prend en compte les réalités très concrètes des luttes et initiatives écocitoyennes

Brinbaum, Y. (2022). *Access to Employment of the Second Generations in France: Unequal Role of Family and Personal Networks by Origins and Gender*. 83. https://doi.org/10.1007/978-3-030-94972-3_5
Abstract Using data from the Trajectories and Origins survey (TeO), this chapter investigates the role of networks in access to employment of descendants of immigrants in France. I compare the recruitment channels and the type of networks used by various origin groups and the majority population. And I analyse the determinants of obtaining a job through family ties or personal networks, disentangling the effects of origin from other individual characteristics, and the nature of the job obtained. I show that the use of networks – and the kind of networks - to get jobs varies by origin groups and by gender.

Within-group differences exist also according to education, family background and place of residence, as well as by sector of employment. Controlling for similar characteristics, family ties play help descendants of migrants from Turkey to get a job, and to a lesser extent, descendants from Portugal. This helps explain ethnic segregation and the quality of the jobs of these groups. Descendants of migrants from Sub-Saharan Africa and from North Africa were less likely to obtain less their job through networks. This is especially true for women, who compensate by using more formal methods. These groups would need stronger networks or intermediaries to provide trusted information to employers and reduce discrimination and racism. This chapter thus contributes to a better understanding of the inequalities faced by various origin groups in the French labour market.

Busch, C. A., Supriya, K., Cooper, K. M., & Brownell, S. E. (2022). **Unveiling Concealable Stigmatized Identities in Class: The Impact of an Instructor Revealing Her LGBTQ+ Identity to Students in a Large-Enrollment Biology Course**. *CBE—Life Sciences Education, 21*(2), ar37. https://doi.org/10.1187/cbe.21-06-0162
Sharing personal information can help instructors build relationships with students, and instructors revealing concealable stigmatized identities (CSIs) may be particularly impactful. One CSI is the LGBTQ+ identity, but there has been no research on the student-perceived impact of an instructor revealing this identity. In this exploratory study conducted at an institution in the U.S. Southwest, an instructor revealed that she identifies as LGBTQ+ to her undergraduate biology course in less than 3 seconds. We surveyed students (n = 475) after 8 weeks to assess whether they remembered this, and if so, how they perceived it affected them. We used regression models to assess whether students with different identities perceived a disproportionate impact of the reveal. Most students perceived the instructor revealing her LGBTQ+ identity positively impacted them; regression results showed LGBTQ+ students and women perceived greater increased sense of belonging and confidence to pursue a science career. Students overwhelmingly agreed that instructors revealing their LGBTQ+ identities to students is appropriate. This study is the first to indicate the perceived impact of an instructor revealing her LGBTQ+ identity to students in the United States and suggests that a brief intervention could positively affect students.

Bush-Mecenas, S. (2022). **"The Business of Teaching and Learning": Institutionalizing Equity in Educational Organizations Through Continuous Improvement**. *American Educational Research Journal, 59*(3), 461-499. https://doi.org/10.3102/00028312221074404
The continuous improvement (CI) approach to systems change has rapidly spread across education policy circles in recent years and has been hailed as a promising means to achieve educational equity and social justice. CI's highly routinized, scientific process for improving efficiency and productivity is a somewhat unexpected means to pursue equity. To understand this puzzle, I examine the use of CI to promote equity through two qualitative, multilevel case studies. I draw on institutional theory to understand how CI has integrated logics of racial equity and performance, and how local actors have improvised novel approaches. This analysis illuminates the complex institutional dynamics at play with CI implementation and identifies the challenges and promise of using CI to promote educational equity.

Cabrera, N. L., Karaman, A. K., Ballysingh, T. A., Oregon, Y. G., Gonell, E. A., Lopez, J. D., & Deil-Amen, R. (2022). **Race Without Gender? Trends and Limitations in the Higher**

Education Scholarship Regarding Men of Color. *Review of Educational Research*, 92(3), 331-369. https://doi.org/10.3102/00346543211054577
The underrepresentation and underperformance of men of color relative to women of color within institutions of higher education have been extensively studied the past 20 years. The purpose of this study is to understand trends in how this research has been conducted rather than understand "best practices" to support this student population. To achieve this, we reviewed 153 pieces of scholarship from 1999 to 2019 using an intersectional and critical content analysis approach. Findings revealed that the bulk of scholarship involved onetime interviews for its empirical foundations, and the overwhelming majority centered the racial experiences of Black and Latinx men. In contrast, few analyses critically explored gender, sexual orientation, or social class. Additionally, scholarship that centered Asian American, Indigenous, multiracial, and trans* men of color was scant or nonexistent. Given these large gaps in the knowledge base, we offer guidance for the next generation of men of color in higher education scholarship in terms of analytical foci, theoretical frameworks, and methodologies.

Cattan, S., Kamhöfer, D. A., Karlsson, M., & Nilsson, T. (2022). **The long-term effects of student absence: Evidence from Sweden** (DICE Discussion Paper N° 383). Consulté à l'adresse Heinrich Heine University Düsseldorf, Düsseldorf Institute for Competition Economics (DICE) website: https://econpapers.repec.org/paper/zbwdicedp/383.htm
Despite the relatively uncontested importance of promoting school attendance in the policy arena, little evidence exists on the causal effect of school absence on long-run socio-economic outcomes. We address this question by combining historical and administrative records for cohorts of Swedish individuals born in the 1930s. We find that primary school absence significantly reduces contemporaneous academic performance, final educational attainment and labor income throughout the life-cycle. The findings are consistent with a dynamic model of human capital formation, whereby absence causes small immediate learning losses, which cumulate to larger human capital losses over time and lead to worse labor market performance.

Collins, M. (2022). **Sibling Gender, Inheritance Customs and Educational Attainment: Evidence from Matrilineal and Patrilineal Societies** (Working Paper N° 2022:5). Consulté à l'adresse Lund University, Department of Economics website: https://econpapers.repec.org/paper/hhslunewp/2022_5f005.htm
Using data from 27 sub-Saharan African countries, I identify the causal effect of sibling gender on education and how it varies according to inheritance customs. Boys who inherit their father's property experience no effect of sibling gender, while boys who do not inherit experience a significant negative effect of having a brother. Having a brother has a small negative effect on the education of girls, regardless of inheritance customs. The effect of sibling gender converges after the introduction of laws guaranteeing that children inherit from their parents, suggesting that parents substitute between transferring inheritance and investing in their children's education.

Cordua, F., & Netz, N. (2022). **Why do women more often intend to study abroad than men?** *Higher Education*, 83(5), 1079-1101. https://doi.org/10.1007/s10734-021-00731-6
In many Western countries, women are more likely to study abroad than men. At present, there is a lack of theory-guided empirical studies searching explanations for this pattern. We address this research gap by examining gender differences in study abroad intent among first-semester students in Germany. To derive a comprehensive theoretical

framework, we draw on social role theory of sex differences, cognitive development theory, new home economics and statistical discrimination theory. Using data from the nationally representative 2010 DZHW School Leavers Survey, we test our hypotheses by estimating logistic regressions and non-linear effect decompositions. We find that women more often intend to study abroad primarily because of the gender-specific interest profiles they develop throughout their early life course: Related to their subject choice at school, women tend to acquire competences (e.g., language skills) that ease later stays abroad. To some extent, women's better educational performance during school also explains their better chances to study abroad. Once in higher education, women tend to choose fields of study in which studying abroad is considered more valuable for competence acquisition. Losing time due to studying abroad is less of an obstacle for women but—against theoretical expectations—not because of a lower labour market orientation. Finally, the expectation to interrupt the professional career for taking care of the family deters women—especially those from a low social background—from studying abroad, but not men. We do not find evidence that women understand studying abroad as a strategy to counteract this anticipated discrimination. Overall, our results underscore the particular importance of social role and cognitive development theory for explaining gender differences in the spatial mobility of students.

Cormier, C. J. (2022). **"I Wouldn't Invite Them to the Cookout": How Black Male Special Education Teachers Feel About Socializing with Their White Colleagues**. *Harvard Educational Review*, 92(1), 86-106. https://doi.org/10.17763/1943-5045-92.1.86
In this research article, Christopher J. Cormier analyzes interviews he conducted with five Black male US special education teachers to understand how they experienced social ties in the workplace. The interviews reveal the raced and gendered dynamics that complicated the interviewees' relationships with their predominantly White and female colleagues and how these Black male teachers chose to forgo social activities with their White colleagues even while knowing that this avoidance could limit their opportunities for broader career advancement.

Couronné, J., Dupuy, C., Sarfati, F., & Simha, J. (2022). **Le plaisir et le calcul : une analyse des activités extra-scolaires des étudiant·es**. *Sociologie*, *13*(1). Consulté à l'adresse https://journals.openedition.org/sociologie/9823
À partir d'une série d'entretiens menés auprès d'étudiant·es inscrit·es dans différents cursus de l'enseignement supérieur public, cet article s'intéresse à ceux et celles qui pratiquent des activités en dehors de leur scolarité et qui s'inscrivent dans des parcours de réussite scolaire. Issu·es des classes moyennes et supérieures, du côté des bon·nes élèves, ils et elles ont été dès le plus jeune âge socialisé·es à exercer une ou des activités extra-scolaires par lesquelles ils et elles ont acquis des dispositions utiles à l'université. Une fois en études supérieures, ces jeunes poursuivent des activités extra-scolaires qu'ils mobilisent selon deux conceptions : une « gratuite », dans laquelle ils déclarent pratiquer leurs activités par « passion » ; une « calculée » présentée comme un investissement dans la réussite des études et de la carrière professionnelle. Cet article montre alors comment les activités extra-scolaires renforcent des parcours de réussite précocement engagés.

Di Pietro, G. (2022). **Changes in the study abroad gender gap: A European cross-country analysis**. *Higher Education Quarterly*, *76*(2), 436-459. https://doi.org/10.1111/hequ.12316
Although it is well-established that female participation in study abroad programmes is higher than the male participation, less is known about how this gap has changed over

time. Using student-level data from the nationally representative surveys of three European countries (France, Germany and Italy), this paper begins by examining changes in the relationship between gender and participation in study abroad programmes between the beginning of the 2000s and the mid-2010s. It then explores to what extent these changes can be explained by different characteristics of men and women. The results suggest that in none of the countries there is evidence of a systematic decline over time in women's over-representation in study abroad programmes. However, the size of the gap is consistently significantly reduced (or even the sign of the gap reversed) once gender differences in observable traits are accounted for. Field of study and academic performance are important factors contributing to the gender disparity in study abroad.

EM2030 : Equal Measure 2030. (2022). *Mise à profit des données et des partenariats: renforcer l'éducation des filles en situations d'urgence avec les ODF*. Consulté à l'adresse https://equalmeasures2030.org/wp-content/uploads/2022/03/GAC-policy-report-spread-pages-French.pdf
En 2021, le gouvernement du Canada a décidé d'appuyer un partenariat avec Equal Measures 2030 - un groupe d'ONG, fondations et entreprises - et ses partenaires au Kenya et au Burkina Faso, afin de recenser les moyens de renforcer la prestation équitable d'une éducation pour les filles et les femmes. Les filles cherchant à poursuivre leur éducation dans les contextes d'urgence au Kenya et au Burkina Faso sont confrontées à deux scénarios notablement différents, aggravés par la pandémie. Le Kenya doit améliorer les résultats scolaires dans les zones où vivent des centaines de milliers de réfugiés. Au Burkina Faso, c'est la menace de la violence extrémiste qui empêche, du moins en partie, les filles d'être scolarisées. Le point de vue essentiel des organisations de défense des droits des femmes (ODF) de la base est souvent absent des débats. Intervenant en première ligne. Les ODF ont pourtant une connaissance unique des réalités vécues par les filles qui cherchent à être scolarisées dans les zones touchées par les crises et les conflits.

Engzell, P., & Raabe, I. (2022, avril 7). *Within-School Achievement Sorting in Comprehensive and Tracked Systems*. https://doi.org/10.31235/osf.io/x6cbt
Why do inequalities in schooling persist, even in relatively egalitarian school systems? This paper examines within-school sorting as an explanation. We use classroom data on friendship networks in 480 European secondary schools, and contrast comprehensive (England, Sweden) and tracked systems (Germany, Netherlands). Our question is to what extent comprehensive systems reduce achievement sorting at the level of (a) schools, (b) classrooms, and (c) friendships. Between-school variance in achievement is lower in comprehensive systems. However, this is counterbalanced by greater sorting within schools, between classrooms and, especially, in friendship networks. Still, comprehensive schools create more equal environments for two reasons. First, the difference in between-school sorting is larger than the difference in within-school sorting. Second, within-school sorting is less strongly related to social background characteristics. These findings help explain both why comprehensive schools produce more equal outcomes, and how substantial inequality can nevertheless persist.

Erickson, J. H., & Pearson, J. (2022). **Excluding Whom? Race, Gender, and Suspension in High School**. *Education and Urban Society*, *54*(4), 389-422. https://doi.org/10.1177/00131245211027510

Students of color are more apt to face exclusionary discipline in school, such as suspension or expulsion, than their white counterparts, and once suspended students may be more likely to drop out of school altogether. Utilizing the Education Longitudinal Study (ELS), we assess the separate and combined effects of various student level influences while controlling for contextual influences on the odds of suspension and dropping out. Results suggest students of color face a more punitive schooling experience and are more likely to experience scholastic exclusion even after controlling for a host of covaraites. Thus, findings indicate implicit perceptions of students of color, irrespective of their attitudes and behaviors, guide disciplinary practices which have real effects for students' subsequent academic experience.

Erlich, V. (2022, avril 5). **« Les Héritiers » : ce que Bourdieu et Passeron nous ont appris de l'inégalité des chances**. Consulté 6 avril 2022, à l'adresse The Conversation website: http://theconversation.com/les-heritiers-ce-que-bourdieu-et-passeron-nous-ont-appris-de-linegalite-des-chances-177185
Vingt ans après la disparition du sociologue et malgré la massification de l'enseignement supérieur, les analyses de Pierre Bourdieu sur les inégalités d'accès aux études restent très actuelles.

Espino, M. L., Rodriguez, S. L., & Le, B. D. (2022). **A Systematic Review of Literature: Engineering Identity and Students with Financial Need in Community Colleges**. *Community College Journal of Research and Practice*, 46(5), 352-363. https://doi.org/10.1080/10668926.2020.1856218
A review of studies published between 2000 and 2017 was conducted to understand students' engineering identity and their financial need within the community college setting. The review found that research studies used a variety of frameworks and methodologies to investigate community college engineering identity and financial need. In addition, scholars focused on investigating engineering identity across disciplines, rather than engineering identity within distinct sub-disciplines. Overall, studies focused on the importance of engineering transfer support and engagement. The review of current literature implicates that additional work is needed on engineering identity in relation to community college students with financial need, particularly in terms of more diverse methods and sampling. This study also points to the need of support and services that can understand, engage, and support students from community colleges with financial need passed on their identities.

Espino, M. M., & Croom, N. N. (2022). **Doing the work: curating resistance and solidarity among black and Chicana womyn faculty**. *International Journal of Qualitative Studies in Education*, 35(5), 510-524. https://doi.org/10.1080/09518398.2021.1991027
Inspired by Black and Chicana feminists who came before us and are leading our paths, we critically examine how to build solidarity among womyn of color faculty, support each other's political projects by uplifting critical raced-gendered epistemologies, and disrupt white supremacy that seeps into the everyday experiences in academia via neoliberal logics at predominantly white research-extensive universities. Through plática methodology, we demonstrate the importance of critical reflexivity, responsibility-taking, and our labor as womyn of color in academe; our complicity in protecting whiteness and patriarchy; and cultivating resistance through solidarity building as an active and on-going process.

Federini, F. (2022, avril 28). **L'égalité des chances à l'école : une hypocrisie**. Consulté 18 janvier 2023, à l'adresse Observatoire des inégalités website: https://www.inegalites.fr/L-egalite-des-chances-a-l-ecole-une-hypocrisie
Prétendre que les enfants de milieux populaires ont les mêmes chances dans leurs études que les élèves de milieux favorisés est une hypocrisie. Le point de vue de Fabienne Federini, sociologue spécialiste des politiques éducatives, extrait du journal Libération.

Forrester, C., Schwikert, S., Foster, J., & Corwin, L. (2022). **Undergraduate R Programming Anxiety in Ecology: Persistent Gender Gaps and Coping Strategies**. *CBE—Life Sciences Education*, *21*(2), ar29. https://doi.org/10.1187/cbe.21-05-0133
The ability to program in R, an open-source statistical program, is increasingly valued across job markets, including ecology. The benefits of teaching R to undergraduates are abundant, but learning to code in R may induce anxiety for students, potentially leading to negative learning outcomes and disengagement. Anecdotes suggest a gender differential in programming anxiety, with women experiencing greater anxiety. Currently, we do not know the extent to which programming anxiety exists in our undergraduate biology classrooms, whether it differs by gender, and what instructors can do to alleviate it. Instructor immediacy has been shown to mediate related anxieties such as quantitative and computer anxiety. Likewise, students' use of adaptive coping strategies may mitigate anxieties. We investigated students' R anxiety within a lower-division ecology course and explored its relationships with gender, instructor immediacy, classroom engagement, and reported coping strategies. Women reported significantly higher R anxiety than men, a gap that narrowed, yet persisted over the semester. In addition, several specific coping skills were associated with decreases in R anxiety and increases in self-concept and sense of control; these differed by gender identity. Our findings can guide future work to identify interventions that lessen programming anxiety in biology classes, especially for women.

Garnier, P. (2021). **Ariès : entre histoire, philosophie sociale et connaissance ordinaire des enfants**. *Les sciences de l'éducation - Pour l'Ère nouvelle*, *54*(1), 35-52. https://doi.org/10.3917/lsdle.541.0035
L'ouvrage d'Ariès, L'enfant et la vie familiale sous l'ancien régime, a ouvert un nouveau champ de recherche dans le domaine des sciences sociales, emportant un large succès public, en même temps que sa thèse d'une « découverte de l'enfance » suscitait de nombreuses critiques scientifiques. L'objectif de cet article est d'analyser un vaste corpus de ces critiques pour comprendre les opérations historiographiques mises en jeu par l'historien afin de donner une histoire à l'enfance. Nous en soulignons ici deux principales dimensions, d'une part, l'importance d'une philosophie sociale privilégiant un ordre domestique qui favorisait un mélange des âges ; d'autre part, la construction de l'enfance comme un ensemble d'attributs différenciés de ceux impartis aux adultes, à partir d'une connaissance ordinaire, de sens commun, des enfants. L'analyse ouvre ainsi une perspective heuristique pour comprendre les tensions qui traversent aujourd'hui les classements d'âge.

Garver, R. (2022). **For Some and for All: Subgroup Entitlement Policies and Daily Opportunity Provision in Segregated Schools**. *American Educational Research Journal*, *59*(3), 574-609. https://doi.org/10.3102/00028312221079302
Educators in economically and racially segregated schools enact subgroup entitlement policies, such as Title III and IDEA (Individuals with Disabilities Education Act), as they

negotiate the diverse and underserved needs throughout the student body. How do subgroup entitlement policies for English learners and students with disabilities shape daily opportunity provision—the day-to-day distribution of resources—in segregated schools? This ethnographic study of a public middle school reveals that the implementation of subgroup entitlement policies shaped the opportunity structure for all students through (1) creating tracks that offered distinct conditions for learning, (2) fragmenting the organizational structure and inhibiting coordination, (3) exposing the school to increased compliance pressure that hierarchized priorities, and (4) utilizing subgroup-specific resources for general education students.

Gaudreault, D. (2022). *Chronique de la violence. Une généalogie de l'intimidation scolaire*. Consulté à l'adresse https://www.pulaval.com/livres/chronique-de-la-violence-une-genealogie-de-l-intimidation-scolaire
Comment un phénomène aussi ancien que la violence à l'école en vient-il à faire l'objet d'un nouveau problème social ? Découvrez la fascinante histoire de la « découverte » de l'intimidation.

Gonzales, L. D., & Shotton, H. (2022). **Coalitional refusal in a neoliberal academy**. *International Journal of Qualitative Studies in Education*, 35(5), 540-552. https://doi.org/10.1080/09518398.2022.2025472
In this project, we share how we—two differently situated Women of Color, one Indigenous and one Chicana, with myriad other identities (e.g. mothers, partners, daughters, friends, co-conspirators, academics)—grew to be friends, and how we foster our friendship as a site of coalitional refusal for creating a more just academy. We offer our reflections in hopes that they will be useful to others who also want to work towards coalition and refuse the neoliberal academy.

Gourdon, J. (2022a, avril 11). **Cinquante ans après son ouverture aux femmes, Polytechnique reste un bastion masculin**. *Le Monde.fr*. Consulté à l'adresse https://www.lemonde.fr/campus/article/2022/04/11/cinquante-ans-apres-son-ouverture-aux-femmes-polytechnique-reste-un-bastion-masculin_6121697_4401467.html
Dans cette grande école qui mène nombre de ses élèves au sommet du pouvoir, 83 % des étudiants sont des hommes. L'établissement, ouvert aux femmes depuis 1972, s'inquiète de l'impact de la réforme Blanquer sur l'appétence pour les maths chez les filles.

Gourdon, J. (2022b, avril 18). **Plus de boursiers, moins de Parisiens… Les nouveaux visages de l'Ecole du Louvre**. *Le Monde.fr*. Consulté à l'adresse https://www.lemonde.fr/campus/article/2022/04/18/plus-de-boursiers-moins-de-parisiens-l-ecole-du-louvre-se-democratise_6122570_4401467.html
Jadis chasse gardée de « jeunes filles de bonne famille », l'Ecole du Louvre fait sa mue. Le profil des étudiants de cette grande école d'histoire de l'art évolue et conduit cette vieille institution à s'adapter à cette nouvelle génération, non sans accrocs.

Gousse-Lessard, A.-S., & Lebrun-Paré, F. (2022). **Regards croisés sur le phénomène « d'écoanxiété » : perspectives psychologique, sociale et éducationnelle**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.8159

Le vocable « écoanxiété » a récemment fait son entrée dans le discours médiatique, celui des mouvements sociaux et au sein des milieux éducatifs. Si le milieu de la recherche n'est pas en reste, trop peu d'écrits, particulièrement en français, se sont penchés sur le phénomène que le terme « écoanxiété » tente de saisir et sa prise en compte en éducation. En vue de contribuer à combler cet écart, cet article mobilise des perspectives ancrées en psychologie et en sociologie critique, fondées sur une recension d'écrits et les résultats d'une recherche empirique exploratoire. Il a pour objectifs 1) de clarifier les contours de cette notion, 2) d'exposer certaines stratégies de régulation de l'écoanxiété et les enjeux qui y sont associés, et 3) de fournir des pistes de réflexion pour l'intervention en éducation relative à l'environnement (ERE).

Hanauer, D. I., Graham, M. J., Jacobs-Sera, D., Garlena, R. A., Russell, D. A., Sivanathan, V., … Hatfull, G. F. (2022). **Broadening Access to STEM through the Community College: Investigating the Role of Course-Based Research Experiences (CREs)**. *CBE—Life Sciences Education*, *21*(2), ar38. https://doi.org/10.1187/cbe.21-08-0203
Broadening access to science, technology, engineering, and mathematics (STEM) professions through the provision of early-career research experiences for a wide range of demographic groups is important for the diversification of the STEM workforce. The size and diversity of the community college system make it a prime educational site for achieving this aim. However, some evidence shows that women and Black, Latinx, and Native American student groups have been hindered in STEM at the community college level. One option for enhancing persistence in STEM is to incorporate the course-based research experiences (CREs) into the curriculum as a replacement for the prevalent traditional laboratory. This can be achieved through the integration of community colleges within extant, multi-institutional CREs such as the SEA-PHAGES program. Using a propensity score–matching technique, students in a CRE and traditional laboratory were compared on a range of psychosocial variables (project ownership, self-efficacy, science identity, scientific community values, and networking). Results revealed higher ratings for women and persons excluded because of their ethnicity or race (PEERs) in the SEA-PHAGES program on important predictors of persistence such as project ownership and science identity. This suggests that the usage of CREs at community colleges could have positive effects in addressing the gender gap for women and enhance inclusiveness for PEER students in STEM.

Hanushek, E. A., Jacobs, B., Schwerdt, G., Van der Velden, R., Vermeulen, S., & Wiederhold, S. (2022). *The intergenerational transmission of cognitive skills: An investigation of the causal impact of families on student outcomes* (Working Paper N° 09). Consulté à l'adresse University of Konstanz, Cluster of Excellence « The Politics of Inequality. Perceptions, Participation and Policies » website: https://econpapers.repec.org/paper/zbwcexwps/09.htm
The extensive literature on intergenerational mobility highlights the importance of family linkages but fails to provide credible evidence about the underlying family factors that drive the pervasive correlations. We employ a unique combination of Dutch survey and registry data that links math and language skills across generations. We identify the connection between cognitive skills of parents and their children by exploiting within-family between-subject variation in these skills. A causal interpretation of the between-subject estimates is reinforced by novel IV estimation that isolates variation in parent cognitive skills due to teacher and classroom peer quality. The between-subject and IV estimates of the key intergenerational persistence parameter are strikingly similar and

close at about 0.1. Finally, we show the strong influence of family skill transmission on children's choices of STEM fields.

Harris, B., Sullivan, A. L., Embleton, P., Shaver, E., Nguyen, T., Kim, J., … Williams, S. (2022). **Exploratory Investigation of Gender Differences in School Psychology Publishing Before and During the Initial Phase of COVID-19**. *Canadian Journal of School Psychology*, *37*(2), 204-211. https://doi.org/10.1177/08295735221074473
Although many disciplines saw increases in manuscript submissions coinciding with lockdown measures, numerous studies have documented widening gender gaps in academic productivity. Chi-squared analyses of gendered trends in first author manuscript submission in three school psychology journals during the initial phase of COVID-19 compared to the same time frame in the preceding 3 years did not reveal any significant associations. There was a significant increase over time in the gender gap, with a trend of more female authors than male authors. Women school psychology researchers may not have experienced similar detriments to productivity as in other disciplines, or such detriments were not reflected in submission patterns during this time frame. Limitations of the study and implications for school psychology are provided.

Herbaut, E., Barone, C., & Vallet, L.-A. (2022). **Baccalaureate Tracks and Employment at the End of Education: Contribution of the Educational Pathway and Analysis of Gender Gaps**. *Économie et Statistique / Economics and Statistics*, (530-31), 61-81. https://doi.org/10.24187/ecostat.2022.530.2065

Herrera, N., Castellanos, J., & Gloria, A. M. (2022). **Mi Conexión Cultural al Ambiente Educativo: Cultural Congruity as a Mediator within a Psychosociocultural Examination of Californian Latinx High School Students' Coping**. *Education and Urban Society*, *54*(4), 487-510. https://doi.org/10.1177/00131245211020482
As California is one of the primary states with the highest influx of Latinxs, the rise of Latinx enrollment in California high schools calls to the importance of understanding methods to increase academic and overall wellness. Cultural congruity (i.e., match of one's cultural values with those of the educational setting) is hypothesized to influence positive academic and psychological outcomes for Latinx students. However, no study to date has examined the role cultural congruity in further explaining psychological outcomes for high schoolers. Using the psychosociocultural framework, the study's purpose was to examine if cultural congruity further explains the relationships between academic self-efficacy, family support, and ethnic identity with coping, respectively. For a sample of 104 Latinx Californian high school students, results revealed that cultural congruity partially explained the relationships of academic self-efficacy and ethnic identity with coping, respectively. Educators and mental health practitioners may benefit from implementing a curriculum that is culturally validating, as it may support positive psychological functioning and coping strategies.

Jabbar, H., Schudde, L., Garza, M., & McKinnon-Crowley, S. (2022). **Bridges or Barriers? How Interactions between Individuals and Institutions Condition Community College Transfer**. *The Journal of Higher Education*, *93*(3), 375-398. https://doi.org/10.1080/00221546.2021.1953339
Institutional practices and conditions at community colleges can improve rates of transfer, as can access to transfer student capital. However, we know little about how institutions attempt to build students' transfer capital, or about students' experiences

within community colleges as they accumulate transfer capital. In this paper, we examine how students' institutional experiences, particularly their engagement with student supports at community colleges and transfer destinations, influence their understanding of, and ability to navigate, the transfer process. We view the accumulation of transfer student capital as an interactionist model between the students and their institution, where students' transfer knowledge and success is conditioned by an interaction between their background and institutional conditions. We draw on longitudinal qualitative interview data with transfer-intending community college students over the course of 3 years to understand how students access, receive, and accumulate transfer capital as they work toward their educational goals. By leveraging student experiences, our study can inform community colleges and transfer destinations about practices and policies interpreted as most effective from the perspective of students. Our work also connects to broader conversations about how institutions reproduce, ameliorate, or exacerbate inequalities based on student background.

Jingru, Q. (2022). **Urban-Rural Differences under the Context of China's Political Textbook System: Student Perspectives**. *Education and Urban Society*, *54*(4), 423-444. https://doi.org/10.1177/00131245211012360
The term "life-related," a significant characteristic of new political textbook(s) in China's new curriculum reform at senior high school level, means that the textbook(s) should be based on the learners' life experiences and designed to enhance learning in daily life. There has been little relevant research about student perspectives on how "life-related" a textbook is, especially on comparing students from urban and rural areas. This paper has two aims: Firstly, to compare the perspectives of the urban and rural students about how "life-related" a textbook is; and secondly, to concentrate on identifying the effecting factors on the student perspectives. In this study, the results of questionnaire survey (N = 569), with 285 students from a urban school and 284 students from a rural school, indicated that the political textbook (Politics and Life, in short P&L) is more related to urban students' daily life. Findings from semi-structured interviews and content analysis of the textbook suggested that public resource, family background, and the urban-oriented textbook content may explain the urban-rural difference of students' perceptions on political textbook.

Jones, D. S., Gillette, D. D., Cooper, P. E., Salinas, R. Y., Hill, J. L., Black, S. J., ... Canelas, D. A. (2022). **Cultivating PhD Aspirations during College**. *CBE—Life Sciences Education*, *21*(2), ar22. https://doi.org/10.1187/cbe.20-06-0111
Science, technology, engineering, and mathematics (STEM) career barriers persist for individuals from marginalized communities due to financial and educational inequality, unconscious bias, and other disadvantaging factors. To evaluate differences in plans and interests between historically underrepresented (UR) and well-represented (WR) groups, we surveyed more than 3000 undergraduates enrolled in chemistry courses. Survey responses showed all groups arrived on campus with similar interests in learning more about science research. Over the 4 years of college, WR students maintained their interest levels, but UR students did not, creating a widening gap between the groups. Without intervention, UR students participated in lab research at lower rates than their WR peers. A case study pilot program, Biosciences Collaborative for Research Engagement (BioCoRE), encouraged STEM research exploration by undergraduates from marginalized communities. BioCoRE provided mentoring and programming that increased community cohesion and cultivated students' intrinsic scientific mindsets. Our

data showed that there was no statistical significant difference between BioCoRE WR and UR students when surveyed about plans for a medical profession, graduate school, and laboratory scientific research. In addition, BioCoRE participants reported higher levels of confidence in conducting research than non-BioCoRE Scholars. We now have the highest annual number of UR students moving into PhD programs in our institution's history.

Kapor, A. (2020). *Distributional Effects of Race-Blind Affirmative Action* [Working Paper]. Consulté à l'adresse Princeton University. Economics Department. website: https://econpapers.repec.org/paper/prieconom/2020-51.htm
This paper compares the impacts of providing information about college admissions and financial aid at scale to those of large-scale policies which directly impact admissions and financial aid offers. It uses variation induced by the « Top Ten Percent » policy in Texas, which guaranteed admissions to each in-state public university to all students ranking in the top decile of their high school class, to estimate a model of college applications, admissions, and achievement. Texas Top Ten caused more students from high-poverty schools to enroll at the flagship universities. Moreover, students who enrolled under it achieved higher GPAs than those who would have enrolled at flagships in its absence, primarily because the admissions guarantee induced strong students to submit applications. Texas Top Ten had small effects on minority enrollment. An expansion of a targeted scholarship program would enroll more students from high-poverty schools than would purely-informative interventions.

Khalid, S., & Tadesse, E. (2022). **Faculty research productivity at women's universities through the lens of preference theory**. *Higher Education*, *83*(5), 949-968. https://doi.org/10.1007/s10734-021-00717-4
Women's universities are common in South Asian countries, such as Pakistan, where females are at a disadvantage. These universities are agencies of freedom for female academics, as they provide a favorable environment that enhances the performance of and opens doors for egalitarianism and prosperity for women. Nevertheless, research productivity among female academics remains an ongoing issue due to many factors, including multiple family and work responsibilities. An exploratory case study was conducted at one of the women's universities in Pakistan to more closely explore this experience. In the current study, preference theory was used as a theoretical framework to explore female faculty's research productivity while simultaneously meeting their family/work responsibilities. The study provides robust and promising observations, which have implications for academia, policy-makers, and scholars.

Kiebler, J. M., & Stewart, A. J. (2022). **Student experiences of the COVID-19 pandemic: Perspectives from first-generation/lower-income students and others**. *Analyses of Social Issues and Public Policy*, *22*(1), 198-224. https://doi.org/10.1111/asap.12288
Twenty-eight University of Michigan students (12 first-generation/low-income and 16 from more educated, affluent families) were invited online to provide open-ended responses and photographs representative of their experiences during COVID-19, in a modified Photovoice approach. Given the literature, we expected that cultural mismatch, class stereotypes, and relative deprivation would be relevant features of the accounts of self-identified first-generation/lower-income students' experience, in contrast to their peers. Using thematic analysis, three themes differentiated the written accounts of the experiences of the two groups of students: changed environmental demands,

comparison to similar or different other students, and change or continuity in the availability of institutional support. Both groups of students shared concerns about issues with mental health, and concern for family. While first-generation/lower-income students reported that they experienced less access to space and quiet for their schoolwork, their counterparts reported that their conditions for studying were better. Additionally, when comparing themselves to others, first-generation students mentioned their best guesses about the experiences of more affluent students, while nonfirst-generation students tended to compare themselves to those like themselves. Finally, while nonfirst-generation students wrote of continued institutional support and dedication to schoolwork, first-generation students reported having fewer resources for academic success.

Kiyama, J. M., Minthorn, R., Museus, S. D., & Quaye, S. J. (2022). **A letter to future scholars in the struggle for justice**. *International Journal of Qualitative Studies in Education*, 35(5), 453-455. https://doi.org/10.1080/09518398.2022.2042615

Lievore, I., & Triventi, M. (2022). **Social background and school track choice: An analysis informed by the rational choice framework**. *Acta Sociologica*, 65(2), 111-129. https://doi.org/10.1177/00016993211061669
We investigate social inequalities based on social background in the choice of the academic track among equally performing students, and how indicators derived from the rational choice framework contribute to account for such inequalities. We discuss the main theoretical concepts underpinning rational choice theory as applied to educational decisions: perceived costs, benefits, and risks of failure; relative risk aversion; and time-discounting preferences. In the empirical section, we use a unique dataset concerning the transition to different tracks in upper secondary school in a large Southern Italian region. By using various regression methods and the Karlson/Holm/Breen decomposition technique, we show that social inequalities in access to the academic track are considerable, even in recent cohorts, and that they are largely not explained by previous academic performance. Indicators linked to key concepts proposed by the rational choice theory?as measured in this study?account, as a whole, for 31% of the gap based on parental education, and for 40% of the gap based on parental occupation. The most important sources of inequalities among those this study examines are the expected benefits associated with the educational alternatives and the time-discounting preferences, while relative risk aversion and the perceived chances of success play negligible roles.

Loh, C. E., Sun, B., & Ieong, C.-H. (2022). **Reading Identities, Mobilities, and Reading Futures: Critical Spatial Perspectives on Adolescent Access to Literacy Resources**. *Harvard Educational Review*, 92(1), 55-85. https://doi.org/10.17763/1943-5045-92.1.55
In this article, Chin Ee Loh, Baoqi Sun, and Chan-Hoong Leong utilize a critical spatial perspective to examine how students from different socioeconomic statuses access reading resources at home, in school, and in the community. Using Geographic Information System (GIS) data, they evaluate the distribution of reading resources in Singapore by mapping out students' physical distances to libraries and bookstores. They juxtapose the data against case studies of students and survey data from more than six thousand participants from six secondary schools in Singapore to understand their use of resources for reading. Findings show that while students may have equal access to reading resources in terms of access to public resources for books, home backgrounds significantly affect students' actual access. The critical spatial approach of this study

provides a new way to evaluate the efficacy and equity of resource distribution and access for twenty-first-century learning.

Millemaci, E., & Patti, A. (2022). *Nemo Propheta in Patria: Empirical Evidence from Italy* (FEEM Working Paper N° 319966). Consulté à l'adresse Fondazione Eni Enrico Mattei (FEEM) website: https://econpapers.repec.org/paper/agsfeemwp/319966.htm
In recent years, young brain drain within Italian provinces has increased at higher speed than ever. While is premature to assess whether this process is transitory or permanent, it should be analysed and monitored by researchers and policy makers for its many socio-economic consequences. Previous empirical studies have demonstrated that Italian net skilled migration is influenced by economic factors, such as income per capita and employment, and, with a less extent, by the search of places endowed with more amenities. In the crossroad between these factors, this paper investigates corruption as key element of the Italian skilled mobility. To this end, a comprehensive framework with Zero-Inflated Poisson and Pseudo-Poisson Maximum Likelihood with High Dimensional Fixed Effects models for bilateral data on the Italian students' flows is used. Results suggest the dual role of push and pull mechanisms at play, as high corruption incentivizes Italian skilled mobility to destinations that, instead, exhibit lower corruption. Moreover, sensitivity of the prospective tertiary students to corruption varies according to their field of study of interest. Finally, empirical evidence on skilled flows from the lagging Mezzogiorno to the North of Italy, suggests that the push and pull effects of corruption stir up the endurance of the well-known socio-economic dualism between these two parts of the country.

Mims, L. C., Rubenstein, L. D., & Thomas, J. (2022). **Black Brilliance and Creative Problem Solving in Fugitive Spaces: Advancing the BlackCreate Framework Through a Systematic Review**. *Review of Research in Education*, 46(1), 134-165. https://doi.org/10.3102/0091732X221084331
Traditional definitions and assessments of creativity often neglect to identify the complexity surrounding Black students' brilliance, leading to lack of access and funding. Further, even when recognized, Black students are often funneled into programs that do not facilitate positive development of their racial-ethnic identity. Through our systematic review of 155 publications, we developed the BlackCreate Framework to illustrate how effective Black creative educational experiences (BCEEs) create fugitive spaces for creative expression and education. Within these spaces, both societal oppression and community assets are explicitly discussed as a part of the creative process, providing students methods for adaptive coping and for addressing systemic inequities. Given these findings, we advocate for consistent funding and support for fugitive spaces to promote Black students' creativity.

Moignard, B., & Rubi, S. (2021). **Lectures sociologiques des désordres scolaires dans la recherche française. 30 ans de construction de l'objet. 1985-2015. Deuxième partie. Un nouvel âge des désordres scolaires : analyse des politiques éducatives et transformations de l'objet**. *Revue française de pédagogie. Recherches en éducation*, (213), 105-141. https://doi.org/10.4000/rfp.11104
Cette note de synthèse s'intéresse aux travaux de recherche français qui, entre 1985 et 2015, traitent des désordres scolaires au travers de différents objets sociologiques. Les désordres scolaires sont considérés comme une notion à partir de laquelle il est possible de rendre compte d'une pluralité d'objets qui, s'ils sont traités de manière disjointe,

participent d'une mise en cohérence de ce qui fait problème à l'école comme de la désignation de « ceux » qui lui font des problèmes. Dans le premier volume de cette note paru dans le numéro 208, nous avons abordé divers débats et tensions qui traversent les travaux sur les désordres scolaires et, ce faisant, les institutions engagées au travers des productions scientifiques : ont ainsi été restituées les interrogations relatives aux marges d'action et aux résistances déployées par les acteurs, au libre arbitre de l'individu, à l'incidence des « contextes » en éducation, au positionnement de l'école comme acteur local ou comme école-sanctuaire, aux inégalités de scolarisation, au travail de la norme scolaire, à l'emprise de la forme scolaire sur les espaces éducatifs, etc. Le traitement quantitatif des productions scientifiques a d'ores et déjà commencé à montrer les tendances les plus récentes de la recherche relative aux désordres scolaires, l'écrasement du champ en certaines périodes par certains objets et les relations, alors étroites, entre commande publique, agenda politique et recherche en éducation. Nous revenons dans ce second tome sur ces relations comme sur l'émergence de paradigmes qui se diffusent tant du côté des travaux de recherche sur les désordres scolaires que plus globalement en sociologie de l'éducation. Nous interrogeons le traitement politique des désordres scolaires, en montrant comment de nouvelles problématiques scolaires mais aussi éducatives s'extraient de la scène scolaire pour se structurer comme problèmes publics. Ce nouvel âge des désordres scolaires rend compte d'une tentation de décontextualiser les modalités de production et de structuration de ces problèmes, comme des formes de leur prise en charge. Dès lors, nous cherchons à interroger la manière avec laquelle les recherches questionnent ces transformations, et ce qu'elles disent de l'évolution de la sociologie de l'éducation en général.

Museus, S. D., Mac, J., Wang, A. C., Sarreal, A., Wright-Mair, R., & Manlove, J. (2022). **How Asian American and Native American Pacific Islander-Serving Institution (AANAPISI) Initiatives Respond to Institutional Racism**. *The Journal of Higher Education*, 93(3), 452-476. https://doi.org/10.1080/00221546.2021.1996168
In this study, authors conduct a qualitative inquiry grounded in a critical paradigm to understand how AANAPISI initiatives transcend their programmatic spaces to respond to racism within their respective institutional contexts. Analysis of 67 qualitative individual face-to-face interviews with faculty, administrators, and staff at five AANAPISI initiatives shed light on how these initiatives encounter institutional racism. The inquiry also details the ways in which such initiatives complicate data use practices and center Asian American and Pacific Islander (AAPI) voices to challenge model minority misconceptions, work with educators to construct more culturally relevant environments to address the racial marginalization and exclusion of AAPIs, and educate people about AANAPISI initiatives to diffuse racialized forms of resistance to AANAPISI efforts. Implications for future research and practice are discussed.

Na, V. S., Wang, A. C., & White, H. H. (2022). **A letter to future scholars in the struggle for justice**. *International Journal of Qualitative Studies in Education*, 35(5), 478-495. https://doi.org/10.1080/09518398.2021.1982058
As institutions of higher education continue to evolve and adopt neoliberal ideologies, doctoral student socialization is increasingly shaped by logic and exacerbated for students of color. In this paper, we use the five tenets, privatized consumerism, precarity, competitive individualism, surveillance, and declining morality, offered by Museus and LePeau derived from a postsecondary education context. To understand this experience, we as three Asian American women in an education doctoral program

utilize Kimoto's theorization of restiveness and collaborative autoethnography to examine and untangle our complicities in contributing to neoliberal doctoral socialization. By employing a restive orientation, we acknowledge and discuss our complicities as a pathway towards continual collective consciousness-raising, self-reflexivity, and collective care.

Nelson, C., Broom, S., Sisaket, L., & Orphan, C. (2022). **Imagining decolonial desires of the public good**. *International Journal of Qualitative Studies in Education*, 35(5), 456-477. https://doi.org/10.1080/09518398.2021.2003890
Considering the legacies of exclusion, white supremacy, and genocide found within the walls of U.S. higher education, the public good construct is also embedded in exclusion, white supremacy, and genocide. The fact that existing notions of the public good remain intact and unquestioned of its origins means that the public good is not for all individuals of our society, particularly Black, Indigenous, Asian, Latinx, gender diverse, and ability diverse folks. Through a relational praxis, we engage in freewriting and Blackout poetry to share three solidarity narratives. This process and action detailed in this article come from a space that imagines the impossible – a decolonial desire for the public good.

Netter, J., & Boulin, A. (2021). **La règle du jeu. Des collégiens entre normes partagées et interprétations divergentes**. *Revue française de pédagogie. Recherches en éducation*, (213), 61-74. https://doi.org/10.4000/rfp.11049
Cet article, en partie appuyé sur des travaux de sociologie interactionniste, présente les résultats d'une enquête par entretiens menée auprès de 38 collégiens scolarisés dans trois collèges socialement différenciés réagissant au visionnage de deux extraits vidéo filmés dans une même classe de 3e d'éducation prioritaire. Les enquêtés s'accordent sur les normes du cadre scolaire qui devraient théoriquement être respectées et sur les règles de l'art du jeu favorisant un tel respect. Mais lorsque le cadre scolaire apparaît fragilisé ou qu'il y a « rupture de cadre », des discours divergents se font jour, qui renvoient au travail d'interprétation intense des élèves et à la mobilisation de cadres d'interprétation plus larges, référés à leurs expériences ancrées socialement.

Netter, J., & Mamede, M. (2021). **Les enfants parlent de la classe (Dossier)**. *Revue française de pédagogie. Recherches en éducation*, (213), 5-21. Consulté à l'adresse https://journals.openedition.org/rfp/10974
Porter un discours sur un objet ou sur quelqu'un, c'est s'approprier le « pouvoir constituant du langage » (Bourdieu, 2001) et acquérir, donc, un pouvoir symbolique (Bourdieu, 1982). Lorsque des adultes (parents, enseignants, chercheurs, etc.) parlent des enfants, ils contribuent à les définir et à les assigner à une place. Leur parole, « mise en mots », forme oralisée de leur discours, réalisation d'une pratique langagière socialement inscrite et différenciée (Bautier, 1995), acquiert une valeur performative parfois lourde de conséquences (Millet & Croizet, 2016 ; Rosenthal & Jacobson, 1971). La remise en question du siège de la parole est alors une remise en question des relations de pouvoir établies et l'ouverture d'une lutte pour l'imposition de catégories d'analyses légitimes. De la même manière, quand les adultes parlent de la classe, ils imposent une façon de la concevoir, de l'interpréter, indissociable de leur point de vue (Montandon, 1997). Mais que se passe-t-il quand les enfants prennent la parole sur la classe ? Comment en perçoivent-ils les différents acteurs et situations, et avec quelles conséquences ? Quelles nouvelles perspectives émergent de leurs discours ? Telles sont les questions que ce dossier tentera d'aborder.

Nishen, A. K., & Kessels, U. (2022). **Non-communicated judgements of, versus feedback on, students' essays: Is feedback inflation larger for students with a migration background?** *Social Psychology of Education*, *25*(1), 1-31. https://doi.org/10.1007/s11218-021-09674-3

When providing feedback, teachers are concerned not only with the simple transmission of information, but also with motivational and interpersonal dynamics. To mitigate these concerns, teachers may inflate feedback by reducing negative or increasing positive content. The resulting difference between initial judgments and feedback may be even more drastic for ethnic minority students: In non-communicated judgments, negative stereotypes may result in more negative judgments, whereas in feedback, concerns about being or appearing prejudiced may inflate feedback towards ethnic minority students. These hypotheses were tested in a sample of 132 German teacher students in a 2 (between subjects: feedback vs. non-communicated judgment) × 2 (within subjects: target student's migration background: Turkish vs. none) design in which participants read supposed student essays and provided their written impressions to the research team or the supposed student. Findings revealed that teacher students' feedback was more positive than their non-communicated judgments on a multitude of dimensions. Contrary to expectations, these effects were not stronger when the student had a Turkish migration background. Instead, teacher students rated the essay of the student with a Turkish migration background more favorably both in the judgment and feedback conditions. Our results suggest that teachers adapt their initial judgments when giving feedback to account for interpersonal or motivational dynamics. Moreover, ethnic minority students may be especially likely to receive overly positive feedback. While the motivational/interpersonal dynamics may warrant some inflation in feedback, negative consequences of overly positive feedback, for which ethnic minority students may be especially vulnerable, are discussed.

Nunès, É. (2022, avril 26). **Cédric Villani : « Voir les jeunes filles renoncer aux mathématiques est inquiétant alors que cette matière a un statut majeur dans nos sociétés »**. *Le Monde.fr*. Consulté à l'adresse https://www.lemonde.fr/campus/article/2022/04/26/cedric-villani-voir-les-jeunes-filles-renoncer-aux-mathematiques-est-inquietant-alors-que-cette-matiere-a-un-statut-majeur-dans-nos-societes_6123686_4401467.html

Le mathématicien appelle, dans un entretien au « Monde », à un renforcement des matières scientifiques dans le tronc commun au lycée.

Okello, W. K., Quaye, S. J., & Satterwhite, E. M. (2022). **Between me and the world: Black survival and solidarity, here and then**. *International Journal of Qualitative Studies in Education*, *35*(5), 525-539. https://doi.org/10.1080/09518398.2021.1982050

Letters enable writers to convey potentially difficult information in creative ways that are different from academic writing conventions. The subject of this article is healing from racial battle fatigue–the psychological, physiological, and emotional stress responses to racism. We use letters addressed to Black educators to illustrate how we wrestle with the question: What does it mean to live in our Black bodies in this historical moment? We also offer some possible larger meaning-making from our letters for Black readers endeavoring to heal from racial battle fatigue and pursue the neverending quest of working to live freely in their Black bodies.

Ortega, G., & Grafnetterova, N. (2022). **Examining the Development of Graduate School Aspirations Among Latinx College Athletes**. *Innovative Higher Education*, *47*(2), 347-365. https://doi.org/10.1007/s10755-021-09578-2

The percentage of Latinx college athletes in the National Collegiate Athletic Association (NCAA) continues to grow, yet research remains scarce on their experiences. In this qualitative study, we used Yosso's (Race, Ethnicity, and Education, 8(1), 69-91, 2005) Community Cultural Wealth model to explore the experiences of former NCAA Division I Latinx college athletes who decided to attend graduate school. This study utilized one-on-one interviews with seven different Latinx college athletes from over the United States. The themes that that emerged included: (1) family influence and support, (2) athletic department's encouragement, and (3) Latinx faculty representation. First, participants reflected how their family members reminded them that they are setting an example and to value their education. Second, participants shared how athletic department personnel encouraged them to pursue graduate school. Lastly, Latinx faculty representation played a critical role in the participants' decisions to pursue graduate school. The findings can provide insight for academic and athletic stakeholders on how Latinx college athletes can develop skills to excel beyond athletics.

Palmisano, F., Biagi, F., & Peragine, V. (2022). **Inequality of Opportunity in Tertiary Education: Evidence from Europe**. *Research in Higher Education*, 63(3), 514-565. https://doi.org/10.1007/s11162-021-09658-4

This study provides comparable lower-bound estimates of inequality of opportunity for tertiary education (EIOp) for 31 countries in Europe, by using the two EU-SILC waves for which information on family background is available (2005 and 2011). The results reveal an important degree of heterogeneity, with Northern European countries showing low levels of inequality of opportunity and Mediterranean and Eastern European countries characterized by significant degrees of unfair educational inequalities. Parental education and occupation are the most relevant circumstances in the great majority of the countries considered. This study also exploits the two point-in-time observations available and analyses the relationship between some country-specific characteristics and inequality of opportunity in tertiary education. The analysis documents a negative association between EIOp and real GDP per capita, possibly indicating that higher equality of opportunity in tertiary education and economic growth are complementary objectives. Two results emerge as especially robust: in all the specifications we find a positive association between EIOp and the students/teacher ratio, and a negative one between EIOp and public spending in tertiary education. While we do not claim that such correlations should be interpreted causally, we think that they might indicate a meaningful underlying relationship between equality of opportunity in tertiary education and the availability of financial and non-financial resources.

Patton, L. D., Jenkins, T. S., Howell, G. L., & Keith, A. R. (2022). **Unapologetically Black Creative Educational Experiences in Higher Education: A Critical Review**. *Review of Research in Education*, 46(1), 64-104. https://doi.org/10.3102/0091732X221084321

Black creative educational experiences (BCEEs) are participatory, performative cultural experiences created by or for students, centering Black artistic expression, aesthetics, and engagement. Using African-centered frameworks, we provide a methodological guide for examining BCEEs in education research, which includes centering Black "ways of knowing," validating creative expressions cultivated by and for Black people, acknowledging the influence of Black creative expression on research and practice,

considering researcher positionalities as observers and cultivators of Black creative expression, and viewing Black creative expression as knowledge production. We found BCEEs are democratizing educational experiences rooted in intellectual and expressive freedom (freedom of movement/voice/tongue), and community building. BCEEs should be centered in education research, particularly postsecondary education, and prioritized in institutional programming, curricula, and high-impact practices.

Peppler, K., Dahn, M., & Ito, M. (2022). **Connected Arts Learning: Cultivating Equity Through Connected and Creative Educational Experiences**. *Review of Research in Education*, 46(1), 264-287. https://doi.org/10.3102/0091732X221084322
This review brings together scholarship from creative educational experiences (CEE) and connected learning to describe a connected arts learning framework, reframing arts education in the 21st century with a focus on connecting youths' interest-driven art making to opportunities through supportive relationships. Such a framework pushes the arts education field to consider outcomes beyond artistic skill acquisition and academic achievement to include a broader range of opportunities, including those civic- and career-related; promote interest development through targeted exposure to new forms of art making; create and implement professional development and programming to emphasize networks and connections; and draw from culturally sustaining practices to bridge connections between spaces for learning. A connected learning lens applied to what we know about high quality arts education sharpens our focus on how CEE can cultivate equity and social/cultural connection for youth.

Picart, A.-G., & Bergonnier-Dupuy, G. (2021). **La parentalité pendant les années d'école maternelle : le point de vue de mères et de pères de CSP+ en REP**. *Les sciences de l'éducation - Pour l'Ère nouvelle*, 54(1), 71-92. https://doi.org/10.3917/lsdle.541.0071
Cet article rend compte d'une recherche visant à éclairer ce qui se joue en termes de parentalité à l'entrée de l'enfant dans l'univers scolaire. 34 entretiens ont été effectués auprès de mères et de pères, majoritairement de CSP+, dont les enfants fréquentent une école maternelle publique dans un quartier parisien situé en réseau d'éducation prioritaire (REP). Les résultats montrent que, si tou·te·s sont engagé·e·s dans une course au temps quotidienne, appliquant un planning « au cordeau », ce sont surtout les femmes qui organisent la vie familiale. Concernant l'école, les mères paraissent focalisées sur l'expérience actuelle de l'enfant tandis que les pères anticipent avec appréhension son passage au collège, dès l'école maternelle. Enfin, les femmes, plus encore que les hommes, témoignent d'une parentalité réflexive, basée sur la compréhension de soi et de l'enfant et engageant la responsabilité personnelle.

Powell, S., & Arora-Jonsson, S. (2022). **The conundrums of formal and informal meritocracy: dealing with gender segregation in the academy**. *Higher Education*, 83(5), 969-985. https://doi.org/10.1007/s10734-021-00719-2
Despite the academy's commitment to the idea of meritocratic and fair principles in recruitments, promotions, student admissions and progress, gender segregation and gender inequalities continue to trouble universities worldwide. Through case-studies of two education programs at a Swedish university, we investigate how processes of formal merit, both formal (required for admission such as high grades) and what we identify as informal merit (needing to act in particular ways once admitted) work to obviate or reproduce gender-segregation. We analyze how everyday gendering processes in the classroom play a central role in what gets constructed as merit. Changing notions of merit

during the period of study can hamper possibilities for ending gender segregation in HE or open up for ways to circumvent it. We show that a complex and ongoing construction of informal merit can restrain students from minority groups (in relation to gender, but also ethnic background, socioeconomic position, or sexuality) to enter, and importantly, remain in the program. At the same time, new ways of addressing the subject itself provides potential openings. We argue that in order to achieve gender balance at universities, it is urgent to understand how informal and formal merit interplay once students have joined the university and importantly also when they have made the leap and broken with gender segregated education choices.

Querejeta, M. (2022). *Impact of female peer composition on gender norm perceptions and skills formation in secondary school* (WIDER Working Paper Series N° wp-2022-28). Consulté à l'adresse World Institute for Development Economic Research (UNU-WIDER) website: https://econpapers.repec.org/paper/unuwpaper/wp-2022-28.htm
This paper examines peer effects on students' gender norm perceptions and skills formation. I use a Uruguayan nationally representative survey of 9th grade students and exploit the quasi-random variation in the proportion of female peers across classes within schools for causal identification. Results show that a higher exposure to female peers in the class leads to more progressive gender norms. Furthermore, these effects in gender perceptions are driven mostly by male students.

Ravenscroft, A. (2022). **Participatory internet radio (RadioActive101) as a social innovation and co-production methodology for engagement and non-formal learning amongst socially excluded young people**. *International Journal of Inclusive Education*, 26(6), 541-558. https://doi.org/10.1080/13603116.2019.1700312
This paper describes an original interlinking of a conceptual frame and co-production methodology of a participatory internet radio intervention (RadioActive101) that supports engagement and non-formal learning amongst socially excluded young people. This considers the inclusive learning of socially excluded young people as a social innovation that is realised through a participation and co-production methodology that is inspired and informed by Paulo Freire. These are combined to develop an innovative pedagogy that has led to relatively high levels of participation (163 young people facilitated by 29 youth workers) and youth-led co-production (33 radio shows) that supports the reported development of psychosocial dimensions and twenty-first century (21C) and employability skills of young people in London in the UK. This approach and its evaluations suggest that our method (RadioActive101) involves harmonising emancipatory learning through co-production with an instrumental approach to skills development, to support a holistic approach to learning. The foundation and 'key' to this holistic learning appears to be the co-development of confidence and communication in ways that lead to the thoughtful and effective use of voice to underpin and support the development of 21C and employability skills.

Rodriguez, A. J., Ciftci, A., Howell, K., Kokini, K., Wright, B., & Nikalje, A. (2022). **Promoting Equity, Diversity and Social Justice Through Faculty-Led Transformative Projects**. *Innovative Higher Education*, 47(2), 201-222. https://doi.org/10.1007/s10755-021-09560-y
We present a transformative professional development project with a focus on equity, diversity and social justice (EDSJ) to raise cultural awareness among faculty, increase agency, and promote positive change through transformative projects. Twenty-three faculty members from nine different colleges located at a Research I university were

provided with critical cultural awareness workshops and then supported to develop transformative projects related to EDSJ. Based on focus group interviews and pre-post surveys, we identified four themes and five categories: two outcome-related (Building Community and Transformative Actions) and two operational themes (Barriers and Facilitators). We conclude that faculty-centered and transformative professional development projects could significantly benefit all those interested in establishing a culturally inclusive, positive and responsive climate. Our study also contributes to the emerging research on scholar activism and provides a practical model for implementation.

Roelens, C. (2021). **Bienveillance et exemplarité**. *Les sciences de l'éducation - Pour l'Ère nouvelle*, *54*(1), 93-112. https://doi.org/10.3917/lsdle.541.0093
Cet article rend compte d'une recherche visant à éclairer ce qui se joue en termes de parentalité à l'entrée de l'enfant dans l'univers scolaire. 34 entretiens ont été effectués auprès de mères et de pères, majoritairement de CSP+, dont les enfants fréquentent une école maternelle publique dans un quartier parisien situé en réseau d'éducation prioritaire (REP). Les résultats montrent que, si tou·te·s sont engagé·e·s dans une course au temps quotidienne, appliquant un planning « au cordeau », ce sont surtout les femmes qui organisent la vie familiale. Concernant l'école, les mères paraissent focalisées sur l'expérience actuelle de l'enfant tandis que les pères anticipent avec appréhension son passage au collège, dès l'école maternelle. Enfin, les femmes, plus encore que les hommes, témoignent d'une parentalité réflexive, basée sur la compréhension de soi et de l'enfant et engageant la responsabilité personnelle.

Ron, R. E., & Gindi, S. (2022). **Alone in the forefront: Teachers' precarious position when facing students' racist comments in class**. *Teaching and Teacher Education*, *113*, 103685. https://doi.org/10.1016/j.tate.2022.103685
This study investigated the way teachers in secondary schools in Israel reported their responses in class to racist comments concerning Jewish-Arab relations. Teachers indicated that the majority of comments were within a discourse that students initiated. In reaction, most teachers reported cognitive strategies, followed by moderating strategies and emotional strategies. Teacher reports indicate that they operate without clear guidelines, and without feeling that their responses will be backed up. Teachers worry that the extreme discourse will make them lose control of the classroom, while rarely being aware of the importance and possible benefits of conducting controversial political issues discussions.

Santiago-Vela, A., & Mergener, A. (2022). **Gender overeducation gap in the digital age: Can spatial flexibility through working from home close the gap?** *Social Science Research*, 102727. https://doi.org/10.1016/j.ssresearch.2022.102727
This study analyses the gender overeducation gap, meaning differences between partnered men and women in the degree of holding a job with lower requirements compared to one's own education, and how working from home (WfH) affects overeducation. Contextualising education–job mismatches in the digital age, we update an old topic of labour market research considering new options of spatial flexibility via WfH. Using a unique German dataset of the core employed population in 2018 (i.e., individuals that are at least 15 years old and report paid work for at least 10 h per week), our results show a gender overeducation gap, with women at a higher risk of overeducation than men. By applying a latent variable approach with simultaneous

regressions to account for potential selection into jobs allowing WfH, we find that the WfH option carries a lower overeducation risk. Moreover, the findings suggest a gender-specific benefit of WfH: women show higher overeducation risks among employees without the WfH option, but the gender overeducation gap is closed among those with the WfH option.

Shukla, S. Y., Theobald, E. J., Abraham, J. K., & Price, R. M. (2022). **Reframing Educational Outcomes: Moving beyond Achievement Gaps**. *CBE—Life Sciences Education*, *21*(2), es2. https://doi.org/10.1187/cbe.21-05-0130
The term "achievement gap" has a negative and racialized history, and using the term reinforces a deficit mindset that is ingrained in U.S. educational systems. In this essay, we review the literature that demonstrates why "achievement gap" reflects deficit thinking. We explain why biology education researchers should avoid using the phrase and also caution that changing vocabulary alone will not suffice. Instead, we suggest that researchers explicitly apply frameworks that are supportive, name racially systemic inequities and embrace student identity. We review four such frameworks—opportunity gaps, educational debt, community cultural wealth, and ethics of care—and reinterpret salient examples from biology education research as an example of each framework. Although not exhaustive, these descriptions form a starting place for biology education researchers to explicitly name systems-level and asset-based frameworks as they work to end educational inequities.

Souto-Manning, M., Emerson, A. C., Marcel, G., Rabadi-Raol, A., & Turner, A. (2022). **Democratizing Creative Early Educational Experiences: A Matter of Racial Justice**. *Review of Research in Education*, *46*(1), 1-31. https://doi.org/10.3102/0091732X221084327
Inquiring into the democratization of creative early educational experiences through the lens of the politics of belonging, this review of research asks: What does research reveal about creative early educational experiences as they pertain to history, race, and justice? Seeking to better understand the racialization of creative early educational experiences, this review undertakes a transformative justice in education approach, attending to the historical roots of the contemporary racialized politics of belonging. Despite the creativity, improvisation, and imagination displayed historically by Black, Indigenous, and other Communities of Color, findings underscore how creative educational experiences prioritize Eurocentric onto-epistemologies, (re)inscribing inequitable schooling. Creative disruption and Black futurities offer two possible pathways to disrupt the legacy of racism in U.S. early schooling.

St-Pierre, S., Tardif-Grenier, K., & Villatte, A. (2022). **Which Anxiety Symptoms are Associated with Perceived Ethnic Discrimination in Adolescents With an Immigrant Background?** *Canadian Journal of School Psychology*, *37*(2), 175-188. https://doi.org/10.1177/08295735211039944
This study assesses the specific anxiety symptoms that are present in the context of perceived ethnic discrimination in 696 (M age = 13.3, σ = .77, 57% girls) seventh and eighth-grade students with immigrant backgrounds from four different Canadian high schools. Multiple hierarchical linear regressions were conducted to determine the association between perceived ethnic discrimination and specific anxiety symptoms. Results demonstrate that perceived ethnic discrimination is significantly associated with more anxiety symptoms, such as panic/somatic, generalized anxiety, social phobia, and school phobia. Findings provide a better understanding of the association between

perceived ethnic discrimination and anxiety symptoms reported by adolescents with an immigrant background. These findings could help school-based mental health professionals in the implementation of prevention and intervention measures aimed at reducing specific anxiety symptoms that are often present in the context of perceived ethnic discrimination.

Suh, Dyer, McGee, & Payne. (2022). **To, Through, and beyond Higher Education: A Literature Review of Multilingual Immigrant Students' Community College Transitions**. *Community College Journal of Research and Practice*, 46(5), 301-317. https://doi.org/10.1080/10668926.2020.1841045
Amidst the growing diverse student population, community colleges are enrolling an increasing number of adult immigrant-background students. However, recent research trends tend to focus on students who enter community colleges from the U.S. K-12 system (Generation 1.5 learners), leaving a significant gap in the research and a lack of cohesion in terminology regarding adult immigrant students who enter into postsecondary education from another path. The objective of this systematic review of the literature is to synthesize research on the transition of adult-arrival immigrants (referred to as Generation 1 learners) from adult ESL to credit-level courses at the community college. Researchers conducted a database search and identified 91 research studies, technical reports, and doctoral dissertations relevant to the transition of Generation 1 Learners through ES(O)L, developmental education, and credit-level courses. Following a thematic analysis of the relevant literature, researchers identified the components of popular models for facilitating Generation 1 transitions, as well as the various placement and assessment policies, and professional development opportunities provided by institutions. Additionally, trends for methodologies and theoretical frameworks used in recent research suggest future directions for study that focus on large-scale or longitudinal research, as well as inter-institutional perspectives. Further analysis of these themes will provide guidance for practitioners and administrators who seek to provide assistance to Generation 1 Learners as they transition through the community college.

Tanase, M. F. (2022). **Culturally Responsive Teaching in Urban Secondary Schools**. *Education and Urban Society*, *54*(4), 363-388. https://doi.org/10.1177/00131245211026689
Demographic data show an increasingly diverse student population in all urban settings. On the other hand, there continues to be a discrepancy about the student population and the teacher force, as the majority of the US teachers are predominately middle class, female, monolingual, and of European ancestry. This discrepancy adds complexity to an already complex profession. To bridge this cultural gap, researchers advocate for a change in the teaching paradigm, in which teachers understand the relationship between students' culture and learning. This paradigm is called Culturally Responsive Teaching. This study followed 22 secondary mathematics and science teachers. The goal was to analyze some of the strategies used in urban schools, while at the same time determining whether these strategies were culturally responsive. Results show that teachers incorporated their students' interests into the curriculum, making connections with real-life and allowing students to make many choices.

Thomsen, J.-P. (2022). **The social class gap in bachelor's and master's completion: university dropout in times of educational expansion**. *Higher Education*, 83(5), 1021-1038. https://doi.org/10.1007/s10734-021-00726-3

While many papers have focused on socially unequal admissions in higher education, this paper looks at the persistence of class differentials after enrolment. I examine the social class gap in bachelor's programme dropout and in the transition from bachelor's to master's in Denmark from the formal introduction of the bachelor's degree in 1993 up to recent cohorts. Using administrative data, I find that the class gap in bachelor's departures has remained constant from 1993 to 2006, with disadvantaged students being around 15 percentage points more likely to leave a bachelor's programme than advantaged students, even after adjusting for other factors such as grades from upper secondary school. Importantly, the class gap reappears at the master's level, with privileged students being more likely to pursue a master's degree than less privileged students. The size of the class gap is remarkable, given that this gap is found among a selected group of university enrolees. As other studies have found that educational expansion in higher education is not necessarily a remedy for narrowing the class gap in educational attainment, scholars need to pay more attention to keeping disadvantaged students from leaving higher education.

Tomás-Miquel, J.-V., & Capó-Vicedo, J. (2022). **Beyond cultural and geographical proximity: delving into the factors that influence the dynamics of academic relationships between students in higher education**. *Higher Education*, *83*(5), 1143-1162. https://doi.org/10.1007/s10734-021-00734-3
Scholars have widely recognised the importance of academic relationships between students at the university. While much of the past research has focused on studying their influence on different aspects such as the students' academic performance or their emotional stability, less is known about their dynamics and the factors that influence the formation and dissolution of linkages between university students in academic networks. In this paper, we try to shed light on this issue by exploring through stochastic actor-oriented models and student-level data the influence that a set of proximity factors may have on formation of these relationships over the entire period in which students are enrolled at the university. Our findings confirm that the establishment of academic relationships is derived, in part, from a wide range of proximity dimensions of a social, personal, geographical, cultural and academic nature. Furthermore, and unlike previous studies, this research also empirically confirms that the specific stage in which the student is at the university determines the influence of these proximity factors on the dynamics of academic relationships. In this regard, beyond cultural and geographic proximities that only influence the first years at the university, students shape their relationships as they progress in their studies from similarities in more strategic aspects such as academic and personal closeness. These results may have significant implications for both academic research and university policies.

Tubbs Dolan, C., Kim, H. Y., Brown, L., Gjicali, K., Borsani, S., Houchaimi, S. E., & Aber, J. L. (2022). **Supporting Syrian Refugee Children's Academic and Social-Emotional Learning in National Education Systems: A Cluster Randomized Controlled Trial of Nonformal Remedial Support and Mindfulness Programs in Lebanon**. *American Educational Research Journal*, *59*(3), 419-460. https://doi.org/10.3102/00028312211062911
Experimental evidence on strategies to support refugee children's integration into host-country public schools is needed. We employ a three-arm, site-randomized controlled trial to test the impact of short-term access to two versions of nonformal remedial programming infused with social-emotional learning (SEL) among Syrian refugee children in Lebanese public schools. Remedial programming with classroom climate-targeted SEL

practices improved children's perceptions of public schools (effect sizes [ES] = 0.48–0.66) only. The remedial program with both classroom climate-targeted SEL and skill-targeted activities had positive impacts on children's perceptions of public schools (ES = 0.43–0.50) and on certain basic academic skills (ES = 0.08–0.14), and marginally significant positive and negative impacts on some SEL outcomes (ES = 0.16–0.31). We found no impacts of either version on children's global literacy or numeracy competence.

UNGEI : United nations girl's education initiative. (2022). ***Social norms and girls' education: a study of eight sub-Saharan African countries. Gender at the centre initiative (CGI) policy paper***. Consulté à l'adresse https://www.ungei.org/sites/default/files/2022-04/GCI_Policy_Paper_V3.pdf
Combinant les principales conclusions de la littérature sur les normes sociales et l'éducation des filles avec de nouvelles preuves, le document présente les défis relatifs à l'éducation des filles et à l'égalité des sexes dans la région, analyse la politique continentale et régionale en la matière et présente des études de cas des huit pays de l'Initiative priorité à l'éducation (présentation des politiques et législations sur le genre, identification des points d'entrée potentiels et des approches prometteuses pour la transformation des normes sociales). Le document émet enfin des recommandations destinées aux décideurs politiques, aux praticiens du genre, aux ministères, aux ONG et à la société civile.

Vugt, L. V., Levels, M., & Jongbloed, J. (2022). **How long-term NEET are explained by family policies in OECD countries**. In M. Levels, C. Brzinsky-Fay, C. Holmes, J. Jongbloed, & H. Taki, *The Dynamics of Marginalized Youth* (p. 233). https://doi.org/10.4324/9781003096658-10

Wang, M.-T., Henry, D. A., Wu, W., Toro, J. D., & Huguley, J. P. (2022). **Racial Stereotype Endorsement, Academic Engagement, Mindset, and Performance among Black and White American Adolescents**. *Journal of Youth and Adolescence*, *51*(5), 984-1001. https://doi.org/10.1007/s10964-022-01587-4
The role of racial stereotypes in youth's academic achievement becomes salient during adolescence. Yet, very few studies have investigated whether associations between Black and White American adolescents' stereotype endorsement and their cognitive engagement, mindset beliefs, and performance in math differed by stereotype valence (i.e., positive versus negative) and youth gender. To address these gaps, this 3-year longitudinal study (n = 2546; age range = 11–16; 50% males, 60% White, 40% Black; 57% qualified for free lunch) investigated (a) whether Black and White American adolescents' endorsement of positive and negative racial stereotypes differentially related to their cognitive engagement, ability mindset, and math performance and (b) whether gender moderated these relations. The results revealed that endorsing either negative or positive racial stereotypes (as opposed to those with unbiased beliefs) was linked to lower cognitive engagement and stronger fixed mindsets in math 1 year after, while endorsing negative racial stereotypes was linked to lower math scores. In addition, the intersection of adolescents' race and gender moderated some of the observed effects. The inverse link between negative stereotype endorsement and math cognitive engagement was significant for Black girls but not for Black boys. The positive link between negative stereotype endorsement and fixed math ability mindset was stronger for Black girls than Black boys, whereas the link was stronger for White boys than White girls. These findings

shed light on the direction and strength of the links between racial stereotype valence and math outcomes among Black and White youth.

Watson, E. (2022). **Keeping Up with the (Zh)oneses: Language Immersion and School Choice**. *Education and Urban Society*, *54*(4), 445-469. https://doi.org/10.1177/00131245211027364
Dual language immersion programs are growing in popularity across America. This article examines the explanations middle-class parents of various racial/ethnic backgrounds give for enrolling their children in Mandarin Immersion Programs. The author addresses the following questions: Why do American parents enroll their children in Mandarin Immersion Programs? How do parents from different racial groups frame the benefits of immersion? The analysis relies on a mixed-method approach using survey data (N = 500) to highlight motivations of parents without an ethnic background related to the language, supplemented with 15 semi-structured interviews with Black and White parents of children enrolled in schools with Mandarin Immersion Programs. The study finds that parents frame the benefits of an educational investment differently by race. White parents take a pragmatic stance of greater future returns while Black parents hope immersion will help construct a stronger self-identity. These findings show the influence a burgeoning global society has on parental educational choices.

Whitaker, A., & Wolniak, G. C. (2022). **Social Exclusion in the Arts: The Dynamics of Social and Economic Mobility Across Three Decades of Undergraduate Arts Alumni in the United States**. *Review of Research in Education*, *46*(1), 198-228. https://doi.org/10.3102/0091732X221089947
This chapter presents a broad interdisciplinary literature review linking artists' economic precarity and need for but resistance to entrepreneurial skills, alongside colonial histories, structural racism, and hierarchies of taste in arts organizations. These themes are complemented empirically by engaging data from the Strategic National Arts Alumni Project (SNAAP) to demonstrate indicators of attrition and privilege of arts alumni relative to their participation in the arts workforce. Meaningfully different associations across racial/ethnic groups are uncovered, showing structural exclusion of Black arts alumni in particular, in addition to other intersectional dynamics. This chapter underscores the importance of addressing student debt, the potential of creative pedagogies across the curriculum, and the need for imaginative approaches to renewed public funding of art and artists.

Willems, J., Coertjens, L., & Donche, V. (2022). **First-year students' social adjustment process in professional higher education: key experiences and their occurrence over time**. *European Journal of Psychology of Education*, *37*(2), 585-604. https://doi.org/10.1007/s10212-021-00530-8
The social adjustment process is a prominent factor in the literature on the transition to higher education (HE). This vast body of research, however, has predominantly focussed on academically oriented first-year higher education (FYHE) contexts, leaving professionally oriented programs (providing vocational education that prepares students for a particular occupation) rather underexamined. Therefore, this study set out to explore what first-year students in professional HE contexts perceive to be the most important social experiences associated with their adjustment process in the first semester of FYHE. Furthermore, this study examines the extent to which the uncovered key experiences associated with social adjustment are reported at different times. Hereto,

drawing on the critical incidents technique, qualitative data were collected from 104 purposively selected freshmen, enrolled in a Flemish (Dutch-speaking part of Belgium) university college which offers professional HE programs, such as social work and nursing. At the start of the second semester of FYHE, these respondents completed 'reflective logs' wherein they reflected on three critical social experiences during their first semester in HE. Firstly, a qualitative content analysis revealed that students report on five overarching themes: (1) dealing with the unknown, (2) establishing a first connection, (3) establishing a deeper connection, (4) support from peers and others, and (5) loneliness. Secondly, a quantitative analysis of code occurrence suggests that these five uncovered themes seem to be more significant at different times in the first semester of FYHE. Implications of the findings for the development of guidance and coaching initiatives are discussed.

Wondra, T. K., & McCrea, S. M. (2022). **Collective self-doubt: does subjective SES predict behavioral self-handicapping tendency in college students?** *Social Psychology of Education*, *25*(1), 129-167. https://doi.org/10.1007/s11218-021-09678-z
Self-handicapping is a defensive response to self-doubt about one's abilities to perform well on an upcoming task. It involves the creation via behavior, or claiming, of obstacles prior to the performance in order to excuse potential failure. Although past research has focused on individual-level threats to identity, self-doubt could also result from being a member of a stigmatized group. As a result, groups that experience stigmatization may report a heightened tendency to self-handicap. We specifically examined whether subjectively lower socioeconomic status (SES) associates with reports of engaging in self-handicapping behavior. Across four samples of college students, we observed consistent associations between subjective SES (but not objective SES) and self-reported tendency to behaviorally self-handicap. Controlling for aspects of susceptibility to stereotype threat (namely, disidentification with college and doubts about academic ability) statistically eliminated this association. The findings are consistent with a process whereby low subjective SES fosters self-doubt and domain disidentification, increasing the appeal of defensive behaviors like self-handicapping.

Yao, C. (2022). **Is a One-Way English Immersion Teaching Approach Equitable to Those Chinese Non-English Major Students from Rural Areas?** *Education and Urban Society*, *54*(4), 470-486. https://doi.org/10.1177/00131245211027514
English is a compulsory course for students in China from primary education to postgraduate education. Recently more and more policymakers at Chinese universities have been forcing English education to be performed using a one-way English immersion approach. In their views, the more English practices in English classes, the better the learners' learning performance will be. This study adopts a hermeneutics research method, a questionnaire survey and some interviews to investigate the question whether a one-way English immersion teaching approach is equitable to those from rural areas. It finds that this teaching approach is inequitable to those from rural areas in at least three aspects, including increasing their economic burdens, decreasing their English acquisition confidences, and mismatching with their career requirements. The study calls for Chinese policymakers to alter their urban-centered viewpoints toward English education, and English teachers to enrich the English teaching approaches in the future and pay more attention to the future career requirements of those from rural areas.

Yates, J., & Plagnol, A. C. (2022). **Female computer science students: A qualitative exploration of women's experiences studying computer science at university in the UK**. *Education and Information Technologies*, *27*(3), 3079-3105. https://doi.org/10.1007/s10639-021-10743-5

The under-representation of w omen in computer science education courses is well documented, and the social and commercial need to address this is widely recognised. Previous literature offers some explanation for this gender imbalance, but there has been limited qualitative data to provide an in-depth understanding of existing quantitative findings. This study explores the lived experiences of female computer science students and how they experience the male dominated learning environment. Female computer science students from eight universities were interviewed (n = 23) and data were analysed using template analysis. Whilst these women have not been troubled by their sense of fit at university, a combination of stereotypical assumptions of male superiority in this field, and a masculine, agentic learning environment, has left them feeling less technologically capable and less motivated. The findings are discussed in terms of Cheryan et al.'s tripartite model for women's participation in STEM (2017) and we recommend that computer science departments should consider feminist pedagogy to ensure that all learners can be well supported.

Yeo, W. T., Tan, A. L., & Jamaludin, A. (2022). **'I feel like I'm fighting fire': Teaching the young and educationally disadvantaged**. *Teaching and Teacher Education*, *113*, 103665. https://doi.org/10.1016/j.tate.2022.103665

This paper explores the emotional realities of teaching educationally disadvantaged students between the ages of 7 and 8 in Singapore. Data was collected via semi-structured face-to-face interviews with 9 primary school Mathematics teachers and analysed using inductive, grounded theory approach and thematic analysis. From a Conservation of Resources theory lens, findings show that educationally disadvantaged students are far from a homogeneous group as there is great diversity in the sources of disadvantage and obstacles to learning, contributing to the emotional weight borne by teachers of educationally disadvantaged students. Possible recommendations are also discussed.

Ziols, R., Davis, N. R., Holbrook, T., & Bridges, S. (2022). **Creativity as a Racializing and Ableizing Scientific Object: Disentangling the Democratic Impulse From Justice-Oriented Futures**. *Review of Research in Education*, *46*(1), 345-373. https://doi.org/10.3102/0091732X221089973

In this review of literature, we attend to some of the ways that well-intentioned hopes for fostering creativity and encouraging greater inclusion may also rely on problematic premises that work to reify exclusionary logics and practices. More specifically, we historicize and critically examine how creativity studies—often despite explicit efforts to broaden notions of creativity, include marginalized populations, and democratize education—have differently reanimated racializing and ableizing discourses over seven decades of efforts to scientifically study, define, and/or cultivate creativity. In our emphasis on the relationship between past and present designs, we attend to more pernicious tensions and concerns that continue to hold implications for scholarship, research, policy, and practice.

Climat de l'école

Aspillaga, C., Alfaro, J., Carrillo, G., Inostroza, C., Escobar, K., & Villarroel, A. (2022). **School and Neighborhood Relationships that Affect Well-Being Based on Chilean Children and Adolescent's Understandings**. *Child Indicators Research*, *15*(2), 511-532. https://doi.org/10.1007/s12187-021-09903-3
This article studies the perceptions that Chilean children and adolescents hold about the personal and distinctive qualities of their relationships in both the school and neighborhood contexts associated with the experience of well-being using a qualitative methodological framework. It takes as its foundation the relevance of studying well-being from an ecological perspective to help identify and differentiate the processes and dynamics that take place in the multiple contexts of daily life and delves into their effects on the well-being experience of children and adolescents. A sample of 21 children and adolescents between the ages of 10 and 15 was used to obtain the data through semi-structured interviews and then analyzed by thematic, which identified five categories associated with the relationships the participants have at schools and in the neighborhoods that affect their well-being. The categories are organized according to their characteristics and properties along a continuum between well-being and dissatisfaction. One conclusion is that feeling a sense of belonging, closeness, support and safety both among peers and with adults in the school and neighborhood contexts is pertinent to the well-being of the children and adolescents. Another key finding is the importance of motivating and entertaining teaching–learning relationships in school settings, as well as feeling pleased and satisfied with the physical and material conditions of their neighborhoods and schools.

Deane, S. (2022). **Rethinking Agency: Addressing the Complexity of Gun Violence and Education**. *Educational Theory*, *72*(1), 47-64. https://doi.org/10.1111/edth.12512
Addressing the problem of rampage school gun violence, this article aims to problematize how we think about agency, in this case when we assign agency to individual shooters but not to networks or objects. In it, Samantha Deane, working within the new materialist and critical vein of pragmatism, situates agency as both limited and widely distributed. She also draws on Bruno Latour to explore new materialist agency and to explain what it would mean to say things are "agentic." Then, connecting the work of Michel Foucault and Donna Haraway, she examines how we might account for the productive power of social gender norms in the actor network. Finally, Deane returns to the implications of shared agency by looking at how teachers are trained to carry a gun. She claims that the aim of civic education ought to be the development of a capacity to act within and on our shared and limited agency, in sum, to share responsibility.

D'Urso, G., Symonds, J., Sloan, S., & Devine, D. (2022). **Bullies, victims, and meanies: the role of child and classmate social and emotional competencies**. *Social Psychology of Education*, *25*(1), 293-312. https://doi.org/10.1007/s11218-021-09684-1
This study used a personal oriented approach to identify distinct combinations of children's experiences of bullying and victimisation in the Irish primary school context. The study investigated the social and emotional characteristics that predicted those profiles at individual and classroom levels. The sample of 2,062 participants was drawn from the Irish national cohort study Children's School Lives. We analysed teacher reports of individual children's strengths and difficulties and neglect, and child reports of

experiences of bullying, victimisation, and care from classmates. Latent profile analysis revealed five main profiles of bullying and victimisation in Irish primary schools. Approximately 40% of the children were distributed in the atypical profiles (i.e., bullies, meanies, victims, and bully-victims) with the other 60% of children reporting very low levels of bullying and victimisation. Multilevel modelling predicted the profile membership from a set of social and emotional predictors from individual and classroom levels. At the individual level, being a bully was predicted by higher child neglect, hyperactivity, conduct problems, and peer problems; being a meanie was predicted by hyperactivity, peer problems, and less caring classmates; being a victim was predicted by child neglect, conduct problems, and less caring classmates; and being a bully-victim was predicted by conduct problems and less caring classmates. At the classroom level, being a victim was predicted by being in a classroom comprised of younger children, and in classrooms where children were less caring on average. Theoretical and psycho-educational implications are discussed.

Gaudreault, D. (2022). *Chronique de la violence. Une généalogie de l'intimidation scolaire*. Consulté à l'adresse https://www.pulaval.com/livres/chronique-de-la-violence-une-genealogie-de-l-intimidation-scolaire
Comment un phénomène aussi ancien que la violence à l'école en vient-il à faire l'objet d'un nouveau problème social ? Découvrez la fascinante histoire de la « découverte » de l'intimidation.

Haag, P., & Martin, M. (2021, juin 12). **Quels cadres théoriques pour penser le bien-être à l'école ? L'exemple du projet pédagogique de la Lab School Paris**. Consulté 13 avril 2022, à l'adresse https://sciences-et-bonheur.org/2021/06/12/quels-cadres-theoriques-pour-penser-le-bien-etre-a-lecole-lexemple-du-projet-pedagogique-de-la-lab-school-paris-pascale-haag-et-marlene-martin/
Which theoretical frameworks can be used to think about wellbeing at school? Learning from Lab School Paris's project in pedagogy Résumé La notion de bien-être à l'école a pris depuis les années 20…

Longobardi, C., Ferrigno, S., Gullotta, G., Jungert, T., Thornberg, R., & Marengo, D. (2022). **The links between students' relationships with teachers, likeability among peers, and bullying victimization: the intervening role of teacher responsiveness**. *European Journal of Psychology of Education*, *37*(2), 489-506. https://doi.org/10.1007/s10212-021-00535-3
Highly responsive teachers tend to foster behaviors that are low in conflict and high in prosociality, among their students, leading to a positive classroom climate and to a decrease in bullying victimization. However, little is known about the interaction between teacher responsiveness and both student–teacher, and student–student relationship characteristics, in influencing students' bullying victimization at school. Here, we examined student–teacher relationship quality and students' likeability among peers as predictors of in-school victimization. Additionally, we investigated the moderating role of teacher responsiveness over this link. Study sample consisted of 386 early-adolescent students (55.2% female, mean age [SD] = 12.17 [0.73]) and 19 main teachers (females, n = 14). Findings indicated that students' exposure to victimization was positively associated with student–teacher conflict and negatively associated with likeability among classroom peers. Teacher responsiveness did not show a significant direct association with bullying victimization. However, when teachers showed high responsiveness, the strength of the association between student–teacher conflict and

students' likelihood of bullying victimization was slightly increased. The present study highlights the importance of considering the role of teacher responsiveness when modeling the link between student and teacher relationship quality and in school bullying victimization.

Narea, M., Treviño, E., Caqueo-Urízar, A., Miranda, C., & Gutiérrez-Rioseco, J. (2022). **Understanding the Relationship between Preschool Teachers' Well-Being, Interaction Quality and Students' Well-Being**. *Child Indicators Research*, *15*(2), 533-551. https://doi.org/10.1007/s12187-021-09876-3
A substantial body of research shows that teacher-student interactions have a significant impact on student outcomes. However, to our knowledge, less is known about the association between teachers' and students' well-being and the implications for teacher–child interactions, particularly in the preschool context. Research Findings. Using ordinary least squares regression, we investigated the association between affective balance and burnout among 28 preschool teachers and the emotional and behavioral problems of 593 students between three and four years old. We found that teacher affective balance—not teacher burnout—was associated with fewer emotional and behavioral problems in children. Furthermore, the different domains of interaction quality affected children's well-being in different ways. Practice or Policy. In initial teacher training and continuing professional development, teachers should be provided with support and strategies to help them manage their mental health and children well-being. Some interventions which have shown encouraging results are discussed.

Obodo, E., Odoh, G. C., Udeh, K., Odoh, N. S., Celestine Gever, V., & Onuora, C. (2022). **Measuring the Impact of Visual Multimedia on Awareness, Alertness and Behavioural Intention Towards Kidnapping Prevention Measures Among Young Secondary School Students in Nigeria**. *Journal of Asian and African Studies*, *57*(4), 678-692. https://doi.org/10.1177/00219096211034529
The aim of this study was to determine the effectiveness of visual multimedia in promoting security awareness, alertness and behavioural intention towards kidnapping prevention measures among secondary school students. A quasi-experimental design was used for the study and the sample was made up of 470 secondary school students. It was found that respondents in the visual multimedia group did not significantly differ from their counterparts in the non-visual multimedia group on security awareness but they significantly differed on security alertness and behaviour intention towards kidnapping prevention measures. The implication is that visual multimedia has been highlighted.

Tejada-Gallardo, C., Blasco-Belled, A., & Alsinet, C. (2022). **Impact of a School-Based Multicomponent Positive Psychology Intervention on Adolescents' Time Attitudes: A Latent Transition Analysis**. *Journal of Youth and Adolescence*, *51*(5), 1002-1016. https://doi.org/10.1007/s10964-021-01562-5
Time attitudes, which refer to positive and negative feelings towards the past, present, and future, are a salient phenomenon in the developmental stage of adolescence and have been related to better well-being. Positive feelings towards time can be promoted in the school setting through empirically validated positive psychology interventions. However, the extent to which these interventions impact the time attitudes of adolescents remains unknown. The current study investigated the influence of a multicomponent positive psychology intervention on adolescents' transitions between time attitude profiles and how these transitions are related to their emotional, social, and

psychological well-being. Participants consisted of 220 (M = 14.98; 47.3% female) adolescents from two Spanish high schools who participated in the six-week Get to Know Me+ program. Adolescents' time attitudes and well-being were measured via the Adolescents and Adult Time Inventory–Time Attitudes and the Mental Health Continuum– Short Form, respectively, at pre- and postintervention. Participants were clustered in different profiles through a latent profile analysis, and the transitions were analyzed using a latent transition analysis. Five profiles were identified (negative, present/future negative, past negative, optimistic, and positive), and results indicated that adolescents who participated in the intervention were more likely to transition to positive profiles (optimistic and positive) and generally reported higher well-being, especially those in the negative, present/future negative, and optimistic profiles. Preliminary evidence showed that school-based multicomponent positive psychology interventions can have a positive impact on adolescents' feelings towards time and well-being.

Welsh, R. O. (2022). **Overlooked Exclusionary Discipline: Examining Placement in Alternative Schools, Expulsions, and Referrals to Hearing in an Urban District**. *Educational Policy*, 36(3), 550-586. https://doi.org/10.1177/0895904820901481
School discipline is a salient challenge in K–12 districts nationwide. The majority of prior studies have focused on suspensions with relatively little attention paid to other forms of exclusionary discipline. This mixed-methods study provides a descriptive analysis of overlooked disciplinary consequences, namely, assignment to alternative schools, expulsions, and referrals to hearing. The findings from the quantitative analysis indicate that possession of drugs, student and staff assault, and weapons-related incidents account for the majority of infractions leading to the most severe forms of exclusionary discipline. Black male students account for the largest proportion of students receiving the harshest exclusionary disciplinary consequences. The findings from the qualitative analysis reveal several challenges that policymakers in urban districts navigate regarding alternative schools, including (a) staffing and the development of professional capacity, (b) the length of the school day, (c) transportation, and (d) the choice between in-district versus third-party operation of alternative schools.

Évaluation des dispositifs d'éducation-formation

Boatman, A., Claro, S., Fresard, M., & Kramer, J. W. (2022). **Do Corequisite Math Courses Improve Academic Outcomes in Technical Colleges?: Evidence from Chile**. *Research in Higher Education*, 63(3), 453-480. https://doi.org/10.1007/s11162-021-09649-5
For countries concerned about equity and access to higher education, providing support services for academically underprepared students is critical to increasing their probabilities of success. Corequisite math courses provide opportunities for underprepared students to develop their basic math skills through simultaneous enrollment in college-level and developmental courses. However, adding the additional developmental course also increases students' academic workload, potentially impeding their progress early in their college journey. Our study explores the effects of being assigned to this additional developmental math class at one of the largest technical colleges in Chile. Few remedial studies have examined the effects of corequisite courses in the technical college context, either in the United States or abroad. Using a regression discontinuity design, we find that for students attending a technical college and scoring close to the cutoff on a standardized mathematics placement

exam, being assigned to a corequisite math course increases the grades in their college-level math course and marginally decreases their likelihood of withdrawing during the first semester, compared to students assigned to a single college-level math course. The effects on credits earned and first semester grades are driven by those pursuing less advanced technical degrees.

Champagne St-Arnaud, V., & Samson, G. (2022). **Évaluer l'efficacité de l'éducation relative au changement climatique en milieu non formel : une étude de cas**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, *17*(1). https://doi.org/10.4000/ere.8097
Les outils permettant d'évaluer l'efficacité de l'éducation relative au changement climatique en milieu non formel sont peu nombreux et souffrent souvent de l'absence d'assises théoriques solides. Dans le contexte de la campagne Sors de ta bulle menée par la Fondation Monique-Fitz-Back, un cadre d'évaluation novateur reposant sur douze indicateurs a été élaboré. Ces indicateurs ont servi à évaluer les effets de la participation de jeunes de 12 à 17 ans au Sommet jeunesse sur le changement climatique, l'une des activités de la campagne. Un devis mixte combinant la réalisation d'une enquête en ligne auprès des participant.e.s et un entretien de groupe avec douze d'entre eux a permis de constater que la campagne Sors de ta bulle a contribué à stimuler efficacement le processus d'adoption de comportements écoresponsables selon trois axes : augmentation de la motivation, renforcement du sentiment d'efficacité personnelle et intensification de l'engagement dans la lutte climatique.

Chen Musgrove, M. M., Nied, S., Cooley, A., Schinske, J. N., & Corwin, L. A. (2022). **Engaging with CC Bio INSITES: Experiences of Barriers, Supports, and Belonging in Community College Faculty Participating in Biology Education Research**. *CBE—Life Sciences Education*, *21*(2), ar16. https://doi.org/10.1187/cbe.21-09-0246

Clements, T. P., Friedman, K. L., Johnson, H. J., Meier, C. J., Watkins, J., Brockman, A. J., & Brame, C. J. (2022). **"It made me feel like a bigger part of the STEM community": Incorporation of Learning Assistants Enhances Students' Sense of Belonging in a Large Introductory Biology Course**. *CBE—Life Sciences Education*, *21*(2), ar26. https://doi.org/10.1187/cbe.21-09-0287
Large introductory science courses are a particularly important and challenging target for creating inclusive learning environments. In this study, we examined the impact of incorporating learning assistants (LAs) on the learning environment in an introductory biology course taught with two different structures: an in-person lecture with intermittent active-learning components and an online setting taught with a flipped instructional approach. Using a survey that measured sense of belonging in a single class, we found that students in sections with LAs reported greater sense of belonging than students in sections without LAs in both class structures. Further, student focus groups revealed that LAs promoted learning and engagement in the class by answering questions and providing clarity; allowing more use of active- and interactive-learning structures; and serving as accessible, approachable, and immediate sources of help. Student responses also indicated that LAs promoted a sense of belonging in science, technology, engineering, and mathematics (STEM) by decreasing feelings of isolation, serving as inspirational role models, clarifying progression through the STEM educational system, and helping students become more engaged and confident in their STEM-related knowledge

and skills. These findings indicate that LAs can support multiple elements of inclusive STEM learning environments.

Desrochers, J.-S., Roy, N., & Carpentier, G. (2022). **L'atelier dialogique au secondaire : récit d'une expérimentation**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.a253

Dewey, J., Evers, A., & Schuchardt, A. (2022). **Students' Experiences and Perceptions of the Scientific Research Culture after Participating in Different Course-Based Undergraduate Research Experience Models**. *CBE—Life Sciences Education*, *21*(2), ar36. https://doi.org/10.1187/cbe.21-10-0304
Undergraduate students interact with the culture of scientific research when they participate in direct mentorship experiences and laboratory courses such as course-based undergraduate research experiences (CUREs). Much work has been done to explore how CUREs impact the interest, motivation, and retention of undergraduate students in science. However, little work has been done exploring students' experiences and perceptions of the culture of scientific research in the CURE context, and how different CURE models representing different subfields of science impact these experiences and perceptions. This study explored which cultural aspects of scientific research students experienced after participating in a CURE and whether their perceptions of those cultural aspects differed based on students' participation in a bench-based or computer-based research project. Students discussed the Practices and Norms/Expectations of scientific research most frequently. Students in the bench-based and computer-based project areas mentioned different cultural aspects as important to their experiences. Bench-based and computational students also had different perceptions of some of the same cultural aspects, including Teamwork, Freedom & Independence, and Persistence & Resilience. These results suggest that different CURE models differentially impact students' experiences and perceptions of the culture of scientific research, which has implications for examining how students move into scientific research.

Goigoux, R. (2022, mars 31). **L'échec des dédoublements des CP et CE1 en Éducation prioritaire**. Consulté 6 avril 2022, à l'adresse Mediapart website: https://blogs.mediapart.fr/roland-goigoux/blog/210322/lechec-des-dedoublements-des-cp-et-ce1-en-education-prioritaire
Le programme du candidat Macron prévoit la « poursuite des classes dédoublées ». Pour débattre de l'intérêt d'une telle poursuite, il faut revenir sur le bilan de cette « mesure phare du quinquenna...

Joublot-Ferré, S. (2022). **Former en géographie en Anthropocène : le pari d'une expérience de « repolitisation »**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18290
En Anthropocène, quelles stratégies sont à développer pour favoriser la formation de citoyen.e.s autonomes et capables de participer aux décisions publiques ? L'article présente un dispositif spécifique, expérimenté en formation initiale d'enseignant.e.s, à la Haute École pédagogique de Lausanne, en Suisse romande. Ce dispositif articule enquête et expérience spatiale, au sein d'une démarche sensible et participative. Cette proposition didactique est évaluée, du point de vue de sa capacité à répondre aux attentes sociétales de « politisation » de l'enseignement en sciences sociales,

notamment en géographie. Les enjeux épistémologiques mais également scolaires et didactiques, sont rappelés. La géographie de l'habiter est particulièrement mobilisée. L'analyse du dispositif, au prisme des apprentissages citoyen et politique, est appuyée par plusieurs références : la légitimation de l'éducation politique en Anthropocène, la pensée critique, la capacitation et l'expérience.

Ravenscroft, A. (2022). **Participatory internet radio (RadioActive101) as a social innovation and co-production methodology for engagement and non-formal learning amongst socially excluded young people**. *International Journal of Inclusive Education*, 26(6), 541-558. https://doi.org/10.1080/13603116.2019.1700312
This paper describes an original interlinking of a conceptual frame and co-production methodology of a participatory internet radio intervention (RadioActive101) that supports engagement and non-formal learning amongst socially excluded young people. This considers the inclusive learning of socially excluded young people as a social innovation that is realised through a participation and co-production methodology that is inspired and informed by Paulo Freire. These are combined to develop an innovative pedagogy that has led to relatively high levels of participation (163 young people facilitated by 29 youth workers) and youth-led co-production (33 radio shows) that supports the reported development of psychosocial dimensions and twenty-first century (21C) and employability skills of young people in London in the UK. This approach and its evaluations suggest that our method (RadioActive101) involves harmonising emancipatory learning through co-production with an instrumental approach to skills development, to support a holistic approach to learning. The foundation and 'key' to this holistic learning appears to be the co-development of confidence and communication in ways that lead to the thoughtful and effective use of voice to underpin and support the development of 21C and employability skills.

Stanfield, E., Slown, C. D., Sedlacek, Q., & Worcester, S. E. (2022). **A Course-Based Undergraduate Research Experience (CURE) in Biology: Developing Systems Thinking through Field Experiences in Restoration Ecology**. *CBE—Life Sciences Education*, 21(2), ar20. https://doi.org/10.1187/cbe.20-12-0300
Course-based undergraduate research experiences (CUREs) introduce research leading to skills acquisition and increased persistence in the major. CUREs generate enthusiasm and interest in doing science and serve as an intervention to increase equity and participation of historically marginalized students. In the second-semester laboratory of our introductory sequence for biology and marine science majors at California State University Monterey Bay (CSUMB), instructors updated and implemented a field-based CURE. The goals of the CURE were to promote increased scientific identity, systems thinking, and equity at a Hispanic-serving institution (HSI). Through the CURE, students engaged in scientific writing through a research paper with a focus on information literacy, critical thinking, and quantitative reasoning as important elements of thinking like a scientist. Course exams also revealed that students showed gains in their ability to evaluate a new biological system using systems thinking. More broadly, because such field-based experiences demonstrate equity gains among Latinx students and a much greater sense of scientific identity, they may have impacts beyond introductory biology including in students' personal and professional lives.

Formation continue

Ekpenyong, D. O., & Aniekwu, R. O. (2022). **The Availability of Physical and Human Resources on the Implementation of Adult Education Programmes in Cross River State, Nigeria**. *British Journal of Education*, *10*(4), 58-68. https://doi.org/10.37745/bje.2013/vol10no4pp.58-68
This study investigated the availability of physical and human resources on the implementation of adult education programmes in Cross River State, Nigeria. Two research questions were formulated. Descriptive survey research design was adopted for the study. A sample of 600 respondents were selected from eighteen local government areas using stratified and simple random sampling techniques. The instrument used for data collection was 20 items, modified rating scale questionnaire titled "Availability of Physical and Human Resources and Implementation of Adult Education programmes Rating Scale (APHRIAEPRS)" was used for data collection. The instrument was dully validated by experts and its reliability estimate was established at .84 using Chronbach Alpha reliability method. Data collected were analysed using simple percentages. The findings from the results revealed that availability of physical resources on the implementation of adult education programmes was inadequate while availability of human resources for the implementation of adult education programmes was 50% average in the study area. Based on the findings, it was recommended among others that there should be adequate provision of physical resources to boost the implementation of adult education programmes

European Centre for the Development of Vocational Training. (2022). **Un allié dans la transition écologique**. *Note d'information CEDEFOP*, (9166), 1-5. https://doi.org/1831-2438
L'EFP, et en particulier l'apprentissage professionnel, peuvent fournir les compétences nécessaires à l'écologisation des emplois et contribuer à les définir.

Rousset, P. (2022). **Le digital choisit la formation en situation de travail, catalyseur d'innovation**. *Céreq Bref*, (421), 1-4. https://doi.org/10.57706/CEREQBREF-0421
La formation en situation de travail est souvent perçue comme une alternative au cadre traditionnel des cours et stages, particulièrement adaptée aux salariés les moins qualifiés ou aux petites entreprises. Elle est pourtant très largement utilisée par les entreprises innovantes du numérique pour former des salariés hautement qualifiés. Pourquoi ces entreprises font-elles le choix de ce mode de formation ? Dans quelle mesure est-il lié à l'innovation ? Une étude du Céreq propose des éléments de réponse.

Marché du travail

Adamecz-Völgyi, A., Henderson, M., & Shure, N. (2022). *The labor market returns to « first in family » university graduates* (GLO Discussion Paper Series N° 1057). Consulté à l'adresse Global Labor Organization (GLO) website: https://econpapers.repec.org/paper/zbwglodps/1057.htm
The labor market returns to « first in family » university graduates We examine how first in family (FiF) graduates (those whose parents do not have university degrees) fare on the labor market. We find that among women, FiF graduates earn 7.4% less on average than

graduate women whose parents have a university degree. For men, we do not find a FiF wage penalty. A decomposition of the wage difference between FiF and non-FiF graduates reveals two interesting findings. First, two-thirds of the female FiF penalty are explained by certain characteristics, including: having lower attainment in school, attending an elite university, selecting particular degree courses, working in smaller firms, working in jobs that do not require their degree, and motherhood. Second, FiF graduate men also differ in their endowments from non-FiF graduate men; however, FiF men earn higher returns on their endowments than non-FiF men and thus compensate for their relative social disadvantage, while FiF women do not. We also estimate the returns to graduation for potential FiF and non- FiF young people. We find that the wage returns to graduation are not lower among FiF graduates compared to those who match their parents with a degree. The effects of coming from a lower educated family are large and positive for men and large and negative for women in general, irrespective of graduation. We provide some context, offer explanations, and suggest implications of these findings.

Burgess, S., Greaves, E., & Murphy, R. (2022). **Deregulating Teacher Labor Markets**. *Economics of Education Review*, *88*, 102253. https://doi.org/10.1016/j.econedurev.2022.102253
This paper examines how the removal of national pay scales, a common feature of public sector labor markets, affects productivity. We exploit a reform that compelled all schools in England to replace pay scales with school-designed performance related pay schemes. Using teacher-level data, we find that in response to the reform, schools in labor markets with better outside options for teachers have relatively higher teacher pay progression, spending on teachers, teacher retention and student performance. These effects are largest for schools with a more disadvantaged demographic. We conclude that centralized pay scales result in a misallocation of resources by preventing such schools from retaining their teachers.

European Centre for the Development of Vocational Training. (2022). **Un allié dans la transition écologique**. *Note d'information CEDEFOP*, (9166), 1-5. https://doi.org/1831-2438
L'EFP, et en particulier l'apprentissage professionnel, peuvent fournir les compétences nécessaires à l'écologisation des emplois et contribuer à les définir.

Lambert, A., & Langlois, L. (2022). **Horaires atypiques de travail : les femmes peu qualifiées de plus en plus exposées**. *Population & Sociétés*, *599*(4), 1-4. https://doi.org/10.3917/popsoc.599.0001

Observatoire des inégalités. (2022, avril 7). **Les femmes ne sont pas plus discriminées à l'embauche que les hommes**. Consulté 18 janvier 2023, à l'adresse Observatoire des inégalités website: https://www.inegalites.fr/discrimination-femmes-hommes-embauche
À profil comparable, femmes et hommes obtiennent le même taux de réponse de la part des recruteurs, selon un testing récent. Les candidates sont même plutôt favorisées quand il s'agit d'embaucher des cadres.

Sanchez Gonzalez, J., & Sueur, É. (2022). **Les salaires dans le secteur privé en 2020 : des évolutions atypiques du fait de la crise sanitaire**. *INSEE Première*, (1898). Consulté à l'adresse https://www.insee.fr/fr/statistiques/6436313

En 2020, un salarié du secteur privé gagne en moyenne 2 518 euros nets par mois en équivalent temps plein (EQTP). Dans un contexte d'inflation modérée, le salaire net moyen en EQTP a augmenté de 3,2 % sur un an en euros constants. L'ampleur de cette augmentation est trompeuse : elle résulte davantage des modifications temporaires dans la composition de l'emploi, imputables à la crise sanitaire, que des progressions salariales individuelles. Ainsi, à catégorie socioprofessionnelle, secteur d'activité et condition d'emploi constants, le salaire net a progressé de 1,5 % en euros constants. Lorsqu'ils ne sont pas mesurés en équivalent temps plein mais rapportés à la durée contractuelle des emplois, les salaires perçus par les salariés au titre de leur activité ont chuté : le salaire journalier net moyen se replie de 4,0 % en 2020 (en euros constants). Cette baisse a néanmoins été compensée par les indemnités versées dans le cadre du recours au chômage partiel, si bien que les revenus professionnels des salariés ont globalement augmenté en 2020 de 0,8 %. Les femmes gagnent en moyenne 15,2 % de moins que les hommes en EQTP. Cet écart s'est réduit de 0,9 point par rapport à 2019 et de 5,7 points depuis 2008.

Silvera, R. (2022, avril 28). **Les risques du télétravail pour les femmes**. Consulté 18 janvier 2023, à l'adresse Alternatives économiques website: https://www.alternatives-economiques.fr/rachel-silvera/risques-teletravail-femmes/00102855
Le télétravail est-il féministe ? Est-il enfin l'occasion pour les femmes et les hommes de mieux se répartir les tâches domestiques ? On en est encore bien loin.

Tixier, J., Richomme-Huet, K., Dunes, M., Boufaden, N., Lameta, N., Duperray, P., … Lebègue, T. (2022, avril 18). **Pourquoi les jeunes femmes n'entreprennent-elles pas autant que les jeunes hommes ?** Consulté 20 septembre 2022, à l'adresse The Conversation website: http://theconversation.com/pourquoi-les-jeunes-femmes-nentreprennent-elles-pas-autant-que-les-jeunes-hommes-180426
Répondre à cette question est l'objectif d'un nouveau collectif de chercheur, intitulé Orelig, qui livre ses premiers résultats.

Métiers de l'éducation

Aspbury-Miyanishi, E. (2022). **The affordances beyond what one does: Reconceptualizing teacher agency with Heidegger and Ecological Psychology**. *Teaching and Teacher Education*, *113*, 103662. https://doi.org/10.1016/j.tate.2022.103662
There has been a recent growth in interest in the concept of teacher agency. However, teacher agency remains somewhat ill-defined and is also difficult to map onto everyday teaching practice. This article attempts to outline a model of teacher agency which is rooted in what teachers perceive and do in their everyday practice. This model draws on ecological psychology and phenomenological perspectives to argue that teacher agency is a capacity to perceive affordances beyond the conventional affordances we are socialized into perceiving. Implications for teacher development are also discussed.

Babic, S., Mairitsch, A., Mercer, S., Sulis, G., Jin, J., King, J., … Shin, S. (2022). **Late-career language teachers in Austria and the UK: Pathways to retirement**. *Teaching and Teacher Education*, *113*, 103686. https://doi.org/10.1016/j.tate.2022.103686
This article seeks to explore personal and socio-contextual factors that supported or hindered the wellbeing of 13 late-career language teachers from Austria and the UK.

Data were generated through in-depth life-history interviews, and analysed following a Grounded Theory approach (Charmaz, 2006). Findings revealed the interplay of various personal and socio-contextual factors that influenced teachers' wellbeing and willingness to stay in the profession. Findings also showed four different pathways to retirement: Perceived stress and wanting to leave the profession; loved being a teacher but mentally preparing for retirement; busy with work, not thinking about retirement; and, thriving and not planning retirement.

Bakker, C., de Glopper, K., & de Vries, S. (2022). **Noticing as reasoning in Lesson Study teams in initial teacher education**. *Teaching and Teacher Education*, *113*, 103656. https://doi.org/10.1016/j.tate.2022.103656
In the current study on noticing as reasoning of Lesson Study (LS)-teams in initial teacher education (ITE), we analyzed the reasoning two mixed LS-teams set up about pupils' subject-related learning of. Both teams consisted of a student teacher and experienced teachers. Both teams paid more attention to identification (describing pupils' learning behavior) and planning elements (considering and deciding how to act) than to interpretation elements (determining and explaining pupils' problems with learning). They differed in the extent to which they considered plans and provided continuity in their reasoning. Stimulating meaningful reflection may help further develop noticing among LS-teams in ITE.

Bissonnette, M., Martiny, C., & Provencher, J. (2022). **Les conseillers et conseillères d'orientation en contexte scolaire pluriethnique dans le Montréal métropolitain : pratiques et défis déclarés**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.617

Bordeau, M., & Torterat, F. (2022). **Catégorisations discursives représentées dans les bilans de formation en travail social**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.591

Briody, E. K., Rodríguez-Mejía, F. R., & Berger, E. J. (2022). **Professional Staff Making a Difference: Cultural Change in Higher Education**. *Innovative Higher Education*, *47*(2), 297-325. https://doi.org/10.1007/s10755-021-09577-3
Higher education scholarship is focused largely on professors who guide students in their learning and students who participate in the educational process. The contributions of professional staff (i.e., those supporting the work of faculty and students) have not been as well understood, particularly those who reside in academic departments. We explore the work and impact of three staff-led problem-solving teams within an academic unit at one U.S. public university. Professional staff led these three grassroots teams on co-operative education, mentorship, and intercultural competency; in each, staff represented the majority of team members. We report on our research on these teams between 2017–2019 which culminated in interviews with 20 team members. We applied cultural models' theory to orient our data collection, analysis, and validation. In this theory, interviews help uncover the existence and extent of a sense of "sharedness" with the potential to reveal a consensus view of the culture, hence the name "cultural models." Interview statements are validated against other data—two sets of drawings interviewees created during the interviews. Through interviewee discourse and drawings, we describe the internal dynamics and connections accessed by members of these three teams. By specifying how staff were able to work together and what the cultural

models illustrated about organizational-culture change, we help fill the gap in the higher education literature about this university subculture.

Burgess, S., Greaves, E., & Murphy, R. (2022). **Deregulating Teacher Labor Markets**. *Economics of Education Review*, *88*, 102253. https://doi.org/10.1016/j.econedurev.2022.102253
This paper examines how the removal of national pay scales, a common feature of public sector labor markets, affects productivity. We exploit a reform that compelled all schools in England to replace pay scales with school-designed performance related pay schemes. Using teacher-level data, we find that in response to the reform, schools in labor markets with better outside options for teachers have relatively higher teacher pay progression, spending on teachers, teacher retention and student performance. These effects are largest for schools with a more disadvantaged demographic. We conclude that centralized pay scales result in a misallocation of resources by preventing such schools from retaining their teachers.

Cahn, P. S., Gona, C. M., Naidoo, K., & Truong, K. A. (2022). **Disrupting Bias Without Trainings: The Effect of Equity Advocates on Faculty Search Committees**. *Innovative Higher Education*, *47*(2), 253-272. https://doi.org/10.1007/s10755-021-09575-5
Many institutions of higher education have implemented workshops for hiring committee members to familiarize them with the pernicious effects of implicit bias and how to counteract them. Unfortunately, the enthusiasm for implicit bias trainings is not matched by the evidence for their effectiveness. Recognizing the difficulty of removing entrenched biases and the potential for trainings to backfire, we introduced the role of equity advocate (EA) at one institution. EAs are trained volunteer faculty and staff members who serve on search committees outside their home departments to identify behaviors and judgments that might have a disparate racial effect in hiring. We conducted focus groups to document the perspectives of both EAs and non-EA search committee members who completed a cycle of academic hiring. Search committee members credited EAs with helping to mitigate bias by questioning their assumptions and introducing standardized tools for evaluating candidates. By contrast, EAs reported a more contentious relationship with the rest of the search committee and expressed less confidence that the process was free from bias. Both groups agreed that the EAs added valuable race-conscious equitable practices, and untrained committee members identified ways they could apply the lessons of bias reduction in other parts of their professional roles. Our study provides evidence for how to engage all faculty and staff members in sustainable, equity-minded efforts.

Carl, N. M., Jones-Layman, A., & Quinn, R. (2022). **Taking Back Teaching: The Professionalization Work of Teacher Activist Organizations**. *Journal of Teacher Education*, *73*(3), 314-327. https://doi.org/10.1177/00224871211070778
We contribute to the teacher activism literature an understanding of how activist organizations support professionalization processes. We examine how teachers' involvement in a local activist organization counteracts the de-professionalizing reforms of the standards and accountability movement and fosters the professionalization of teaching. Our findings suggest that the structures of the activist organization provide opportunities for teachers to create and maintain collective knowledge for curricula and practice, sustain their professional commitments to social justice, and build confidence that promotes voice in educational decision-making. We discuss implications for teacher

professionalization and identify the need for future studies on the role of teacher activist organizations on teachers, teaching, and the profession.

Casely-Hayford, J., Björklund, C., Bergström, G., Lindqvist, P., & Kwak, L. (2022). **What makes teachers stay? A cross-sectional exploration of the individual and contextual factors associated with teacher retention in Sweden.** *Teaching and Teacher Education*, *113*, 103664. https://doi.org/10.1016/j.tate.2022.103664
This cross-sectional study aimed to identify individual and contextual factors associated with Swedish teachers' intention to remain in the profession. A sample of 5903 elementary-year teachers completed a questionnaire between 2004 and 2011 assessing their health and perception of individual and contextual factors at work. The findings showed that teachers' intention to remain in the profession is mainly explained by individual factors, predominantly by teachers' perceived health state, work motivation and collegial support. The main implication is the importance of teachers' perceived health state for their intention to remain, underscoring the importance of a health promoting work environment in schools.

Chen, J., & Cheng, T. (2022). **Review of research on teacher emotion during 1985–2019: a descriptive quantitative analysis of knowledge production trends**. *European Journal of Psychology of Education*, *37*(2), 417-438. https://doi.org/10.1007/s10212-021-00537-1
This current review of research tells a richly detailed story of the evolving intellectual structure of teacher emotion research during 35 years starting from 1985 until 2019, through identifying 812 articles and using a descriptive quantitative analysis approach. The developmental trend reveals a substantial change in the volume of publications recently, although the overall volume of research is still relatively low. Findings identify that, although quantitative methods were the most commonly used, qualitative and mixed methods of research have undergone a marked increase in the past ten years. However, as the majority of articles have been exploratory-oriented, intervention and experimental studies are largely lacking, resulting in the "so-what" story being missing. A functionalist perspective suggests that knowledge production in teacher emotion research is either at a late first stage or an emerging second stage. This effort lays a foundation on which to interpret the evolution of the teacher emotion literature.

Chu, Y. (2022). **Sensemaking of University and District Stakeholders in Implementing a Teacher Residency Policy in Louisiana**. *Journal of Teacher Education*, *73*(3), 240-252. https://doi.org/10.1177/00224871211059161
A growing body of research has identified teacher residency's potentials for improving and sustaining preservice teacher learning through a stronger district–university partnership. Drawing on sensemaking perspectives on education policy implementation, this qualitative case study examines how a variety of university and district stakeholders make sense of and implement a state-mandated teacher residency in Louisiana. Findings reveal that stakeholders are primarily making sense of the residency in isolation, leading to incoherent understandings and varied implementation practices. Opportunities to improve stakeholders' collective sensemaking and collaborative implementation and to optimize the benefits and potentials of teacher residency partnerships are discussed. This study has implications for teacher education policy implementation and continuous inquiry into the complexities of teacher preparation.

Cormier, C. J. (2022). **"I Wouldn't Invite Them to the Cookout": How Black Male Special Education Teachers Feel About Socializing with Their White Colleagues**. *Harvard Educational Review*, 92(1), 86-106. https://doi.org/10.17763/1943-5045-92.1.86
In this research article, Christopher J. Cormier analyzes interviews he conducted with five Black male US special education teachers to understand how they experienced social ties in the workplace. The interviews reveal the raced and gendered dynamics that complicated the interviewees' relationships with their predominantly White and female colleagues and how these Black male teachers chose to forgo social activities with their White colleagues even while knowing that this avoidance could limit their opportunities for broader career advancement.

Craig, C. J., Flores, M. A., Van Overschelde, J. P., & Hill-Jackson, V. (2022). **Problematizing the Taken-For-Granted: Talking Across Differences in Teacher Education**. *Journal of Teacher Education*, *73*(3), 221-224. https://doi.org/10.1177/00224871221089790

Cuerrier, M., & Montésinos-Gelet, I. (2022). **Les outils d'écriture numériques : quels enjeux pour les scripteurs débutants**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.a255

Dubet, F. (2022, avril 8). **Ce que le mérite fait aux enseignants**. Consulté 12 avril 2022, à l'adresse Alternatives Economiques website: https://www.alternatives-economiques.fr/francois-dubet/merite-aux-enseignants/00102882
À première vue, il n'y aurait rien d'absurde et d'illégitime à vouloir évaluer le mérite des enseignants.

Dugué, P. (2021). *Souffrance au travail et usure professionnelle des éducateurs(rices) spécialisé(e)s : l'apport d'une approche générationnelle et biographique en formation des adultes* (Phdthesis, Université de Lille). Consulté à l'adresse https://tel.archives-ouvertes.fr/tel-03635278
Dans cette thèse, nous avons cherché à comprendre les problématiques du mal-être, de la souffrance au travail et de la perte de sens professionnelle chez les éducateurs spécialisés. Cette problématique professionnelle, très présente à l'heure actuelles dans cette «communauté» professionnelle, nous est apparue dans le cadre de l'animation de groupes d'analyse de la pratique auprès d'équipes du secteur médicosocial. Ces espaces de formation nous confrontent très régulièrement à l'accueil de professionnels témoignant d'un sentiment d'usure professionnelle naissant, persistant ou prononcé. Lieu d'expression des malaises professionnels, les GAP sont fréquemment utilisés par les travailleurs sociaux comme un espace servant au dépôt de la plainte. Cette thèse met à jour le fait que ces malaises professionnels sont également liés à des changements de rapport au travail qu'entretiennent différentes générations d'éducateurs spécialisés. Cependant, au-delà de l'identification de la problématique du mal-être au travail résultant d'une préoccupation collective, bâtie sur des typologies générationnelles de travailleurs sociaux, nous avons admis que ce n'est pas seulement sur le plan collectif que tout ceci se joue, mais que c'est aussi du côté du sujet, de son histoire personnelle que ces difficultés perçues sont agissantes. Ce qui semble apparaitre aujourd'hui, c'est que bon nombre d'éléments conjoncturels et structurels, mais aussi biographiques, participent de la production d'un mal-être au travail chez les professionnels du travail social et tendraient à s'étendre à l'ensemble de ce champ professionnel. En effet, les groupes professionnels que nous rencontrons dans le cadre de GAP font ressurgir des

questions qui semblent, de prime abord être collectives, mais qui au final ont toujours un profond retentissement personnel en tant qu'elles produisent des résonances avec le sujet et sa biographie. L'usure professionnelle et les épreuves de professionnalités résultent, à notre sens, de la conjugaison des effets de structure qui ont actuellement cours dans les métiers et les professions du secteur médico-social et des résonances biographiques qu'ils produisent chez certains professionnels.

Fadda, N., Marinò, L., Pischedda, G., & Ezza, A. (2022). **The effect of performance-oriented funding in higher education: evidence from the staff recruitment budget in Italian higher education**. *Higher Education*, *83*(5), 1003-1019. https://doi.org/10.1007/s10734-021-00725-4
This study, which aims to investigate some potential effects derived from the adoption of performance-oriented funding in the higher education system, is focused on competitive allocative mechanism to provide universities with the staff recruitment budget in the Italian Higher Education System using panel data spanning the period 2012–2018 for 58 public universities. Results show that the geographical area in which universities operate influences their capacity to increase performance and thus financial resources. Indeed, universities located in Northern areas, the wealthier part of Italy, received a higher amount of resources than those located in the rest of the country. These findings reveal the key role played by external factors, which are beyond the control of management, in universities' capacity to achieve better performance. Results also suggest that policy-makers should identify the correct trade-off between the quest for higher performance within the Italian Higher Education System and equity in resource allocation.

Fejzo, A., Whissell-Turner, K., & Saidane, R. (2022). **Rédiger à plusieurs mains : l'encadrement des futurs chercheurs dans la rédaction d'un article scientifique**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.a251

Fielding, J., Geiger, V., Miller, J., Bruder, R., Towara, U., & Ratnayake, I. (2022). **Using situated expectancy value theory to explore initial teacher education students' motivation to engage with challenging mathematical tasks**. *Teaching and Teacher Education*, *113*, 103663. https://doi.org/10.1016/j.tate.2022.103663
Strengthening Initial Teacher Education (ITE) students' capabilities to implement challenging mathematical tasks is a focus for policy and curriculum internationally. In this article, we report on motivational aspects of ITE students' engagement with challenging mathematical tasks as an outcome of an explorative study involving 41 Australian ITE students in their third year of a four-year program. Data collection instruments consisted of pre- and post-surveys and a focus group interview. The study was interpretive, utilizing both quantitative and qualitative techniques. Findings suggest ITE student motivation was most closely associated with situational interest and challenge served to both motivate and demotivate students.

Foster, S. J. L., Springer, D., & Harry, M. (2022). **"Please Bear with me a Moment as I Write About Sports": Addressing the Dearth of Sport Scholarship in General, High-Impact Higher Education Journals**. *Innovative Higher Education*, *47*(2), 175-200. https://doi.org/10.1007/s10755-021-09564-8
The presence of research regarding specific student populations demonstrates their importance to the field given the importance of research and knowledge creation in shaping higher education. A growing number of higher education scholar-practitioners

have engaged in work addressing college sport but an overwhelming dearth of college sport and athlete-focused higher education research in higher education journals is cause for concern. The purpose of this study is to investigate the presence of college sport research within high impact, general higher education journals between 2010–2019. Using content analysis, the authors examined seven highly regarded higher education journals. Findings support the hypothesis that an absence of sport-related research exists in such journals. Suggestions to address this gap are provided.

Frei-Landau, R., Orland-Barak, L., & Muchnick-Rozonov, Y. (2022). **What's in it for the observer? Mimetic aspects of learning through observation in simulation-based learning in teacher education**. *Teaching and Teacher Education*, *113*, 103682. https://doi.org/10.1016/j.tate.2022.103682
The aim of this exploratory case study was to gain insight into the overlooked learning experience of simulation "observers," through the lens of the mimetic learning theory. Fifty-nine inservice teachers attended five, 4-h-long simulation workshops. Data were collected using semi-structured interviews (15), a focus group, and participants' reflections (59), and underwent content and linguistic analysis. Four themes denoting mimetic learning emerged: multimodal sensory observation; adopting multiple perspectives; balanced emotional involvement; and cognitive critical thinking. The study highlights the affordances of simulation-based observation experiences in teacher education. This is especially relevant considering the COVID-19 lockdown, when opportunities for peer observation are limited.

Gagnon, B., & Gamache, Y. (2022). **Le groupe de codéveloppement professionnel : expérimentation dans une école primaire pour favoriser l'insertion professionnelle d'enseignantes novices**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.a252

Gerashchenko, D. (2022). **Academic leadership and university performance: do Russian universities improve when they are led by top researchers?** *Higher Education*, *83*(5), 1103-1123. https://doi.org/10.1007/s10734-021-00732-5
Studies that have examined organizations' productivity and their leaders have found a rather weak relationship between a leader's personal characteristics and organizational output. Similar empirical studies have also been conducted in relation to universities. These studies have concentrated on university leaders' individual academic performance as a quantifiable individual characteristic. They have yielded rather contradictory results. In this study, I take a theoretical approach to quantify the effects of top leadership on university research performance. I assume that top leaders may influence university research productivity, but this influence should be visible. I theorize two types of university leader: the "strategic manager" who seeks to reallocate resources to make it of use for the whole university and the "politician" who reallocates resources to benefit certain research areas, especially the one they specialize in. It is hypothesized that (1) if a leader is a strategic manager, an increase in overall university research productivity would be observed; and (2) if a leader is a politician, there will be an increase in university performance in the research field in which the leader specializes. Using an extensive sample of Russian universities, it is demonstrated that while there is no observable relationship between overall university research productivity and the university leader's academic excellence, there is a positive influence by university leader's academic productivity on the research performance of his/her specific research

field. This study finds evidence that leaders qua "politicians" can have a profound effect on their respective research areas' productivity.

Goldhaber, D., Krieg, J., Theobald, R., & Goggins, M. (2022). **Front End to Back End: Teacher Preparation, Workforce Entry, and Attrition**. *Journal of Teacher Education*, *73*(3), 253-270. https://doi.org/10.1177/00224871211030303
We use a database of over 15,000 teacher candidates from 15 teacher education programs in Washington state to investigate the connections between specific teacher preparation experiences and the likelihood that these candidates enter and stay in the state's public teaching workforce. As has been found in prior research, candidates with endorsements in hard-to-staff subjects like math and special education are more likely to enter the public teaching workforce than other candidates. We also find large differences in hiring rates over time, as candidates who graduated in the years prior to and during the Great Recession are far less likely to be hired than candidates in recent years. Finally, teacher candidates hired into the same school type (elementary, middle, or high school) or into schools and classrooms with similar student demographics as their student teaching placement are more likely to stay in the teaching workforce than candidates who experience less alignment.

Güler, M., & Çelik, D. (2022). **Supporting novice mathematics teachers: The impact of e-mentoring on lesson analysis skills**. *Teaching and Teacher Education*, *113*, 103658. https://doi.org/10.1016/j.tate.2022.103658
This one-group pretest-posttest study aims to investigate the impact of an e-mentoring application enriched with video-recorded lessons and video clips on novice mathematics teachers' lesson analysis skills. The participants consisted of twelve in-service teachers. The participants' ability to analyze lessons was measured through an open-ended assessment of a lesson video both before and after the intervention. The findings revealed that the intervention improved the novice mathematics teachers' lesson analysis skills significantly. This indicates that approaches such as e-mentoring in mathematics teaching can be effective for improving teachers' lesson analysis skills.

Heng, L., Quinlivan, K., & du Plessis, R. (2022). **Deconstructing initial teacher education: a critical approach**. *International Journal of Inclusive Education*, *26*(6), 609-621. https://doi.org/10.1080/13603116.2019.1708982
The paper explores the development and facilitation of a new initial teacher education (ITE) programme underpinned by critical perspectives. It looks at the past and existing influences that have shaped the ways schooling is understood and operationalised in Aotearoa New Zealand. Through an 11-month ethnographic case study approach, the paper discusses an investigation of how a cohort of teacher educators attempt to highlight and deconstruct inequities underlying contemporary educational practices to student teachers. The purpose is to prepare emergent teachers who will be socially conscious of the purposes of education and to reconceptualise teaching with the learning outcomes of classroom students at the centre of education.

Jarraud, F. (2022a, avril 4). **Paye au mérite : Histoire d'une obsession**. Consulté 6 avril 2022, à l'adresse Le café pédagogique website: https://www.cafepedagogique.net/2022/04/04/paye-au-merite-histoire-dune-obsession/

Jarraud, F. (2022b, avril 15). **Etats-Unis : La moitié des enseignants veut partir dans les deux ans**. Consulté 15 avril 2022, à l'adresse Le café pédagogique website: http://www.cafepedagogique.net/lexpresso/Pages/2022/04/15042022Article637856016 291642014.aspx?actId=ebwp0YMB8s1_OGEGSsDRkNUcvuQDVN7aFZ1E4yS5hsZMczVe0o RbhmAPNiXrAmaf&actCampaignType=CAMPAIGN_MAIL&actSource=515906

C'est une profession « désillusionnée, croulant sous le travail, sous payée et déconsidérée ». Ce bilan concerne le métier enseignant aux Etats Unis. Une étude faite par le Merrimack College auprès de plus d'un millier d'enseignants américains pour la revue Edweek décrit une crise profonde du métier enseignant qui nous rappelle quelque chose. Seulement 12% des enseignants se déclarent satisfaits. Plus de 40% veulent quitter le métier dans les deux ans. La revue souligne que depuis deux ans les enseignants sont au coeur des polémiques du fait de la politique contre le covid d'une part et des lois interdisant de parler de race ou de genre. Aujourd'hui seulement 35% des enseignants estiment qu'ils sont bien payés. Ils se plaignent de manquer de liberté pédagogique : seulement 37% estiment avoir une influence sur ces domaines clés. Selon l'étude, ils sont en surcharge de travail mais avec des différences qui tiennent à l'histoire raciale du pays. Les enseignants hispaniques travaillent 42 heure spar semaine, les « blancs » 53 et les « noirs » 65h.

Jensen, M. T. (2022). **Are test-based policies in the schools associated with burnout and bullying? A study of direct and indirect associations with pupil-teacher ratio as a moderator**. *Teaching and Teacher Education*, *113*, 103670. https://doi.org/10.1016/j.tate.2022.103670

Research is lacking regarding how teachers' perceptions of a performance goal structure, relate to teacher and student outcomes. Thus, the present study examined associations among performance goal structure, teacher burnout, and bullying among students, and further whether pupil-teacher ratio moderated the relation between teacher burnout and bullying. 300 class teachers from 150 schools participated in the project, and structural equation modeling was applied. Results revealed significant associations among performance goal structure, teacher burnout, and bullying. However, having an additional teacher in the classroom did not moderate the association between burnout and bullying.

Jung, J., Lu, Y.-H., & Ding, A.-C. E. (2022). **How Do Prompts Shape Preservice Teachers' Reflections? A Case Study in an Online Technology Integration Class**. *Journal of Teacher Education*, *73*(3), 301-313. https://doi.org/10.1177/00224871211056936

To investigate how prompts shape preservice teachers' reflections, we examined, in this exploratory case study, the written reflections responding to three types of prompts (standard-based, concept-based, and task-based) of 21 preservice teachers in an online technology integration class. We analyzed these reflections at the sentence level (total 1,503 comments), both quantitatively and qualitatively, using a framework comprising descriptive, rationalistic, and anticipatory dimensions to understand the compositions of reflections generated from each type of prompt and the kinds of teacher abilities demonstrated in each dimension. We found quantitative patterns between prompt types and the reflections generated and emergent themes in each dimension of reflection relating to teacher abilities. We conclude by discussing three prompt design features that appeared to have played an important role in shaping the reflections and suggesting implications and future research directions.

Kanyinda Biduaya, E. (2022). *Mémento pratique du chef d'établissement scolaire en République Démocratique du Congo*. Consulté à l'adresse https://www.editions-harmattan.fr/index_harmattan.asp?navig=catalogue&obj=livre&razSqlClone=1&no=72838
Comment gérer un établissement scolaire face aux diverses situations qui ne sont parfois pas prévues dans la législation scolaire ? Ce livre explore les principes et les actes de gestion que peut poser un chef d'établissement scolaire. Il analyse dans le détail les problèmes concrets et quotidiens liés à la gestion d'un établissement scolaire. Il donne au chef d'établissement des outils indispensables en vue de créer les bonnes conditions de travail et l'encadrement pédagogique pour toute la communauté scolaire.

Khalid, S., & Tadesse, E. (2022). **Faculty research productivity at women's universities through the lens of preference theory**. *Higher Education*, *83*(5), 949-968. https://doi.org/10.1007/s10734-021-00717-4
Women's universities are common in South Asian countries, such as Pakistan, where females are at a disadvantage. These universities are agencies of freedom for female academics, as they provide a favorable environment that enhances the performance of and opens doors for egalitarianism and prosperity for women. Nevertheless, research productivity among female academics remains an ongoing issue due to many factors, including multiple family and work responsibilities. An exploratory case study was conducted at one of the women's universities in Pakistan to more closely explore this experience. In the current study, preference theory was used as a theoretical framework to explore female faculty's research productivity while simultaneously meeting their family/work responsibilities. The study provides robust and promising observations, which have implications for academia, policy-makers, and scholars.

Kraft, M. A., & Christian, A. (2022). **Can Teacher Evaluation Systems Produce High-Quality Feedback? An Administrator Training Field Experiment**. *American Educational Research Journal*, *59*(3), 500-537. https://doi.org/10.3102/00028312211024603
A core motivation for the widespread teacher evaluation reforms of the past decade was the belief that these new systems would promote teacher development through high-quality feedback. We examine this theory by studying teachers' perceptions of evaluation feedback in Boston Public Schools and evaluating the district's efforts to improve feedback through an administrator training program. Teachers generally reported that evaluators were trustworthy, fair, and accurate but that they struggled to provide high-quality feedback. We find little evidence that the training program improved perceived feedback quality, classroom instruction, teacher self-efficacy, or student achievement. Our results illustrate the challenges of using evaluation systems as engines for professional growth when administrators lack the time and skill necessary to provide frequent, high-quality feedback.

Kuhn, C., Hagenauer, G., & Gröschner, A. (2022). **"Because you always learn something new yourself!" An expectancy-value-theory perspective on mentor teachers' initial motivations**. *Teaching and Teacher Education*, *113*, 103659. https://doi.org/10.1016/j.tate.2022.103659
A teacher's decision to become a mentor teacher affects mentoring quality and the practicum experience of student teachers respectively. However, little systematic knowledge about teachers' motivations to become mentors exists to date. Based on expectancy-value theory (EVT), this interview study among 23 secondary school mentor

teachers explores which aspects motivate teachers to undertake the task of mentoring. In line with EVT, teachers choose to become mentors due to a combination of expectancy and value beliefs, and socialisation influences, which can be further categorised into competence beliefs, intrinsic values, social utility values, intrinsic and extrinsic personal utility values, and social influences.

Kyaw, M. T. (2022). **Policy for promoting teacher educators' research engagement in Myanmar**. *Teaching and Teacher Education*, *113*, 103680. https://doi.org/10.1016/j.tate.2022.103680
This qualitative case study investigates the policy context for teacher educators' research engagement during Myanmar's reform to develop education colleges into higher education institutions. The data were obtained from document analysis and semi-structured interviews with teacher education authorities. The study found that, despite pitfalls, teacher educators' research engagement has been promoted through policy encouragement. It suggests that, among teacher educators, research engagement requires a supportive policy context through sustained encouragement to achieve realistic goals. However, such policies may be problematic if research engagement is pursued for competition or promotion rather than professional growth.

Larochelle-Audet, J., Magnan, M., Doré, E., & St-Vincent, L.-A. (2022). **Récits de pratiques de directions d'établissement d'enseignement au Québec : illustration d'une compétence pour l'équité, l'inclusion et la justice sociale**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.666

Laughter, J. C., Brown, A. A., & Neu, L. W. (2022). **ProCAD: Looking at a Fuller Picture of the Teacher Candidate**. *Journal of Teacher Education*, *73*(3), 271-285. https://doi.org/10.1177/0022487120972635
Definitions of effective teaching focus on three primary areas: performances, essential knowledge, and critical dispositions. While no one measure provides a complete picture of teacher effectiveness, empirical inquiry into critical dispositions lags behind what is known about essential knowledge and performances. We found this underdevelopment true in our own educator preparation program at the University of Tennessee, Knoxville, which led to the development, testing, and implementation of the Professional Competencies, Attitudes, and Dispositions (ProCAD) assessment. In this article, we introduce the ProCAD assessment, describing each piece of the ProCAD framework and its alignment with InTASC critical disposition substandards. We present findings from the analysis of ProCAD data and close with implications for better understanding effective teaching and future research.

Lefebvre, M.-E. (2022). **Éduquer à l'autisme à travers la richesse créative des adultes autistes**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.a250

Lovell, E. D., & Lockhart, M. (2022). **Female Community College STEM Student-Parent-Researchers Living in Poverty: Fear, Fulfillment, and Family**. *Community College Journal of Research and Practice*, *46*(5), 364-367. https://doi.org/10.1080/10668926.2021.1873873
Community College student-parents shared their personal, academic, and career experiences in association with conducting and presenting psychological science (STEM) research. Raelynn began, I never would have imagined myself being into research … I would think that it would be kinda like my old self before school … Would have thought,

oh that's so hard, that's like scientists' kind of stuff … who knows how to do that kind of stuff? And, that's math. Five qualitative themes evolved suggesting increased academic confidence, feelings of academic inclusion, improved self-worth, families interwoven with learning, and enhanced career pursuits. Annie emphasized her future working in mental health, "[mental health professionals] are always just learning something we didn't know before … I think research will continue to be a part of my career." A purposive sample (N = 2) was used to explore the specific nuances of these female, first-generation, STEM, student-parent-researchers living in poverty.

Luque-Reca, O., García-Martínez, I., Pulido-Martos, M., Lorenzo Burguera, J., & Augusto-Landa, J. M. (2022). **Teachers' life satisfaction: A structural equation model analyzing the role of trait emotion regulation, intrinsic job satisfaction and affect**. *Teaching and Teacher Education*, *113*, 103668. https://doi.org/10.1016/j.tate.2022.103668
Teaching is an emotionally demanding profession that can negatively affect teacher well-being. This cross-sectional study aimed to test a comprehensive structural equation model of both the direct and indirect (through affect and intrinsic job satisfaction) relationships between trait emotion regulation and life satisfaction in a sample of 404 Spanish teachers. The model obtained good fit (S–B $\chi2$ = 319.142, df = 201, p < .001; CFI = 0.957; RMSEA = 0.038). Outcomes suggested that: i) positive and negative affect mediates the relationship between trait emotion regulation and both life and job satisfaction; ii) job satisfaction is the main determinant of life satisfaction. Practical implications and limitations are also discussed.

Marcel, J.-F., Tardif, M., & Piot, T. (2022). *Trente ans de politiques de professionnalisation des enseignants: regards internationaux*. Consulté à l'adresse https://pum.univ-tlse2.fr/~Trente-ans-de-politiques-de~.html

Martinez, A. E., Gehrtz, J., Rasmussen, C., LaTona-Tequida, T., & Vroom, K. (2022). **Course Coordinator Orientations Toward their Work and Opportunities for Professional Development**. *Innovative Higher Education*, *47*(2), 327-346. https://doi.org/10.1007/s10755-021-09579-1
One way that university mathematics departments across the United States are making efforts to improve their introductory mathematics courses is by implementing or increasing the level of course coordination. This can entail creating uniform course elements for multi-section courses and efforts to build a community of practice among the instructors teaching these courses. In this paper we explore coordinator orientations that implicitly (and in some cases explicitly) guide their work. In particular, we identified two orientations toward coordination, a Humanistic-Growth orientation and a Resource-Managerial orientation. Data analyzed in this manuscript consists of interviews with 19 course coordinators and 53 instructors from seven different higher education institutions across the United States. We introduce a framework that aligns two approaches to professional development with these two coordinator orientations and conclude with a discussion on how department chairs and others looking to implement or improve coordination may leverage this framework provided in this paper.

Matsko, K. K., Ronfeldt, M., & Nolan, H. G. (2022). **How Different Are They? Comparing Teacher Preparation Offered by Traditional, Alternative, and Residency Pathways**. *Journal of Teacher Education*, *73*(3), 225-239. https://doi.org/10.1177/00224871211015976

Nontraditional teacher preparation pathways were designed to offer different forms of preparation meant to attract different populations of teachers; however, prior literature suggests they may not provide as much of an alternative as initially intended. Drawing on surveys of nearly 800 preservice student teachers and their mentor teachers, we offer a descriptive overview comparing traditional, alternative, and residency pathways preparing teachers in Chicago Public Schools. Our study provides evidence that nontraditional forms of teacher preparation in Chicago do indeed provide unique routes of entry into the profession. We find substantive differences in the kinds of preparation that these pathways offer, including features of preparation such as program and student teaching duration and methods course load, which are often assumed to differ. We also find differences in features not historically studied including mentor characteristics and experiences, types of mentoring provided, and supports received by mentors.

Maxwell, B., Booth, J., Bevins, S., Halliday, J., Hotham, E., Nelson, J., … Andrade, J. (2022). *Supporting science teachers to engage with and carry out research: research report*. Consulté à l'adresse https://www.nfer.ac.uk/media/4897/supporting_science_teachers_to_engage_with_and_carry_out_research_report.pdf
Ce rapport rend compte d'une recherche sur les effets d'un soutien supplémentaire visant à aider les enseignants à s'engager ou à mener des recherches pédagogiques sur l'enseignement des sciences et sur les types de soutien les plus utiles au Royaume-Uni. Il montre que ces programmes de développement professionnel (DPC) peuvent contribuer à un meilleur enseignement des sciences. L'utilisation de la recherche est plus efficace dans les écoles qui encouragent les enseignants à discuter, expérimenter et planifier de manière collaborative. L'impact est aussi plus marqué quand la direction permet aux enseignants de disposer du temps approprié. Différents types de DPC sont nécessaires pour soutenir l'utilisation de la recherche, en fonction des étapes de carrière, du rôle, des intérêts et des enseignants.

McNaughtan, J., Thacker, R., Eicke, D., & Freeman, S. (2022). **Committed to their craft: Understanding the relationship between job crafting and work commitment among faculty in the United States**. *Higher Education Quarterly*, *76*(2), 367-384. https://doi.org/10.1111/hequ.12293
Faculty engage in several institutional activities typically categorised as teaching, research and service. Within those activities there are numerous potential tasks, and research denotes that faculty often bemoan this work which can lead to turnover and lack of commitment. We present the job crafting framework as one way to allow faculty to be active participants in increasing their work commitment. The focus of this analysis was understanding which of the three concepts of job crafting (e.g., task, cognitive and relational) is most associated with work commitment among academic staff, or faculty. Employing a polychoric correlation matrix and confirmatory factor analysis to develop a structural equation model accounting for the relationships between job crafting and work commitment, we utilised a unique data set to answer three research questions. Our sample includes associate and full professors (N = 771) from 20 states in the continental United States. Findings highlight the importance of dissecting the construct of job crafting to better understand work commitment as evidenced by the strong positive relationships between work commitment and the relational and cognitive tenets of the job crafting

framework. Implications include the potential for positive work commitment when administrators allow faculty more autonomy to define their work.

Metsäpelto, R.-L., Utriainen, J., Poikkeus, A.-M., Muotka, J., Tolvanen, A., & Warinowski, A. (2022). **Multiple mini-interviews as a selection tool for initial teacher education admissions**. *Teaching and Teacher Education*, *113*, 103660. https://doi.org/10.1016/j.tate.2022.103660
This study investigates the reliability of multiple mini interviews (MMIs) to select students for classroom and special education teacher programs (n = 418) using intraclass correlations and cross-classified multilevel modeling. The results indicated mostly small effects of clustering of applicants to different interviewers and five-station circuits. The largest variance components in the MMI total score were for applicants (63.3%) and measurement error (20.6%), while the variance component for the interviewer was relatively small (11.6–14.4%). The applicants' and interviewers' perceptions were positive. This study provides evidence for the use of MMIs as a reliable tool for initial teacher education selection.

Miller & Smith. (2022). **Urban Community College Department Chairs: A Status Report**. *Community College Journal of Research and Practice*, 46(5), 368-373. https://doi.org/10.1080/10668926.2021.1876781
Community colleges located in urban areas face unique challenges and opportunities. How leaders in these institutions respond to this unique setting requires an understanding of the skills that might be required to adeptly work in these environments. Drawing upon survey research from the past 20 years, a research-team developed instrument was administered to a national sample of 466 academic program leaders who held titles similar to a department or division head or chair. With nearly 100 (n = 96) responses, the roles these leaders identified as being most important to their work focused on advocacy and information dissemination. The most agreed upon skills identified were related to sensitivity (including cultural sensitivity), leadership, and judgment, and the most important tasks they undertook were related to communications and creating a positive work environment. These findings suggest that these academic program leaders saw their roles as building supportive environments on campus in highly diverse urban areas, and that they in particular see the importance of serving as communicators between the institution and faculty.

Mira, C. (2022, mars 15). *Co-agir dans les dispositifs d'orientation en territoires d'éducation prioritaire : enjeux de proximités, de ressources, de reconnaissances et de représentations*. Présenté à Continuum Sco-Sup. Consulté à l'adresse https://hal.science/hal-03653560
Les dispositifs d'orientation sur les territoires en éducation prioritaire sont envisagés ici par les sciences de l'éducation et de gestion pour proposer une étude liant deux disciplines qui le sont rarement. Nous étudions les consortiums d'acteurs pour comprendre leurs effets sur les parcours d'orientation des jeunes. Les politiques d'éducation prioritaire mettent en réseau les acteurs publics, associatifs et privés pour accompagner les trajectoires des jeunes. Ces relations sont envisagées dans une analyse multi-niveaux (intra-, inter-, organisationnel). La gouvernance en place pose les proximités, les ressources, les reconnaissances et les représentations comme enjeux qui induisent les positionnements des acteurs.

Neilson, C., Gallegos, S., Calle, F., & Karnani, M. (2022). *Screening and Recruiting Talent at Teacher Colleges Using Pre-College Academic Achievement* (Working Paper N° 2022-004). Consulté à l'adresse Human Capital and Economic Opportunity Working Group website: https://econpapers.repec.org/paper/hkawpaper/2022-004.htm
This paper studies screening and recruiting policies that restrict or incentivize entry to teacher-colleges. Using historical records of college entrance exam scores since 1967 and linking them to administrative data on the population of teachers in Chile, we first document a robust positive and concave relationship between precollege academic achievement and several short and long run measures of teacher productivity. We use an RD design to evaluate two recent policies that increased the share of high-scoring students studying to become teachers. We then show how data-driven algorithms and administrative data can enhance similar teacher screening and recruiting policies.

OCDE. (2022). *Staff teams in early childhood education and care centres*. https://doi.org/10.1787/2b913691-en
Early childhood education and care (ECEC) staff are central to promoting young children's development, learning and well-being. ECEC staff work in teams and the staff roles included these teams vary both across countries and within countries, for instance related to the size and location of ECEC centres. Initial education and ongoing professional development of staff in different roles (e.g. teacher compared with assistant) also varies, with implications for children's daily experiences in their ECEC settings. Creating staff teams with complementary skill sets and fostering collaborative learning among ECEC professionals are policy approaches that can make the most of these different training profiles. In addition, ensuring staff with specific training to work with children with special needs or those from socio-economically disadvantaged backgrounds are present in centres with higher shares of these children can help increase equity in ECEC for all children.

Onrubia, J., Roca, B., & Minguela, M. (2022). **Assisting teacher collaborative discourse in professional development: An analysis of a facilitator's discourse strategies**. *Teaching and Teacher Education*, *113*, 103667. https://doi.org/10.1016/j.tate.2022.103667
This study aims to deepen the knowledge of how to assist the emergence of productive teacher collaborative discourse in professional development (PD) processes. We analysed a facilitator's discourse in a one-year PD process carried out with a group of in-service teachers in a secondary school. Data analysis followed a three-step procedure designed to analyse the facilitator's discourse within the joint activity in which it appeared. We identified ten discourse strategies and three combinations of discourse strategies that the facilitator used to promote and scaffold teacher collaborative discourse throughout the PD process.

Oolbekkink-Marchand, H., van der Want, A., Schaap, H., Louws, M., & Meijer, P. (2022). **Achieving professional agency for school development in the context of having a PhD scholarship: An intricate interplay**. *Teaching and Teacher Education*, *113*, 103684. https://doi.org/10.1016/j.tate.2022.103684
In this multiple case study, we investigated teachers professional agency in relation to school development in the context of having a PhD scholarship, and the interplay of personal and social resources. Semi-structured interviews were conducted with 11 Dutch secondary education teachers with PhD scholarships. Teachers are achieving bounded, restricted and extensive agency, and performed informed actions aiming to influence

curriculum development and research culture. The interplay between personal and social resources we found influences teachers achieving of professional agency. Implications for future research include more in-depth analysis of this interplay of resources in achieving agency.

Ron, R. E., & Gindi, S. (2022). **Alone in the forefront: Teachers' precarious position when facing students' racist comments in class**. *Teaching and Teacher Education*, *113*, 103685. https://doi.org/10.1016/j.tate.2022.103685
This study investigated the way teachers in secondary schools in Israel reported their responses in class to racist comments concerning Jewish-Arab relations. Teachers indicated that the majority of comments were within a discourse that students initiated. In reaction, most teachers reported cognitive strategies, followed by moderating strategies and emotional strategies. Teacher reports indicate that they operate without clear guidelines, and without feeling that their responses will be backed up. Teachers worry that the extreme discourse will make them lose control of the classroom, while rarely being aware of the importance and possible benefits of conducting controversial political issues discussions.

Saltes, N. (2022). **'It's all about student accessibility. No one ever talks about teacher accessibility': Examining ableist expectations in academia**. *International Journal of Inclusive Education*, *26*(7), 674-700. https://doi.org/10.1080/13603116.2020.1712483
Drawing from perspectives in critical disability studies, this article examines the teaching experiences of 9 disabled graduate students in Canada and the United States. Participants took between 2 and 6 photographs that illustrated their experience teaching with a disability. Follow-up interviews were conducted to gather descriptive accounts of the meaning and significance of the photos. Thematic analysis was used to analyse the data and uncover the core themes of mobility, disclosure and teaching performance, accommodation, and careers goals. The findings shed new light on the barriers that graduate students with disabilities face navigating the dual role of learners and teachers. Data reveal that there are overt and tacit ableist expectations in academia about how those in a teaching role perform and carry out their duties. Participants in this study internalised these ableist expectations and believed that an academic career was an unlikely career option.

Shurygin, V., Ryskaliyeva, R., Dolzhich, E., Dmitrichenkova, S., & Ilyin, A. (2022). **Transformation of teacher training in a rapidly evolving digital environment**. *Education and Information Technologies*, *27*(3), 3361-3380. https://doi.org/10.1007/s10639-021-10749-z
Today the increasing level of technology in education requires corresponding skills from the teachers. However, they often do not have them. The purpose of the study is to explore the problem of digital competence of rising teachers and provide recommendations for its improvement. The study generally describes the widespread use of digital tools in the classroom, namely the current situation, barriers and prospects associated with it. The research was conducted using a digital questionnaire that was sent to respondents by e-mail. The survey involved 117 people: 85 university students and teachers. The results showed that today there is every reason to actively introduce digital technologies in educational institutions. Thus, 100% of the respondents have and can use various devices (smartphones, laptops, tablets, etc.); 74% of participants consider it appropriate to introduce digital tools into the educational process. However, only 31% of

respondents believe that they have been properly trained in their educational institutions, which would allow them to apply the above technologies in the classroom. The research results can be of interest to those who develop plans for the digitalization of educational institutions, teachers, creators of digital tools and learning programs. This article describes both current problems and possible solutions.

Smith, L. K., Nixon, R. S., Sudweeks, R. R., & Larsen, R. A. (2022). **Elementary teacher characteristics, experiences, and science subject matter knowledge: Understanding the relationships through structural equation modeling**. *Teaching and Teacher Education*, *113*, 103661. https://doi.org/10.1016/j.tate.2022.103661
Using structural equation modeling, we explored the relationship between practicing 5th and 6th grade elementary teachers' subject matter knowledge (SMK) of the science topics they are responsible for teaching and other factors, including teaching experience (number of years teaching current grade level), science teaching self-efficacy, formal science-related professional development opportunities, college science coursework, and instructional time devoted to science. Results indicate that teaching experience and science teaching self-efficacy were predictive of participants' science SMK; other factors only indirectly influenced science SMK through teachers' science teaching self-efficacy. Potential reasons and implications are discussed.

Strunk, K. O., Cowen, J., Goldhaber, D., Marianno, B. D., Theobald, R., & Kilbride, T. (2022). **Public School Teacher Contracts and State-Level Reforms: Assessing Changes to Collective Bargaining Restrictiveness Across Three States**. *American Educational Research Journal*, 59(3), 538-573. https://doi.org/10.3102/00028312211048950
In many school districts, the policies that regulate teaching personnel are governed by collective bargaining agreements (CBAs). While there is significant policy attention that has affected the scope of these agreements, there is relatively little research on how CBAs vary over time, or whether they change in response to states' legislative reforms. Using a panel data set of over 1,200 CBAs across three states, we compare CBA change before and after reforms in two states (Michigan and Washington) relative to a state with no statutory changes (California). We show that the state policy reforms lessened the restrictiveness of CBAs, as intended. The results suggest when reforms limit bargaining negotiations, unions are unable to compensate for the substantial reductions in working conditions.

St-Vincent, L.-A., Huot, A., Leclerc, L., & Rivest, G. (2022). **École universitaire primaire : portrait du cadre de référence éthique des personnes intervenantes en vue de favoriser une saine collaboration**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.685

Umaña, A. L. V. (2021). *Vers une caractérisation de l'identité professionnelle des enseignants du secteur LANSAD : pratiques, rôles et représentations* (Phdthesis, Université de la Sorbonne nouvelle - Paris III). Consulté à l'adresse https://tel.archives-ouvertes.fr/tel-03652513
Notre travail vise à contribuer à la caractérisation du secteur des langues pour spécialistes d'autres disciplines (LANSAD), en se focalisant sur l'identité professionnelle des enseignants qui y interviennent. Cette identité est conceptualisée comme englobant l'ensemble des représentations des enseignants vis-à-vis de leur travail dans ce contexte spécifique, concernant notamment les pratiques, les rôles et les savoirs à

mobiliser. Notre recherche comporte deux volets complémentaires. Le premier, purement qualitatif, se compose d'observations de classe, d'analyses d'interactions, d'entretiens semi-directifs et d'entretiens d'auto-confrontation auprès de trois enseignants du secteur. Il vise à décrire les pratiques observées, ainsi que les motifs, convictions et rapports aux savoirs qui les sous-tendent. Nous nous intéressons à la place des disciplines des étudiants dans les cours observés et aux rôles que les enseignants considèrent comme étant les leurs auprès de ce public en voie de professionnalisation. Le deuxième volet, se basant sur un questionnaire en ligne diffusé au niveau national, cherche à dresser une description du corps enseignant du secteur à partir des données fournies par 269 participants, représentant 74 établissements du supérieur. Nous portons attention aux parcours et aux expériences des enseignants, à leurs représentations des particularités du secteur LANSAD, aux pratiques qu'ils mettent en place, aux rôles qu'ils revendiquent et aux savoirs et compétences qu'ils considèrent nécessaires pour enseigner dans le secteur. Les deux volets nous permettent d'examiner ce que les enseignants perçoivent comme étant les particularités et les enjeux de l'enseignement dans le secteur et de proposer quelques pistes de réflexion pour la formation de ses enseignants.

van Katwijk, L., Jansen, E., & van Veen, K. (2022). **Development of an Inquiry Stance? Perceptions of Preservice Teachers and Teacher Educators Toward Preservice Teacher Inquiry in Dutch Primary Teacher Education**. *Journal of Teacher Education*, *73*(3), 286-300. https://doi.org/10.1177/00224871211013750
This study aims to gain insight into the perceived purpose and value of preservice teacher inquiry in Dutch primary teacher education by teacher educators and preservice teachers at the undergraduate level; it also assesses the implementation of teaching and learning activities, and learning outcomes associated with teacher inquiry. In the Netherlands, inquiry competence in primary teacher education develops over a 4-year period, resulting in students' completion of capstone projects using practitioner inquiry. The authors combine a survey with focus groups of teacher educators and preservice teachers from eight institutes. They find differences between preservice teachers' perceptions of the implementation of inquiry competence and teacher educators' visions and perceptions of such implementation. All participants, students and educators, believe inquiry to be valuable and perceive learning outcomes of inquiry to be enriching, yet about half of the preservice teachers do not to expect to undertake inquiry in their future teaching jobs.

Weißmüller, K. S., & De Waele, L. (2021). *Would you Bribe your Lecturer? A Quasi-experimental Study on Burnout and Bribery in Higher Education* (OSF Preprints N° csvkd). Consulté à l'adresse Center for Open Science website: https://econpapers.repec.org/paper/osfosfxxx/csvkd.htm
Bribery is a complex and critical issue in higher education (HE), causing severe economic and societal harm. Traditionally, most scholarship on HE corruption has focused on institutional factors in developing countries and insights into the psychological and motivational factors that drive HE bribery on the micro-level mechanisms are virtually non-existent. To close this research gap, this study investigates the connection between study-related burnout and university students' willingness to offer bribes to their lecturers to pass important exams. Conducting a vignette-based quasi-experimental replication study with 624 university students in Germany, Belgium, and the Netherlands we find that university students in three countries differentiate sharply between different shades of

bribery and that a majority accept using emotional influence tactics to pass (failed) exams. In contrast, offering a helping hand or money (i.e., darker shades of bribery) to their lecturer was less acceptable. Study-related burnout is associated with a higher likelihood of engaging in these darker shades of bribery and students' commitment to the public interest is but a weak factor in preventing unethical behavior. In summary, this study provides solid empirical evidence that university students are likely to use emotional influence tactics violating both the ethical codes of conduct and the formalized bureaucratic procedures of HE examination, particularly if they suffer from study-related burnout. However, the accelerating effect of burnout on bribery is conditional in that it only holds for darker shades of bribery. HE institutions may benefit from implementing the four-eye principle and from launching awareness campaigns that enable lecturers to better recognize these tactics and engage students in creating a transparent environment for testing, grading, and collaboration that is resistant to bribery.

Numérique et éducation

Adjanohoun, J., & Agbanglanon, S. L. (2022). **Déterminants de l'acceptation des réseaux sociaux pour apprendre à l'université virtuelle du Sénégal**. *Revue internationale des technologies en pédagogie universitaire*, *19*(2), 7-24. https://doi.org/10.18162/ritpu-2022-v19n2-02

Al-Adwan, A. S., Yaseen, H., Alsoud, A., Abousweilem, F., & Al-Rahmi, W. M. (2022). **Novel extension of the UTAUT model to understand continued usage intention of learning management systems: the role of learning tradition**. *Education and Information Technologies*, *27*(3), 3567-3593. https://doi.org/10.1007/s10639-021-10758-y
The key objective of this study was to reveal the key factors that impact university students' continued usage intentions with respect to Learning Management Systems (LMSs). Given the context-dependent nature of e-learning, the Unified Theory of Acceptance and Use of Technology (UTAUT) model was applied and extended with constructs principally related to LMSs. The newly added constructs include learning tradition, self-directed learning, and e-learning self-efficacy. The extended model, which measures continued usage intentions with respect to LMSs, was validated with empirical data collected via an online survey questionnaire completed by a sample of 590 higher education students in three private universities in Jordan. PLS-SEM- "Partial least squares structural equation modelling" was employed to examine the various hypotheses introduced in the model. The results demonstrated that: (1) performance expectancy, e-learning self-efficacy, effort expectancy, facilitating conditions, and social influence have a direct positive influence on continued usage intentions, (2) effort expectancy has a direct positive effect on performance expectancy, (3) performance expectancy partially mediates the relationship between effort expectancy and continued usage intentions, and (4) self-directed learning and learning tradition have direct negative effects on continued usage intentions. The outcomes of this study have valuable theoretical and practical implications for researchers, higher education institutions (HEIs), and developers of LMSs.

Alanoglu, M., Aslan, S., & Karabatak, S. (2022). **Do teachers' educational philosophies affect their digital literacy? The mediating effect of resistance to change**. *Education and Information Technologies*, *27*(3), 3447-3466. https://doi.org/10.1007/s10639-021-10753-3

This study aims to reveal the direct and indirect effects of primary school teachers' educational philosophies on their digital literacy through resistance to change. A cross-sectional research design was used in the current study. Data were collected from 298 primary school teachers working at primary schools located in a city centre in the Mediterranean region of Turkey. The relationships between the variables were tested through the use of the structural equation model. The study results indicated that the teachers' traditional and contemporary educational philosophies did not directly affect their digital literacy levels, but indirectly affected their resistance to change through the level of resistance to change. The results also suggested that teachers' traditional educational philosophies had a negative effect on their digital literacy levels through the mediating role of resistance to change, while the contemporary educational philosophies positively affected their digital literacy levels through resistance to change. Consequently, in recent conditions teachers are expected to develop both their own and students' digital skills. Due to the importance of digital literacy in this age where technology permeates every aspect of life, teachers should accept digital change and transformation without resistance.

Al-Shaikhli, D., Jin, L., Porter, A., & Tarczynski, A. (2022). **Visualising weekly learning outcomes (VWLO) and the intention to continue using a learning management system (CIU): the role of cognitive absorption and perceived learning self-regulation**. *Education and Information Technologies*, *27*(3), 2909-2937. https://doi.org/10.1007/s10639-021-10703-z
This research, using goal setting theory, proposes a new educational intervention to improve the perceptions of a Learning management System (LMS) as an organising technology, so as to improve the intention to continue using it. This research developed Visualised Weekly Learning Outcomes (VWLO) as a mechanism for exposing learners to the required learning outcomes week by week. The research used the Partial Least Square Method to analyse 151 responses from an IT university course and found that the perceived ease of use and usefulness of the VWLO, as an intervention, improves the learners' perception of self-regulation and cognitive absorption from the LMS, which in turn affects the learners' intention to continue using the LMS.

Anthony Jnr., B. (2022). **An exploratory study on academic staff perception towards blended learning in higher education**. *Education and Information Technologies*, *27*(3), 3107-3133. https://doi.org/10.1007/s10639-021-10705-x
As the years progresses, higher education has move towards implementing Blended Learning (BL) which is a combination of face-to-face and online mode of teaching and learning which have continued to advance in institutions all over the world. Accordingly, it is important to investigate the factors that may influence lecturers' perception towards BL approaches. Likewise, there are fewer studies that explored BL in lecturers' perspective. Therefore, this study proposed a framework based on Model of Personal Computer Utilization (MPCU) theory to examine the factors that influence lecturers' perception of BL to improve teaching quality in higher education. A total of 413 lecturers across universities, colleges, and polytechnics responded to an online survey questionnaire. Statistical Package for Social Science and Partial Least Square-Structural Equation Modelling was utilized for data analysis. The results suggest that social factors affect towards use, complexity, job fit, long term consequences, facilitating conditions, and Information Technology (IT) experience significantly influences lecturers' perception towards using BL initiatives to improve academic activities in higher education. Findings

from this article support institutions in developing an understanding of the factors that can be considered to improve teaching design, as well as in improving IT for teaching and learning purposes.

Azuka Onyido, J., & Nwaogu, O. A. (2022). **Technology in Secondary Education: Sociological Implications for the 21st Century Nigeria Adolescents**. *British Journal of Education*, *10*(4), 35-42. https://doi.org/10.37745/bje.2013/vol10no4pp.35-42
Change is inevitable in the society and in the 21st Century. This assertion cannot be overemphasized in the sense that the advent of technology has seen unprecedented levels of change. The application of technology in every aspect of today's society has become the order of the day in the 21st Century, influencing every sector of modern society. The educational sector is not left in this wave of technological application as the introduction and employment of technological gadgets and approaches in the educational process has impacted the teaching and learning processes comprised of distant learning, cognitive development, collaborative teaching and learning to mention. Scholars have highlighted that the application of technological approaches to learning has been observed to impact the educational performance of students. It is therefore important that this approach be inculcated in the educational sector, particularly the secondary educational level because of its strategic position in the educational sector, its target population and the need to secure and guarantee the future of generations to come. It however, has a number of positive and negative implications for the adolescents such exemplified in cyber-bullying, pornography and the acquisition of improper use of language, among others. Cyber bullying, for instance, has the potential to impact the educational performance of students. This paper therefore seeks to explore the employment of technology in secondary in Nigeria and its sociological implication on adolescents. it establishes that education remains a critical drive of societal advancement and growth as it continues to adjust to meet the educational expectations of the modern-day society. The paper therefore makes a number of recommendations which include that parents and teachers should provide pupils with good orientation on the application and dangers of technology and its devices as well as the need for government and other organization to provide ICT equipment in schools.

Bakonga, J. B. (2021). *Usages pédagogiques des outils numériques en classe, compétences technologiques et motivation scolaire dans l'enseignement secondaire au Cameroun : Étude comparée des caractéristiques institutionnelles et individuelles.* (Phdthesis, CY Cergy Paris Université). Consulté à l'adresse https://tel.archives-ouvertes.fr/tel-03633583
L'étude du triplet, pratiques numériques, compétences et motivation, inhérente à une intégration efficace des TIC en classe, est centrale dans les programmes de discipline, via l'approche par compétence, mise en place au lycée au Cameroun depuis plus de 7 ans. Cette révolution pédagogique intervient plus de dix ans plus tard après des innovations technologiques, dans les établissements scolaires, et actuellement avec la mise en œuvre de plusieurs initiatives d'usage des outils numériques pour la formation continue et le développement professionnel des enseignants (Mian B. S., 2013), notamment la formation de nombreux enseignants fonctionnaires et auditeurs libres, formés en TIC ou en informatique fondamentale, dans les sept écoles normales supérieures , que compte le Cameroun. Cependant, des écarts demeurent entre les volontés des politiques numériques éducatives et la situation réelle d'utilisation des outils

numériques en classe, observées sur le terrain. Cette étude, menée dans le contexte camerounais pluriculturel et bilingue, permet d'obtenir un éclairage plus parfait sur des facteurs qui stimulent le triplet pratiques pédagogiques, compétences et motivation des outils numériques. La question de recherche est donc de savoir quelles sont les usages éducatifs des outils numériques qui influenceraient la compétence en TIC et la motivation scolaire chez les élèves dans l'enseignement secondaire au Cameroun. L'objectif est d'identifier les usages pédagogiques des outils numériques des élèves inspirés des modèles de (Mian B. A., 2010; Touré, Mbangwana, & Sène, 2009), les types de compétences technologiques selon Desjardins (2005), les types et les profils de motivation scolaire selon la théorie d'auto-détermination de Deci et Ryan (2002) ; et ensuite analyser et mieux comprendre les similitudes et les différences qui existeraient entre les dimensions institutionnelles des établissements scolaires, les dimensions sociologiques ainsi que ethnoculturelles des élèves. Cette analyse est effectuée à partir du regard des élèves eux-mêmes et devrait constituer en soi un moyen de corroborer (ou non) les constats faits auprès des enseignants (Coen, Rey, Monnard, & Jauquier, 2013), d'une part, et des directions d'écoles, d'autre part. C'est une recherche inductive à caractère exploratoire, qui porte sur trois échantillons non probabilistes constitués respectivement de 18 écoles secondaires, 71 enseignants et 1525 élèves au titre des deux années scolaires, 2017 – 2018 et 2018 – 2019. Le choix méthodologique porte sur une étude multi-cas inspirée de (Yin, 1994 ; in (Tchameni Ngamo S. , 2007, p. 78)). La collecte des données s'est effectuée par le canal de trois questionnaires, des entretiens informels, semi-dirigés et de groupes, des observations des situations de terrain, et des analyses de documents divers. Les principaux résultats de cette présente étude, semblent mettre en valeur trois familles de facteurs qui se recoupent : le milieu social, l'origine sociale des élèves, et les études suivies ou facteur pédagogique. Ce qui nous a permis d'élaborer des hypothèses conclusives. Primo, les élèves de milieu social plus aisé, ont plus de familiarité avec les TICE en classe, un plus fort sentiment de compétence en TIC, et ont également une plus forte motivation autodéterminée à l'égard du numérique éducatif à l'école. Secundo, les études suivies jouent un rôle discriminant entre les lycéens, dans le contexte des trois phénomènes mesurés (usages éducatifs des outils numériques, compétences technologiques et motivation). Tertio, l'origine sociale telle que les facteurs personnels de l'élève jouent un rôle discriminant entre les lycéens, dans le contexte des trois phénomènes mesurés.

Barut Tugtekin, E., & Dursun, O. O. (2022). **Effect of animated and interactive video variations on learners' motivation in distance Education**. *Education and Information Technologies*, *27*(3), 3247-3276. https://doi.org/10.1007/s10639-021-10735-5
One of the objectives of this research is to develop and validate the Instructional Material Motivation Scale for Single-Use (IMMS-SU) instrument in the Turkish context. The IMMS-SU was developed and validated in a two-phased process on a sample of 1654 students. The Exploratory Factor Analysis revealed that IMMS-SU included 14 items ($\chi2 = 332.59$; sd = 74; $p < 0.001$), the fitness indices were found to be RMSEA = .077; SRMR = .040; AGFI = .88; NFI = .95; CFI = .96; and GFI = .92. The Cronbach's Alpha coefficients regarding the whole scale was calculated as a = 0.95. Thereafter, in the second study, the animated and interactive video materials used in distance education were scrutinized in the context of openness to different materials, time spent viewing, motivation, and cognitive load. A total of 933 students participated who had a distance education experience. In order to collect data, the extraneous cognitive load instrument (Kalyuga et al., Human Factors, 40(1), 1-17, Kalyuga, S., Chandler, P., & Sweller, J. (1998). Levels of expertise and

instructional design. Human Factors, 40(1), 1–17. 10.1518/001872098779480587), IMMS-SU, and questionnaire items were used. According to the findings, it was determined that animation and interactive video materials did not cause a higher level of cognitive load on the participants, and both groups had higher material motivation. In addition, it was revealed that interactive video materials caused a higher extraneous cognitive load in participants than animation group. It was figured out that as the openness levels of the participants watching the animation and interactive materials decreased, their cognitive load levels increased. In the light of the results, some suggestions have been recommended for further research.

Blažič, B. J. (2022). **Changing the landscape of cybersecurity education in the EU: Will the new approach produce the required cybersecurity skills?** *Education and Information Technologies*, *27*(3), 3011-3036. https://doi.org/10.1007/s10639-021-10704-y
Recruiting, retaining, and maintaining sufficient numbers of cybersecurity professionals in the workplace is a constant battle, not only for the technical side of cybersecurity, but also for the overlooked area of non-technical, managerial-related jobs in the cyber sector. The problem is the lack of cybersecurity skills in the European labour force. This paper presents the results of a study carried out with the aim to identify how much the cybersecurity education system within the high-level educational institutions and the industrial sector meets the needs for graduate students to gain the required cybersecurity skills. The method applied in the study is based on data collected from surveys carried out by the European competence centres on cybersecurity and the European Cybersecurity organisation. The problem of common educational program accreditation in Europe is highlighted and discussed. The actions undertaken to improve the education in both sectors are described and the emerging educational landscape is commented. The main cybersecurity knowledge specified by the industrial needs is presented in the form of five knowledge pillars. The study's findings show that there are missing topics in high-level institution's cybersecurity programs and that that there is a need to re-shape the content of the courses provided by the professional education providers.

Boz, T., & Allexsaht-Snider, M. (2022). **How do elementary school teachers learn coding and robotics? A case study of mediations and conflicts**. *Education and Information Technologies*, *27*(3), 3935-3963. https://doi.org/10.1007/s10639-021-10736-4
In this qualitative case study, we examined in-service elementary school teachers' learning of coding and robotics in a blended professional learning course developed and delivered through the collaboration between university faculty and a school district. We focused on activity theory to understand and reveal the mediations, conflicts, and effective practices that facilitated or hindered teachers' learning of coding and robotics. The participants of the study were twelve teachers from five different elementary schools in a rural school district. Data collection and generation sources included interviews, videos of class meetings, course assignments, and artifacts. In analyzing the data, we employed analytical approaches under the guidance of activity theory. The findings showed that teacher collaboration, coding/robotics platforms employed during the professional learning course, instructional approaches, and resources in and outside the professional learning setting mediated or conflicted with the teachers' learning of coding and robotics depending on the way that each of these elements was employed in the course. Elaborating on these elements, we reported the implications for further research and practice.

Caprara, L., & Caprara, C. (2022). **Effects of virtual learning environments: A scoping review of literature**. *Education and Information Technologies*, *27*(3), 3683-3722. https://doi.org/10.1007/s10639-021-10768-w

The purpose of this scoping review is to isolate and investigate the existing data and research that identifies if the synchronous face-to-face visual presence of a teacher in a virtual learning environment (VLE) is a significant factor in a student's ability to maintain good mental health. While the present research on this explicit interaction among VLE implementation and student mental health is limited, the material suggests a framework for strong utilization of VLEs. Overall, our research has shown that authentic, high quality VLEs are ones that have as their primary focus the communication between students and their teachers and between students and their peers. This communication is best generated through synchronous connections where there exists the ability to convey the student's immediate needs in real-time. Our research results and discussion will outline how a team approach that brings together teachers, students, administration, counsellors, mental health support staff, instructional designers, and ICT specialists is necessary to create a genuinely enriching VLE where both learning and social-emotional needs can be met. The authors present a case for further study in order to reveal the nature of the interaction among VLEs and student mental health.

Chen, V., Sandford, A., LaGrone, M., Charbonneau, K., Kong, J., & Ragavaloo, S. (2022). **An exploration of instructors' and students' perspectives on remote delivery of courses during the COVID-19 pandemic**. *British Journal of Educational Technology*, *53*(3), 512-533. https://doi.org/10.1111/bjet.13205

The world-wide pivot to remote learning due to the exogenous shocks of COVID-19 across educational institutions has presented unique challenges and opportunities. This study documents the lived experiences of instructors and students and recommends emerging pathways for teaching and learning strategies post-pandemic. Seventy-one instructors and 122 students completed online surveys containing closed and open-ended questions. Quantitative and qualitative analyses were conducted, including frequencies, chi-square tests, Welch Two-Samples t-tests, and thematic analyses. The results demonstrated that with effective online tools, remote learning could replicate key components of content delivery, activities, assessments, and virtual proctored exams. However, instructors and students did not want in-person learning to disappear and recommended flexibility by combining learning opportunities in in-person, online, and asynchronous course deliveries according to personal preferences. The paper concludes with future directions and how the findings influenced our planning for Fall 2021 delivery. The video abstract for this article is available at https://www.youtube.com/watch?v=F48KBg_d8AE. Practitioner notes What is already known about this topic Emergency Remote Teaching (ERT) allowed institutions across the world to continue teaching and learning at all levels of education during the COVID-19 pandemic. However, this form of delivery, created under conditions of uncertainty, was developed out of an urgency to keep education going rather than maintaining it at the same level. What this paper adds This study comes after ERT, and is situated between ERT and the return to campus, with some social distancing restrictions still active, in a delivery method widely viewed as "remote delivery". This is a case study of an entire Canadian higher education institution that implemented remote learning for over one full academic year, documenting and examining instructors' and students' experiences and challenges of the remote learning course delivery format. Quantitative and qualitative

data were collected to provide a holistic overview of instructors' and students' experiences of delivery method and assessments including the use of face-tracking proctoring software. Implications for practice and/or policy Compared to ERT, remote delivery was a thoughtful and deliberate way to transform in-person courses into virtual learning experiences. Instructors and students were able to successfully replicate many features of in-person learning and assessments experiences in remote delivery of courses by using effective online tools to teach and learn. As a result, instructors and students called for the use of elements of remote delivery to create more flexible learning opportunities by combining in-person, live streaming, and asynchronous learning options.

Commission européenne. Direction générale éducation, jeunesse. (2022). *Compendium on digital inclusion in education: 8 country case studies and 33 inspiring practices*. Consulté à l'adresse https://op.europa.eu/o/opportal-service/download-handler?identifier=08f98a36-c054-11ec-b6f4-01aa75ed71a1&format=pdf&language=en&productionSystem=cellar&part=
Ce compendium présente 8 études de cas (Belgique, Bulgarie, Danemark, Estonie, France, Italie, Espagne, Suède) et 33 pratiques inspirantes rassemblées dans le cadre de l'étude « Enhancing learning through digital tools and practices: How digital technology in compulsory education can help promote inclusion » dont l'objectif était d'évaluer le rôle des technologies numériques pour promouvoir l'accès, la qualité et l'équité dans l'enseignement scolaire obligatoire. Il vise à fournir un examen plus approfondi de ce qui se passe actuellement au niveau local, régional et national dans un certain nombre d'États membres de l'UE et à fournir des idées aux décideurs politiques et aux praticiens de toute l'UE qui s'efforcent d'améliorer la qualité et l'inclusivité des systèmes d'éducation et de formation en tirant parti des outils numériques.

Conrad, C., Deng, Q., Caron, I., Shkurska, O., Skerrett, P., & Sundararajan, B. (2022). **How student perceptions about online learning difficulty influenced their satisfaction during Canada's Covid-19 response**. *British Journal of Educational Technology*, *53*(3), 534-557. https://doi.org/10.1111/bjet.13206
The COVID-19 pandemic has posed a significant challenge to higher education and forced academic institutions across the globe to abruptly shift to remote teaching. Because of the emergent transition, higher education institutions continuously face difficulties in creating satisfactory online learning experiences that adhere to the new norms. This study investigates the transition to online learning during Covid-19 to identify factors that influenced students' satisfaction with the online learning environment. Adopting a mixed-method design, we find that students' experience with online learning can be negatively affected by information overload, and perceived technical skill requirements, and describe qualitative evidence that suggest a lack of social interactions, class format, and ambiguous communication also affected perceived learning. This study suggests that to digitalize higher education successfully, institutions need to redesign students' learning experience systematically and re-evaluate traditional pedagogical approaches in the online context. Practitioner notes What is already known about this topic University transitions to online learning during the Covid-19 pandemic were undertaken by faculty and students who had little online learning experience. The transition to online learning was often described as having a negative influence on students' learning experience and mental health. Varieties of cognitive load are known predictors of effective online learning experiences and satisfaction. What this paper adds Information overload and perceptions of technical abilities are

demonstrated to predict students' difficulty and satisfaction with online learning. Students express negative attitudes towards factors that influence information overload, technical factors, and asynchronous course formats. Communication quantity was not found to be a significant factor in predicting either perceived difficulty or negative attitudes. Implications for practice and/or policy We identify ways that educators in higher education can improve their online offerings and implementations during future disruptions. We offer insights into student experience concerning online learning environments during an abrupt transition. We identify design factors that contribute to effective online delivery, educators in higher education can improve students' learning experiences during difficult periods and abrupt transitions to online learning.

Cullinane, A., McGregor, D., Frodsham, S., Hillier, J., & Guilfoyle, L. (2022). **Transforming a doctoral summer school to an online experience: A response to the COVID-19 pandemic**. *British Journal of Educational Technology*, *53*(3), 558-576. https://doi.org/10.1111/bjet.13195
For the last 28 years, one of the leading international science education organisations has regularly provided a week-long summer school experience for doctoral students. In summer 2020, the COVID-19 pandemic prevented international travel and close-contact interactions between scholars. This required the transformation and relocation of learning interactions between mentors and doctoral students online through a virtual week-long summer school. All doctoral participants, from across the five continents, were invited to reflectively comment on their educative experience after the online event. This paper consequently presents the perspectives of these science education PhD students who engaged with the transformed virtual summer school to consider how the range of varied online interactions maintained the learning opportunities for them and enabled their introduction to an established research community. The study indicates how the digital activities facilitated and maintained high-quality learning exchanges through a varied array of intellectual activities involving both experienced and novice scholars. The findings demonstrate how successful academic outcomes can be achieved remotely while minimising international travel and significantly reducing financial outlay. This was achieved through creatively structuring a week-long virtual experience and combining a series of synchronous and asynchronous learning opportunities for different groupings of participants within the international summer school community. Practitioner notes What is already known about this topic Doctoral students often feel that studying for their research degree is a very solitary experience. Supporting doctoral students to discuss their research with peers and more experienced others can address the feelings of isolation. The pandemic restricting face-to-face interaction constrains how learning can unfold in online contexts. It is possible to provide doctoral support through online means, however, the exact nature of such is not clearly defined. What this paper adds Clear evidence that doctoral learning communities [involving university students and tutors] can be successfully developed through online virtual environments. That online working can afford and extend doctoral learning, develop beginning researcher identities and provide students the opportunity to become part of an international research community whatever their geographical setting and prior socio-cultural experiences. Clarity about the nature of online activities that ensure an appropriate blend of the kind of synchronous and asynchronous interactions that effectively support virtual online doctoral learning. The Community of Practice COP theoretical framework can offer a useful way of looking at different dimensions of higher degree learning. Implications for practice and/or policy This paper provides advice for those who would like to develop their own virtual learning

networks that bring together learners from universities and wider organisations to develop a community of learning. That an appropriate blend of synchronous and asynchronous interactions can mediate and support doctoral students, aiding them to effectively become more knowledgeable members of an international research community within a short space of time. That international virtual events can successfully achieve learning outcomes while also minimising overseas travel, significantly reducing financial expenditure and individual carbon footprints.

Demir, F. (2022). **The effect of different usage of the educational programming language in programming education on the programming anxiety and achievement**. *Education and Information Technologies*, *27*(3), 4171-4194. https://doi.org/10.1007/s10639-021-10750-6

The abstract structure, logic, negative perceptions, and anxiety of programming are seen as obstacles to novice programmers. The importance of educational programming languages is increasing day by day in overcoming these obstacles. In this study, it was aimed to investigate the effect of educational programming language integration on academic achievement and programming anxiety level. The pretest–posttest test design without control group, which is one of the experimental methods, was used in the study, which was carried out on three groups consisting of the theory, practice and integration of the course into both theory and practice part. The groups determined by random sampling method consist of 87 people, 61 boys and 26 girls. Pretest–posttest method was used to determine academic success. During the application process, five performance tests were used to determined the change in success. The scale developed by Cheung (1990) in determining computer programming anxiety was adapted to Turkish by the validity and reliability study by the researcher and was used as pre-test and post-test. Variance and covariance analyzes were used to determine anxiety about academic success and programming, and the results of Kruskal–Wallis test analyzes were used for analysis of performance tests. It is concluded that educational programming languages can be used by integrating both the theory and practice of the course in order to increase academic success and in-class performance and reduce anxiety about computer programming.

Dench, D., & Joyce, T. (2022). *Information and Credible Sanctions in Curbing Online Cheating Among Undergraduates: a Field Experiment* (NBER Working Paper N° 29755). Consulté à l'adresse National Bureau of Economic Research, Inc website: https://econpapers.repec.org/paper/nbrnberwo/29755.htm

The rapid increase in online instruction in higher education has heightened concerns about cheating. We use a randomized control design to test whether informing students that we can detect plagiarism reduces cheating. We further test whether informing students they have been caught cheating reduces subsequent cheating. We find informing students about our capability to detect plagiarism has little effect on cheating. Notifying students that they have been caught cheating and are on a watch list reduces subsequent cheating attempts by at least 65 percent depending on the class and sample. We test for peer effects but conclude we cannot credibly identify peer effects distinct from own-cheating propensities.

Duan, T. (2022). **A new idea for the optimization of MOOC-based teaching**. *Education and Information Technologies*, *27*(3), 3623-3650. https://doi.org/10.1007/s10639-021-10755-1

This paper aims to analyze the factors that influence the effects of MOOC-based teaching in universities and find an effective way to make the advantages of MOOCs be better played. Considering the factors affecting MOOC-based teaching are complicated, we take a university course (Ideological and Political Education) as an example to analyze the influence factors by using ISM and MICMAC model. Combining ISM and MICMAC models can further analyze the hierarchical structure and overall relationship of influence factors on the teaching effect of MOOCs. Based on existing researches, we firstly select 10 principal factors that affect the teaching effects of MOOC-based courses (IPE courses). Second, we set up an adjacency matrix to clarify the basic binary relations between these factors, find the reachability matrix by exponentiation, and obtain a 5-hierarchy Interpretive Structural Model. Third, based on the MICMAC analysis, we get a new idea for the optimization of MOOC-based teaching. Finally, through a detailed discussion of the results, we provide some suggestions to optimize the teaching effect of MOOCs in the IPE courses. This study is of great significance for optimizing MOOC-based teaching and provides workable methods and ideas for improving the teaching effect of MOOCs in university courses.

Erol, O., & Çırak, N. S. (2022). **The effect of a programming tool scratch on the problem-solving skills of middle school students**. *Education and Information Technologies*, *27*(3), 4065-4086. https://doi.org/10.1007/s10639-021-10776-w
Problem-solving is one of the most important twenty-first-century skills and should be acquired at an early age. Since programming is a kind of problem-solving process, it may be seen in the context of problem-solving skills development. Hence, this study aims to identify the effectiveness of one of the most popular programming tools "Scratch" on middle school students' problem-solving skills. For this purpose, this current study's implementation lasted for a period of 14 weeks, based on the 'Information Technologies and Software' course at 2 h per week. The course curriculum was conducted for both 18 middle school students in an experimental group and 16 middle school students in a control group at least one hour per week while in the second hour, the control group worked on the activities that the coursebook included and the experimental group engaged in game design activities using Scratch. The Problem Solving Inventory for Children (PSIC) was used as a data collection tool in order to examine the participants' self-perception with regard to their problem-solving skills. MANOVA, ANOVA, and t-tests were employed in the analysis of the obtained data. The study showed that game design activities with Scratch increased the problem-solving skills of the participants. In this context, game design activities with coding tools can be employed with children in order to help them gain problem-solving skills at an early age.

Estrada-Molina, O., Fuentes-Cancell, D. R., & Morales, A. A. (2022). **The assessment of the usability of digital educational resources: An interdisciplinary analysis from two systematic reviews**. *Education and Information Technologies*, *27*(3), 4037-4063. https://doi.org/10.1007/s10639-021-10727-5
International reports analyzing current and future educational trends with an emphasis on technologies applied to education declare the importance of the design and application of digital educational resources. Guaranteeing its usability allows obtaining an adequate resource with a high pedagogical and technological quality. The objective of this paper is to analyze the empirical researches to determine if exists convergence between educational and computational researches on the assessment of the usability of digital educational resources. To fulfill the objective, the PRISMA protocol was used to

carry out two systematic reviews and answer the two scientific questions. The results show that in few cases an adequate integration is achieved between: (1) the criteria for assessing usability as established by Software Engineering; (2) the methods and computational models to assess usability and, (3) the criteria established in pedagogical usability. Due to these shortcomings, a model for evaluating the usability of digital educational resources is proposed as future work. It concludes with the importance of interdisciplinary integration to assess the usability of digital educational resources.

Fahd, K., Venkatraman, S., Miah, S. J., & Ahmed, K. (2022). **Application of machine learning in higher education to assess student academic performance, at-risk, and attrition: A meta-analysis of literature**. *Education and Information Technologies*, *27*(3), 3743-3775. https://doi.org/10.1007/s10639-021-10741-7
Recently, machine learning (ML) has evolved and finds its application in higher education (HE) for various data analysis. Studies have shown that such an emerging field in educational technology provides meaningful insights into several dimensions of educational quality. An in-depth analysis of the application of ML could have a positive impact on the HE sector. However, there is a scarcity of a systematic review of HE literature to gain from the overarching trends and patterns discovered using ML. This paper conducts a systematic review and meta-analyses of research studies that have reported on the application of ML in HE. The differentiating factors of this study are primarily vested in the meta-analyses including a specific focus on student academic performance, at-risk, and attrition in HE. Our detailed investigation adopts an evidence-based framework called PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) for reporting the findings of our systematic review and meta-analyses of literature on the use of ML models, algorithms, evaluation metrics, and other criteria, including demographics for assessing student academic performance, at-risk and attrition in HE. After undergoing the PRISMA steps such as selection criteria and filtering, we arrive at a small-scale dataset of 89 relevant studies published from 2010 to 2020 for an in-depth analysis. The results show the outcomes of the quantitative analysis of the application of ML types, models, evaluation metrics, and other related demographics and provide quality insights of publication patterns and future trends towards predicting and monitoring student academic progress in HE.

Fahm, A. O., Azeez, A. L., Imam-Fulani, Y. O., Mejabi, O. V., Faruk, N., Abdulrahaman, M. D., … Surajudeen-Bakinde, N. T. (2022). **ICT enabled Almajiri education in Nigeria: Challenges and prospects**. *Education and Information Technologies*, *27*(3), 3135-3169. https://doi.org/10.1007/s10639-021-10490-7
The Almajiri children in Nigeria are deserving of special interventions to reduce the life-long divide in educational achievement, social status, and economic empowerment. One way of speedily achieving this is through the use of Information and Communication Technologies (ICTs). This study examined the prospects and challenges of using ICT in the teaching and learning processes of Almajiri children's education in Nigeria. A descriptive research methodology was adopted and data were collected from the Almajiri children, their teachers, and parents from communities with a high concentration of Almajiri schools. The results showed that while the official language of instruction in schools in Nigeria is English, the language often spoken by children and teachers was Hausa. Also, while teachers and parents were quite familiar with ICTs such as mobile phones, computers, and television, the Almajiri children were more familiar with television and mobile phones, and very few had used a computer. Some strategies proposed for

successful adoption of ICT in Almajiri education include the use of indigenous languages in courseware development and the use of one-to-many ICT facilities, such as multimedia teaching aids, projectors, and smart televisions.

Fang, M., Tapalova, O., Zhiyenbayeva, N., & Kozlovskaya, S. (2022). **Impact of digital game-based learning on the social competence and behavior of preschoolers**. *Education and Information Technologies*, *27*(3), 3065-3078. https://doi.org/10.1007/s10639-021-10737-3
Digital gaming has become a regular part of life for today's pre-schoolers. Hence, there is a need to look at the integration of digital technology into the preschool education. The present study aims to examine the effect digital games have on children's behaviour and their social competence if played to reach an educational purpose (supervised play) and for fun (without educational aim). The study population consists of 54 pre-schoolers (26 girls and 28 boys), aged 4 to 6, who were recruited in Moscow, Russia. All children were divided in two groups: children playing digital games with peers (n = 28) and children playing digital games at home (n = 28). The pre-schoolers' social competence and behaviour were assessed before and after the experiment using the Social Competence and Behavior Identification (SCBE-30) questionnaire. Findings revealed a higher level of social competence in the experimental group (+11.71, p < 0.05) as compared to children playing without being told what they were expected to achieve. The experimental group also scored lower on Anxiety-Withdrawal (−7.94, p < 0.05). A higher Anxiety-Withdrawal score normally means that a child experiences some degree of depression or anxiety, and exhibits overly dependent behaviour. At the same time, a higher Social Competence score suggests that a child is more joyful, tolerant, socially integrated, calm, and willing to collaborate with peers and that he or she exhibits a prosocial behaviour. The results of this study may help parents and teachers to use digital learning tools, in particular video games, effectively when working with young children.

Gallardo-Montes, C. del P., Caurcel Cara, M. J., & Rodríguez Fuentes, A. (2022). **Technologies in the education of children and teenagers with autism: evaluation and classification of apps by work areas**. *Education and Information Technologies*, *27*(3), 4087-4115. https://doi.org/10.1007/s10639-021-10773-z
Mobile apps represent a resource with great potential for encouraging the development of many skills, given the high number of apps available and the quick access to them. Many professionals and families include these resources in the education and therapy of children with autism. For a group with such particular needs, a review of the apps is great importance, since, due to their characteristics, the apps must provide content, design and pedagogical aspects that fit those needs. Through a previously validated system of indicators, 155 free apps on Google Play were evaluated, using "autism" in English and in Spanish. We determined which work area each app developed, as well as which were the most multifaceted. Having evaluated the recorded data, we calculated frequencies, percentages and reliability, as well as parametric contrast and correlation statistics. We found that the focus of most apps was on executive functions, language and entertainment, with a minority devoted to the emotional sphere or time management. However, 98.06% of the apps worked on several areas, which makes them more functional but with the downside of not being specialized. Most apps were placed in the "recommendable" level but with margin for improvement in increasing their functionality.

Gasell, C., Lowenthal, P. R., Uribe-Flórez, L. J., & Ching, Y.-H. (2022). **Interaction in asynchronous discussion boards: a campus-wide analysis to better understand regular and substantive interaction**. *Education and Information Technologies*, *27*(3), 3421-3445. https://doi.org/10.1007/s10639-021-10745-3
Discussion boards can provide a glimpse into the regular and substantive interaction required in online courses. Advances in technology and an increased interest in learning analytics now provides researchers with billions of data points about instructor and student interaction within a learning management system (LMS). This study used LMS data to explore the frequency of interaction between instructors and students in discussion boards in online courses at one institution. Overall, 415 courses were analyzed spanning two semesters. Results from the study found that the average number of posts by an instructor was 32.9. The average instructor interaction was 1.49 instructor posts per student. 23% of courses had no instructor posts. Student posts averaged 470 per course and the average posts per student was 19.9. Based on the discussion board activity, the most discussion interaction occurred during the first two weeks of the semester. Results also suggested that there is no relationship between student satisfaction and the number of total posts in a course. The paper concludes with implications for research and practice.

Goger, A., Parco, A., & Vegas, E. (2022). **The promises and perils of new technologies to improve education and employment opportunities**. In *https://veille-et-analyses.ens-lyon.fr/Rapports/DetailRapport.php?parent=actu&id=3573* [Report]. Consulté à l'adresse Brookings Institution (États-Unis) website: https://www.brookings.edu/wp-content/uploads/2022/03/Digital-innovations_FINAL.pdf
Digital technologies are rapidly developing and transforming the way individuals work, learn, and participate in civic life. As digital innovations become more available and present opportunities to make quality learning and career opportunities more accessible across the globe, educational institutions, administrative data systems, and regulatory frameworks have struggled to adapt. Through research on the landscape of digital micro-credentials, we hope to provide insights and policy recommendations to decisionmakers and stakeholders, such as education and labor policymakers, to expand access to skills and quality jobs to the most disadvantaged learners and workers across the world.

Graben, K., Doering, B. K., & Barke, A. (2022). **Playing smartphone games while studying: an experimental study on reading interruptions by a smartphone game**. *Education and Information Technologies*, *27*(3), 3965-3980. https://doi.org/10.1007/s10639-021-10764-0
In this study, we investigated whether the use of smartphone games while reading a text reduces learning performance or reading speed. We also examined whether this is affected by push notifications. Ninety-three students were randomly assigned to three learning conditions. In the gaming group (G), participants played a game app for 20 s at 2-min intervals while reading. In one subgroup, the game app sent push notifications (GN+); in the other subgroup, no notifications (GN−) were sent. In the control group (C), participants did not play a game. After the reading, participants took a multiple-choice quiz. We compared quiz scores and reading times of the groups (G) and (C) and within the gaming group (GN+, GN−) and observed no differences. Since the statistical non-significance of these tests does not entail the absence of an effect, we conducted equivalence tests, which did not demonstrate equivalence either. The experiment

ensured high internal validity, yet remained inconclusive. Reasons for the similarity of performance in all groups could be non-specific exercise effects (all participants owned a smartphone), low similarity between the tasks, low variance of participants' ability and motivation (high achieving, low ADHD scores) or low game complexity. Future research should address these questions.

Greenland, S. J., & Moore, C. (2022). **Large qualitative sample and thematic analysis to redefine student dropout and retention strategy in open online education**. *British Journal of Educational Technology*, 53(3), 647-667. https://doi.org/10.1111/bjet.13173
Open online education experiences persistently high dropout rates, and the efficacy of dropout interventions has been questioned. Despite considerable research, dropout reasons are not fully understood, and further in-depth investigation has been called for. Prior qualitative retention studies have frequently relied on smaller samples that are unable to generate deeper appreciation of dropout reasons. Over 200 in-depth interviews were therefore conducted with students that had dropped out of open online education. The probability-based qualitative sample facilitated capture of subthemes down to a 5% incidence level or frequency of occurrence. Thematic analysis revealed 41 subthemes within 10 broad dropout reasons. While the broad dropout themes have been identified previously, the subthemes are new and provide richer understanding. This study also captured students' suggestions for what might have prevented their dropout. Thematic analysis identified 19 subthemes within 5 broad intervention themes that respond to the root dropout causes. Many intervention subthemes address personal and learner context dropout factors that have often been considered uncontrollable and unavoidable. This paper therefore redefines dropout in open online education and offers new insights for improving retention. It also provides a strategic framework for evaluating dropouts and prioritising student-informed interventions that respond to the main dropout causes. Practitioner notes What is already known about this topic Persistently high open online education dropout suggests existing interventions are ineffective. Prior qualitative retention studies identified the main dropout reasons, but small sample sizes failed to generate deeper insights and more in-depth investigation has been called for. What this paper adds A probability-based qualitative sample of 226 participants captured dropout subthemes down to a 5% level of incidence or frequency of occurrence. Thematic analysis identified 41 subthemes, within 10 broad dropout reasons. These subthemes are new and offer richer understanding. Thematic analysis also identified 19 subthemes within 5 broad dropout intervention areas that students suggested could have prevented their dropout. These include new insights for addressing dropout causes that have often previously been considered unavoidable. Implications for practice and/or policy The strategic framework provides a retention management approach that prioritises responding to the main dropout causes with student-informed interventions. This approach and the deeper understanding afforded by robust qualitative investigation should help reduce persistently high dropout rates.

Harrison, T., & Polizzi, G. (2022). **(In)civility and adolescents' moral decision making online: drawing on moral theory to advance digital citizenship education**. *Education and Information Technologies*, 27(3), 3277-3297. https://doi.org/10.1007/s10639-021-10710-0
This article draws on moral theory to advance digital citizenship education and explore how adolescents aged 13–16 make decisions when confronted with incivility, such as cyberbullying, on social media. Given the extent to which digital citizenship education may be approached in line with deontological (rules), utilitarian (consequences) and/or

virtue ethical (character) theories, we argue that it is important to know which of these underpin adolescents' moral decision making online. To address this question, this article reports findings from a survey completed by 1947 13–16 year olds in England. Chi-square tests, binary logistic regressions and other exploratory analysis showed that most 13–16 year-olds use virtue ethical reasons to justify moral actions. We conclude that if online incivility is to be reduced, policymakers, educators and parents should focus more on virtue- and character-based approaches to digital citizenship education.

Hirsh-Pasek, K., Zosh, J. M., Hadani, H. S., Golinkoff, R. M., Clark, K., Donohuef, C., & Wartella, E. (2022). ***A whole new world: Education meets the metaverse***. Consulté à l'adresse https://www.brookings.edu/wp-content/uploads/2022/02/A-whole-new-world_Education-meets-the-metaverse-FINAL-021422.pdf

Cette note d'orientation sur le métaverse et son potentiel d'interface avec le système éducatif décrit plusieurs points clés sur la ludification des activités d'apprentissage et la meilleure façon d'utiliser le métaverse comme un outil efficace dans une salle de classe. Les auteurs montrent comment l'engagement dans cet univers virtuel toujours actif favorise l'éducation et comment il peut préserver les principales interactions sociales qui sont au cœur de la façon dont les humains apprennent. Ils soulignent le fait que les développeurs de technologies éducatives doivent apprendre des erreurs d'autres plates-formes edtech, comme les applications éducatives bidimensionnelles et les jeux vidéos qui ont gagné en popularité au cours des deux dernières décennies.

Ho, J. C.-S., Hung, Y.-S., & Kwan, L. Y.-Y. (2022). **The impact of peer competition and collaboration on gamified learning performance in educational settings: a Meta-analytical study**. *Education and Information Technologies*, *27*(3), 3833-3866. https://doi.org/10.1007/s10639-021-10770-2

This study is a meta-analytical study that examines the effectiveness of gamification in learning performance in educational settings (n = 29; year-span = 2011–2019). Specifically, it aimed to investigate (a) whether gamification could improve learning performance, and (b) whether peer interaction (i.e., peer competition and peer collaboration) moderated the effectiveness of gamification in learning performance. Results from random-effects models showed significant effects of gamification in learning performance (g = .595, 95% CI [.432, .758], N = 3515). This effect remained robust after excluding outliers and was stable in a sub-split analysis that excludes studies with low methodological rigor (i.e., studies with pre-post test design). Subgroup analyses revealed a moderating effect of peer competition in gamification in learning, suggesting that competitive games were better than non-competitive games for promoting learning performance in educational settings. However, this effect was not robust and no evidence of subgroup differences were found in the sub-split analysis. Peer collaboration did not moderate the effectiveness of gamification in learning as no subgroup differences were found between collaborative games and non-collaborative games. The effectiveness of games that were both competitive and collaborative did not differ from those that were only competitive. Other moderators such as education level and research design were also investigated. No subgroup differences were found for these two moderators. Educational implications and limitations were further discussed.

Hoang, L. P., Le, H. T., Van Tran, H., Phan, T. C., Vo, D. M., Le, P. A., … Pong-inwong, C. (2022). **Does evaluating peer assessment accuracy and taking it into account in calculating assessor's final score enhance online peer assessment quality?** *Education*

and Information Technologies, *27*(3), 4007-4035. https://doi.org/10.1007/s10639-021-10763-1

Peer assessment has an important role in teaching and learning nowadays. However, the existing techniques tend to be limited due to a lack of a suitable means to evaluate the accuracy of peer assessment activities and supervise peer assessment performances in an online environment. Hence, it is very necessary to develop new solutions encourage students to take full effort when they join in online peer assessment activities. This study proposed a new approach to evaluate the accuracy of peer assessment results for enhancing the quality of peer assessment system. The proposed approach was applied to evaluate peer assessment activities of two groups of students. The experimental results analyzed and evaluated in terms of both the learning scores and opinion survey results, which revealed that when students realized both their own responses and their peer assessment activities were taken into account by the system in the calculation of the last score, they had positive attitudes towards peer assessment activities and the peer assessment results were improved significantly.

Huang, H.-L., Hwang, G.-J., & Chen, P.-Y. (2022). **An integrated concept mapping and image recognition approach to improving students' scientific inquiry course performance**. *British Journal of Educational Technology*, *53*(3), 706-727. https://doi.org/10.1111/bjet.13177

Scholars and researchers generally believe that scientific inquiry is an important activity for cultivating students' applied knowledge and high-level thinking ability. The process of scientific inquiry can promote students' learning motivation and trigger their higher-order thinking ability. However, students may not have enough prior knowledge or they may lack inquiry experience, which may influence the effectiveness of their inquiry learning. Besides, in a scientific inquiry environment assisted by technology, students must face abundant and diverse learning resources, and may not effectively organize and carry out advanced cogitation to solve problems. Therefore, this research proposed an integrated concept mapping and image recognition (IR) approach to help students effectively acquire and organize knowledge in the process of scientific inquiry. This study applied a quasi-experimental design to verify the effect of this proposed approach. The experimental group conducted the concept mapping-based IR (CM-IR) learning approach, whilst the control group conducted the conventional IR-based learning approach to evaluate the students' performance in terms of their learning motivation and learning achievements. The participants were two classes of 10th-grade students in northern Taiwan. One was the experimental group with 22 students, whilst the other was the control group with 22 students. The experimental results show that the students learning with the CM-IR learning approach had better learning achievement, attitudes and intrinsic motivation, as well as higher mental load than those learning with the conventional IR-based learning approach. Accordingly, several suggestions are provided for future research in this field. Practitioner notes What is already known about this topic With the development of information technology, AI has attracted the attention of researchers. Image recognition (IR) is one of the AI applications, and has been used to support learning in various educational fields. Researchers have indicated that concept mapping is an effective instructional strategy and promotes students' knowledge construction. What this paper adds A concept mapping-based IR (CM-IR) learning approach is proposed to improve students' scientific inquiry performance. A quasi-experimental design was conducted with 10th-grade students on the 'Plant identification' unit of the scientific inquiry course. The experimental results show that the

proposed approach can significantly improve students' learning achievement, learning motivation and learning attitude. Implications for practice and/or policy The CM-IR learning approach could be an effective method to facilitate students' learning performances and motivation in scientific inquiry. It is worth promoting the CM-IR learning approach in school settings since it is low-cost and enables learning anywhere using mobile devices. Scholars and educators are encouraged to work on how AI technologies applications can be applied to support learning.

Jung, J., Lu, Y.-H., & Ding, A.-C. E. (2022). **How Do Prompts Shape Preservice Teachers' Reflections? A Case Study in an Online Technology Integration Class**. *Journal of Teacher Education*, *73*(3), 301-313. https://doi.org/10.1177/00224871211056936
To investigate how prompts shape preservice teachers' reflections, we examined, in this exploratory case study, the written reflections responding to three types of prompts (standard-based, concept-based, and task-based) of 21 preservice teachers in an online technology integration class. We analyzed these reflections at the sentence level (total 1,503 comments), both quantitatively and qualitatively, using a framework comprising descriptive, rationalistic, and anticipatory dimensions to understand the compositions of reflections generated from each type of prompt and the kinds of teacher abilities demonstrated in each dimension. We found quantitative patterns between prompt types and the reflections generated and emergent themes in each dimension of reflection relating to teacher abilities. We conclude by discussing three prompt design features that appeared to have played an important role in shaping the reflections and suggesting implications and future research directions.

Kanetaki, Z., Stergiou, C., Bekas, G., Jacques, S., Troussas, C., Sgouropoulou, C., & Ouahabi, A. (2022). **Grade Prediction Modeling in Hybrid Learning Environments for Sustainable Engineering Education**. *Sustainability*, *14*(9), 5205. https://doi.org/10.3390/su14095205
Since mid-March 2020, due to the COVID-19 pandemic, higher education has been facing a very uncertain situation, despite the hasty implementation of information and communication technologies for distance and online learning. Hybrid learning, i.e., the mixing of distance and face-to-face learning, seems to be the rule in most universities today. In order to build a post-COVID-19 university education, i.e., one that is increasingly digital and sustainable, it is essential to learn from these years of health crisis. In this context, this paper aims to identify and quantify the main factors affecting mechanical engineering student performance in order to build a generalized linear autoregressive (GLAR) model. This model, which is distinguished by its simplicity and ease of implementation, is responsible for predicting student grades in online learning situations in hybrid environments. The thirty or so variables identified by a previously tested model in 2020–2021, in which distance learning was the exclusive mode of learning, were evaluated in blended learning spaces. Given the low predictive power of the original model, about ten new factors, specific to blended learning, were then identified and tested. The refined version of the GLAR model predicts student grades to within ±1 with a success rate of 63.70%, making it 28.08% more accurate than the model originally created in 2020–2021. Special attention was also given to students whose grade predictions were underestimated and who failed. The methodology presented is applicable to all aspects of the academic process, including students, instructors, and decisionmakers.

Khan, S., Kambris, M. E. K., & Alfalahi, H. (2022). **Perspectives of University Students and Faculty on remote education experiences during COVID-19- a qualitative study**. *Education and Information Technologies*, 27(3), 4141-4169. https://doi.org/10.1007/s10639-021-10784-w

Owing to COVID-19 the Ministry of Education in the United Arab Emirates mandated educational institutions to shift to remote learning. In this study the perspectives on remote learning, of both students and faculty, from the Science major, in a public university in Dubai have been explored. A qualitative research was conducted through focus group discussions using a semi-structured interview guide. All discussions were recorded and transcribed verbatim. Thematic content analysis was carried out following coding and analyzing content using NVivo 12. Recurrent, emerging and diverging views were identified and represented under themes. Participants believed that altered human interaction was a major consideration in remote learning. Assessments were modified to reduce cheating however increasing students' accountability and prudent use of questions was suggested as a more effective strategy. Challenges associated with technology, changes to the learning environment, wellbeing and institutional policies were highlighted. Advantages of remote learning included more inclusivity, flexibility, availability of recorded sessions and time efficiency. Also, remote learning had compelled faculty to enhance their technological skills. Including class participation as a graded component of courses, clear institutional guidelines on assessments, use of recordings and methods of communication were recommended. It was evident that students' stances for learning were based on courses and disciplines, with a preference for synchronous lessons. Culture influenced interaction, assessments, acceptability, and accessibility of remote education. The views from this research will contribute to improving the adoption and outcomes of digital education in higher education in the field of science, while considering the sociocultural influences of the region.

Khelfi, A. (2021). *TIC et apprentissage des langues dans le supérieur Algérien : efficacité d'un dispositif de formation hybride sur l'amélioration de la compréhension en lecture des contenus pédagogiques produits en FLE* (Phdthesis, Université de Haute Alsace - Mulhouse). Consulté à l'adresse https://tel.archives-ouvertes.fr/tel-03652197

La présente recherche relève du domaine de la didactique du Français Langue Étrangère et consiste à évaluer l'efficacité d'un dispositif de formation hybride sur l'amélioration de l'activité de compréhension en lecture de contenus pédagogiques produits en français langue étrangère, en le comparant à une situation de formation traditionnelle. Nous supposons qu'un dispositif de formation hybride permet aux étudiants d'acquérir des apprentissages en langue 2 (L2) de qualité, en améliorant et développant davantage leur activité de compréhension en lecture des contenus pédagogiques proposés dans leurs offres de formations, plus particulièrement ceux des matières fondamentales. Pour expérimenter notre principale hypothèse de recherche, nous avons conçu un dispositif de formation hybride en deux temps. Dans un premier temps, nous avons créé et didactisé à l'aide de la chaine éditoriale Scénari Opale un contenu pédagogique numérique. Puis, dans un second temps, nous l'avons mis en place pour les étudiants participant à notre projet à l'aide d'une plateforme d'apprentissage (MoodleCloud), en lui intégrant plusieurs activités considérées comme nécessaires pour l'interaction, la construction de connaissances et l'évaluation.Le recueil des données a été formé par le biais d'une expérimentation comparant deux situations de formation différentes : une hybride combinant un enseignement en présentiel et à distance, et une traditionnelle suivie exclusivement en présentiel, menée auprès

d'étudiants inscrits en première année Licence de Français à l'Université de Badji Mokhtar Annaba (Algérie) et d'une post-enquête par questionnaire administré seulement au groupe ayant participé à la formation hybride. Ainsi, le corpus traité ici est constitué de réponses fournies à un test par (26) Vingt-Six étudiants répartis en deux groupes (groupe expérimental et groupe témoin) et à un questionnaire adressé au (13) Treize étudiants qui ont participé à la formation hybride (groupe expérimental). Pour vérifier notre première série d'hypothèses qui porte sur les effets du dispositif hybride sur l'amélioration de l'activité de compréhension en lecture de contenu pédagogique en L2, nous avons évalué les réponses apportées au test selon des grilles d'analyse élaborées en se basant sur le modèle de compréhension de Van Dijk et Kintsch (1982) et la taxonomie SOLO de Biggs et Collis (1983). Quant à notre deuxième série d'hypothèses qui concerne les effets perçus du dispositif hybride suivi sur la qualité des apprentissages, nous l'avons mesuré à l'aide du logiciel de statistique SPSS. Notre approche d'analyse est essentiellement descriptive et analytique. Le traitement et l'interprétation des corpus rendent compte que le recours à ce mode de formation articulant le présentiel et la distance représente une solution pour améliorer la qualité des apprentissages. Effectivement, les résultats obtenus mettent en évidence un important relèvement du niveau de compréhension en lecture des étudiants ayant participé à la formation hybride en comparaison avec le niveau de leurs homologues du groupe traditionnel et également une évaluation positive du dispositif de la part de l'ensemble des étudiants interrogés qui nous a amené à affirmer que l'avenir et le bon fonctionnement d'un tel mode d'apprentissage dépend fortement de l'investissement engagé par les étudiants qui y ont recours.

Kong, S.-C., & Lai, M. (2022). **Computational identity and programming empowerment of students in computational thinking development**. *British Journal of Educational Technology*, *53*(3), 668-686. https://doi.org/10.1111/bjet.13175
The participatory view of learning emphasises students' identity construction. However, identity research in the context of programming education to cultivate students' computational thinking is scarce. In this study, an instrument of computational identity with components of engagement, imagination and affiliation, was developed and validated. Convenience sampling was used to select 1066 senior primary school students studying programming to respond to the instrument, and to a programming empowerment instrument developed previously with components of meaningfulness, self-efficacy and impact. The two instruments' factor structure was confirmed to have acceptable discriminant validity and support gender invariance. There was a positive relationship between programming empowerment and computational identity. Specifically, students' perceived meaningfulness and self-efficacy of programming related to all aspects of computational identity. The perceived impact of programming is related only to the imaginative aspect of computational identity. The establishment of the instrument enables researchers to investigate further factors related to students' computational identity development. The results also indicate that the programming curriculum should be carefully designed so that students can realise the meaning of the activities and foster their programming self-efficacy. This, in turn, is critical to enable these primary school students to participate in and become a member of the digital community. Practitioner notes What is already known about this topic Cultivating students' computational thinking (CT) has become an educational goal in various countries around the world. It is necessary to develop appropriate tools to assess students' CT development. Founded on a participatory view of learning, identity has

been employed in different subject areas to assess students' development, but identity research in CT is scarce. What this paper adds An instrument of computational identity with components of engagement, imagination and affiliation is developed and validated with a sample of senior primary students. This study shows the importance of empowerment in developing primary students' computational identity. Students' perceived meaningfulness of programming and self-efficacy relate to all aspects of identity, but the impact of programming only relates to the imaginative aspect of identity. Implications for practice and/or policy The curriculum for CT should be designed carefully to foster the development of students' computational identity. The curriculum should allow students to see the meaning of programming activities and how young people can make an impact by means of CT. The programming tasks should be designed at an optimal level of difficulty so that students' self-efficacy can be fostered.

Kumar, B. A., Sharma, B., & Nakagawa, E. Y. (2022). **Architectural Support for Context-Aware Mobile Learning Applications**. *Education and Information Technologies*, *27*(3), 3723-3741. https://doi.org/10.1007/s10639-021-10771-1
Context-aware mobile learning applications provide learning materials to suit the needs of individual learners. Despite several applications developed, there is a lack of architectural support for developing these applications. This has resulted in a number of challenges; lack of standardization, poor quality of developed applications, and reliability. Motivated by this shortcoming, a reference architecture was designed using requirements gathered from twenty-four context-aware mobile learning applications. The reference architecture provides architectural support for context capturing and processing. Evaluation of the reference architecture was conducted, and the results indicate that it solves the motivated problem and also consolidates necessary requirements.

Lacey, G., Gozdzielewska, L., McAloney-Kocaman, K., Ruttle, J., Cronin, S., & Price, L. (2022). **Psychomotor learning theory informing the design and evaluation of an interactive augmented reality hand hygiene training app for healthcare workers**. *Education and Information Technologies*, *27*(3), 3813-3832. https://doi.org/10.1007/s10639-021-10752-4
Hand hygiene is critical for infection control, but studies report poor transfer from training to practice. Hand hygiene training in hospitals typically involves one classroom session per year, but psychomotor skills require repetition and feedback for retention. We describe the design and independent evaluation of a mobile interactive augmented reality training tool for the World Health Organisation (WHO) hand hygiene technique. The design was based on a detailed analysis of the underlying educational theory relating to psychomotor skills learning. During the evaluation forty-seven subjects used AR hand hygiene training over 4 weeks. Hand hygiene proficiency was assessed at weekly intervals, both electronically and via human inspection. Thirty eight participants (81%) reached proficiency after 24.3 (SD = 17.8) two-minute practice sessions. The study demonstrated that interactive mobile applications could empower learners to develop hand hygiene skills independently. Healthcare organizations could improve hand hygiene quality by using self-directed skills-based training combined with regular ward-based assessments.

Lee, K., & Fanguy, M. (2022). **Online exam proctoring technologies: Educational innovation or deterioration?** *British Journal of Educational Technology*, *53*(3), 475-490. https://doi.org/10.1111/bjet.13182
During the coronavirus disease-2019 (Covid-19) pandemic, many universities have adopted online exam proctoring technologies to monitor and control an increasing number of student cheating incidents. Although it looks like a natural and effective solution for a fair assessment of student online learning performance, the authors argue that proctoring technologies are rooted in problematic assumptions about educational fairness and authoritarian pedagogical approaches. The authors have conducted a qualitative case study in a large-sized, top-tier university in South Korea to investigate the negative impacts of adopting proctoring technologies on student subjectivities, pedagogical relationships and educational outcomes, which have not been fully discussed in previous studies. By utilising Foucault's theorisation of disciplinary governmentality, the authors effectively demonstrate that the binary subjectification of students as cheaters and the cheated has degraded the value of student engagement in university education whilst creating more competitive and distrusting relationships amongst students and between students and teachers. Nevertheless, without challenging the unethical consequences of online proctoring technologies or fundamentally unfair social and educational systems, students willingly accept and adopt them as docile bodies, which has led to educational deterioration rather than innovation. Practitioner notes What is already known about this topic There is an increasing number of online exam proctoring technologies available with advanced technical features. During the coronavirus disease-2019 (Covid-19) pandemic, many universities have adopted online exam proctoring technologies with exam-related policies and regulations to stop student cheating behaviours. Previous studies have discussed both advantages and disadvantages of adopting online exam proctoring technologies, including specific ethical concerns. What this paper adds Online exam proctoring technologies are deeply rooted in problematic educational approaches such as teacher-centred knowledge transmission. The adoption of online exam proctoring technologies has produced negative impacts on student subjectivities, pedagogical relationships and educational outcomes. Focusing on student cheating as an individual and interpersonal problem neglects the more fundamental issue of social and educational inequality. Implications for practice and/or policy The negative consequences and damages created by the adoption of online exams and online exam proctoring technologies need to be carefully reflected. The notion of academic fairness needs to be approached with a broader perspective, considering the different social and academic circumstances each student is in. It is essential to critically engage students with the broader conversation about educational fairness to develop them as critical thinkers and future leaders in their chosen fields.

Lee, S. J. C., & Abdul Rabu, S. N. (2022). **Google docs for higher education: Evaluating online interaction and reflective writing using content analysis approach**. *Education and Information Technologies*, *27*(3), 3651-3681. https://doi.org/10.1007/s10639-021-10760-4
This study explores the types of online interaction used and levels of reflection achieved by undergraduate students, including the influence of the former on the latter on Google Docs. A qualitative approach was employed by means of (i) content analysis of students' comments and individual reflections based on the established coding schemes of online interaction and reflection and (ii) focus group interviews for triangulation purposes. The study involved two groups of six students. Analysis of data revealed that Group 1 and

Group 2 used Clarification/Elaboration and Acknowledgement of Opinion the most while commenting on the platform, respectively. Though instances of Relating were reported most frequently in both groups' individual reflections, most of the students actually reached the Low level of reflection. Group 2 had more students categorised as Medium-level reflectors than Group 1, suggesting that the use of more Question types for interaction by the former could have led them to have more Medium-level reflectors than Group 1.

Logemann, M., Aritz, J., Cardon, P., Swartz, S., Elhaddaoui, T., Getchell, K., … Stapp, J. (2022). **Standing strong amid a pandemic: How a global online team project stands up to the public health crisis**. *British Journal of Educational Technology*, *53*(3), 577-592. https://doi.org/10.1111/bjet.13189

The annual instructional virtual team Project X brings together professors and students from across the globe to engage in client projects. The 2020 project was challenged by the global disruption of the COVID-19 pandemic. This paper draws on a quantitative dataset from a post-project survey among 500 participating students and a qualitative narrative inquiry of personal experiences of the faculty members. The findings reveal how innovative use of a variety of collaboration and communication technologies helped students and their professors in building emotional connection and compassion to support each other in the midst of the crisis, and to accomplish the project despite connectivity disruptions. The results suggest that the role of an instructor changed to a coach and mentor, and technology was used to create a greater sense of inclusion and co-presence in student-faculty interactions. Ultimately, the paper highlights the role of technology to help the participants navigate sudden crisis affecting a global online instructional team project. The adaptive instructional teaching strategies and technologies depicted in this study offer transformative potential for future developments in higher education. Practitioner notes What is already known about this topic The modern workplace calls for cross-cultural, digital collaboration skills, and this need has increased potentially after the impacts of the pandemic on moving a lot of work to remote settings—permanently. While instructional virtual teams are being used as part of diverse curricula to add an international, experiential element for students, universities still struggle helping students to acquire the whole spectrum of skills needed for the global digital workplace: virtual teamwork, project management, and comfort on working with digital business collaboration platforms. Virtual team research has studied impacts of the pandemic on organizational teams but there is little research on instructional online teams during the pandemic crisis. What this paper adds This paper adds evidence-based knowledge how virtual instructional teams, and their instructors navigated the broken connectivity situation when a global external health crisis forced students to transition from campuses to home environments in the middle of the collaboration project. It offers practical ideas how faculty used technology to connect with students and maintain class community in cases of inequal access to technology from home environments by using multiple platforms, and both, computer, and mobile enabled communication. It offers examples of student-centered, coaching-like teaching strategies and how these were applied when the global health crisis affected students in instructional teams. Implications for practice and policy The study offers implications for development of digital pedagogies for future; specifically, how to develop students' virtual intelligence and to promote intercultural awareness and collaboration skills in future higher education. The pandemic experiences shed additional light on the need to develop and

acquire soft skills among students, for them to be able to navigate struggles and crisis in global, digital real workplace.

Martinez, L., Gimenes, M., & Lambert, E. (2022). **Entertainment Video Games for Academic Learning: A Systematic Review**. *Journal of Educational Computing Research*, 073563331211053848. https://doi.org/10.1177/073563331211053848
Entertainment video games are very popular among young audiences. Nevertheless, despite their potential to improve cognitive functioning, they are still studied rarely as a tool for digital game-based learning. To better understand video gaming practices' value in the classroom, this article provides a systematic review of literature on the effect of entertainment video games on academic learning. Our literature search yielded 49 relevant intervention studies published between 2005 and 2019 that integrated entertainment video games into academic curricula from preschool to college. Our review revealed that entertainment video games can be an effective educational tool and are beneficial in almost all academic disciplines, particularly in foreign language and science. However, research on entertainment video gaming's effects on academic learning is still not extensive enough and remains mostly qualitative. Future studies need to provide a quantitative approach to complete and confirm already-existing literature, particularly in the environmental and social sciences, physical education, and programming. Given entertainment video games' popularity and benefits on cognition and learning, it seems essential to investigate their practical value further in the education sector and to determine the mechanisms that mediate their effects on academic learning.

McCormick, K. I., & Hall, J. A. (2022). **Computational thinking learning experiences, outcomes, and research in preschool settings: a scoping review of literature**. *Education and Information Technologies*, *27*(3), 3777-3812. https://doi.org/10.1007/s10639-021-10765-z
When implemented appropriately, computational thinking (CT) experiences in early childhood settings build essential literacy skills and foster initial explorations of sequencing, engineering design principles, and cause-and-effect relationships. While existing research explores CT in K-12 settings, there is insufficient research documenting the true scope of CT skills for preschool-age children (ages 3–5 years old). Thus, the paucity of research in this emerging area warranted a scoping review approach. This scoping review surveys existing CT studies with preschool-age participants and maps what is known of CT learning experience design, intended educational outcomes, and CT study design. Evidence from the reviewed articles (n = 17) indicate most studies used physical kits, task-oriented activities, and varying experience timeframes and adult scaffolding. Most studies focused on learning sequencing and events with few embedding remixing and reusing skills. Additionally, studies primarily implemented pre-post research design approaches, and few utilized qualitative methods. The analysis of the reviewed articles indicates gaps exist in CT experience designs, scope of CT interventions, and CT tool research and development. We conclude with recommendations for closing the knowledge gaps by providing specific future research directions.

MD, S., & Krishnamoorthy, S. (2022). **Student performance prediction, risk analysis, and feedback based on context-bound cognitive skill scores**. *Education and Information Technologies*, *27*(3), 3981-4005. https://doi.org/10.1007/s10639-021-10738-2

In recent times, Educational Data Mining and Learning Analytics have been abundantly used to model decision-making to improve teaching/learning ecosystems. However, the adaptation of student models in different domains/courses needs a balance between the generalization and context specificity to reduce the redundancy in creating domain-specific models. This paper explores the predictive power and generalization of a feature - context-bound cognitive skill score- in estimating the likelihood of success or failure of a student in a traditional higher education course so that the appropriate intervention is provided to help the students. To identify the students at risk in different courses, we applied classification algorithms on context-bound cognitive skill scores of a student to estimate the chances of success or failure, especially failure. The context-bound cognitive skill scores were aggregated based on the learning objective of a course to generate meaningful visual feedback to teachers and students so that they can understand why some students are predicted to be at risk. Evaluation of the generated model shows that this feature is applicable in a range of courses, and it mitigates the effort in engineering features/models for each domain. We submit that overall, context-bound cognitive skill scores prove to be effective in flagging the student performance when the accurate metrics related to learning activities and social behaviors of the students are unavailable.

Mejbri, N., Essalmi, F., Jemni, M., & Alyoubi, B. A. (2022). **Trends in the use of affective computing in e-learning environments**. *Education and Information Technologies*, *27*(3), 3867-3889. https://doi.org/10.1007/s10639-021-10769-9
Considering that emotions have a great impact on motivation, reasoning, and decision making, affective computing methods, that were designed to attempt to understand and respond to human emotional states, have been used in more than one field including e-learning. Thus, a systematic literature review was conducted on 4 search engines resulting in a set of papers that were filtered in a systematic way until we obtained a corpus of 27 papers. Data were extracted to answer four research questions concerning the use and efficacy of affective computing in e-learning in recent years. We found out that the majority of studies about emotion recognition use uni-modal systems in which facial expressions emotion detection is the most present. The major research purpose is designing/building systems, approaches, methods, detectors for emotion recognition. For the e-learning environments, the most present is conversational agents. The emotions detected or used are basic emotions, non-basic emotions, learning-centered emotions, trait emotions, or a combination of two or three of them. This systematic literature review also provides the major findings, challenges, and future research.

Meyliana, Sablan, B., Surjandy, & Hidayanto, A. N. (2022). **Flipped learning effect on classroom engagement and outcomes in university information systems class**. *Education and Information Technologies*, *27*(3), 3341-3359. https://doi.org/10.1007/s10639-021-10723-9
How to improve student engagement and educational learning outcomes in the classroom have always been high on a teacher's priority list. Unfortunately, it seems these challenges have become more pronounced in teaching Generation Z. To address these challenges educators are exploring new teaching methodologies such as flipped learning. The authors examined the effect of flipped learning on student motivation and educational outcomes on sophomore students from a private university in Indonesia majoring in Information Systems. The survey was taken from two groups, a control group

which was not taught using flipped learning (60 respondents), and an experimental group which was taught using flipped learning (60 respondents). Results showed that flipped learning increased student motivation and improved educational outcomes compared to a group that was not exposed to flipped learning. The results can help guide teachers and administrators on potential implementation of flipped learning at their universities.

Mohamed Hashim, M. A., Tlemsani, I., & Matthews, R. (2022). **Higher education strategy in digital transformation**. *Education and Information Technologies*, *27*(3), 3171-3195. https://doi.org/10.1007/s10639-021-10739-1
Digital transformation in the global higher education industry determines the future roadmap to a sustainable education management strategy. This research paper aims to develop a qualitative model that advocates how digital transformation as a propelling force could be used to build competitive advantages for universities. Building competitive advantage is a relative, evolving, and important concept in strategy formulation. In recent years, specifically in the education industry, the notion of building competitive advantage is challenged by global phenomena such as digital transformation globalization, information exchange, digitization and social media in most of the global industries. These phenomena have collectively made the process of building competitive advantage rapidly changing, short-term and contextual. These findings aid the evolution of strategic management practices in universities by providing empirical insights in determining the impactful changes and their connection to evolutionary learning. It also stresses the importance of using the developed model as a decision support system to generate, regulate and retain student experience and expectations. This research paper provides first-hand insight into the impactful changes affecting universities' vision and how they can turn these changes to their advantages and set a road map to design-develop models to integrate and regulate these essential changes in their strategies using evolution learning mechanism and digital transformation strategy.

Nelekar, S., Abdulrahman, A., Gupta, M., & Richards, D. (2022). **Effectiveness of embodied conversational agents for managing academic stress at an Indian University (ARU) during COVID-19**. *British Journal of Educational Technology*, *53*(3), 491-511. https://doi.org/10.1111/bjet.13174
Stress has become one of the major reasons for many mental health related issues among students of all age groups, which has resulted in devastating personal losses including suicide. Societal and familial pressure to succeed is high, particularly in developing countries where education is highly valued as a key enabler. As part of stress management during the COVID-19 pandemic, demand for online intelligent virtual advisors has risen and, consequently, the need for personalised explanation that is culturally sensitive to the user's context is essential to improve the user's understanding of and trust in the recommendations provided by the virtual advisor. This paper presents the mAnaging stRess at University embodied conversational agent (ECA) that has been adapted for Indian university students from an explainable agent that was found to help Western students reduce their stress by providing study tips with explanations based on the student's beliefs and/or goals. We conducted a research study with sixty students which measured the impact of providing three different patterns of tailored explanations (belief-based, goal-based, and belief and goal-based explanation) on the students' intentions to change the recommended behaviours and the relationship built with the

ECA. The experimental results indicate that there was stress reduction across all student groups provided with different types of explanations. Further, the students showed trust and a good working alliance with the conversational agent, along with an intention to change behaviour across all types of explanations. However, it was observed that the user context played an important role in behaviour change intention and hence explanations could be tailored further, making them culturally more relevant to Indian students. Practitioner notes What is already known about this topic Embodied conversational agents (ECAs) have been mostly developed, applied and shown to be effective in developed countries. Hence, their design and development are mostly guided by the intended user's needs and preferences. In a Western context, ECAs have been found to be beneficial for reducing study stress in university students. There is a pertinent need for use of low cost, effective technology that can aid academic stress reduction in higher educational institutions in developing countries owing to their high youth populations, lack of adequate mental healthcare facilities and associated social stigma. What this paper adds The adaptation and use of ECAs to reduce study stress in higher education students in a developing country is evaluated. The ECA technology is adapted for an Indian context in terms of its physical appearance, colour, speech dialect and dialog content so that it is culturally more aligned to the target population. The ECA engages in an empathic conversation tailored for the Indian students and their COVID-19 context providing them with explanation-backed behaviour recommendations that take their beliefs and goals into account. The ECA provides three types of explanation: belief-only; goal-only; and both belief and goal. Results of a study carried out in an Indian university with 61 students, randomly assigned to one of the explanation types, to capture their demographics, study stress statistics, behaviour change intentions and trust/working alliance with the conversational agent. The major findings include stress reduction across all explanation groups, development of a positive relationship between the ECA and the students regardless of its explanation pattern, and changes in behaviour intentions across all types of explanations for all recommended behaviours. However, differences in change intentions for certain behaviours indicate further tailoring of explanations is required based on the user context. Implications for practice and/or policy The ECA technology has shown promise in terms of stress reduction amongst Indian students. Higher Education Institutions in developing countries could utilise low-cost and widely accessible ECAs to overcome lack of access to human-based support and reluctance to use available services due to stigmatized attitudes to mental health issues. This technology can be further improved and deployed into a larger number of Indian educational institutions leading to a widespread impact on overall student health and wellbeing. Digital technologies to support mental health have become more prominent during the COVID-19 pandemic, at least in Western countries. The ECA technology evaluated in our study demonstrates its viability and potential value for use in developing countries, with appropriate tailoring.

Ng, D. T. K. (2022). **Online aviation learning experience during the COVID-19 pandemic in Hong Kong and Mainland China**. *British Journal of Educational Technology, 53*(3), 443-474. https://doi.org/10.1111/bjet.13185
The COVID-19 pandemic has triggered an unexpected digital revolution, speeding up universities' digital transformation worldwide. It has brought heavy disruptions to travel and mobility worldwide, but it drives the opportunity for hosting region-wide or even international academic exchanges through learning programs, workshops, and conferences via an alternative online mode. This study reports on a case study of a 1-

month online aviation learning program that engaged 108 university students from Mainland China and Hong Kong during the lockdown. At first, we first recruited students in Hong Kong; however, the program registration was unsatisfactory. This could be attributed to the students' perceived future aviation career prospects and readiness of emergent remote teaching during the pandemic. In the program, we designed an alternative blended learning approach to attract students to sustain their aviation learning. First, we transformed the activities from face-to-face (F2F) to online settings using digital technologies including flight simulation and virtual visits in a web-conferencing environment. Second, we extended the reach of the event and attracted a larger audience in the neighbouring regions in Mainland China. It turned out that we could successfully recruit 108 students from 20 cities. In the end, students' interviews and motivational surveys indicated that this online learning experience could effectively enhance students' knowledge and motivational gain. Since the government has relaxed the policy of homeschooling, we organised two F2F meetings for students in Hong Kong to connect them together. This blended mode of teaching favoured the students in Hong Kong who showed a greater motivation than those in Mainland China. Furthermore, follow-up interviews for teachers revealed how they invest in new technological equipment and knowledge to support the radical changes. Overall, the virtual event eliminates geographical barriers which successfully motivate a larger audience and gain some online collaboration between universities. This article offered useful evidence for engineering educators to reflect on online informal learning, lab settings and academic exchanges, and motivate more students to revitalise aviation education and industry. Practitioner notes What is already known about this topic Emergency remote teaching (ERT) caused a temporary shift of instructional delivery to an alternate online mode due to crisis circumstances. After months, educators gained rich online teaching experience and resources, and developed strategies to digitally transform teaching online. During the COVID-19 pandemic, many aviation educators were facing various teaching challenges due to the industry downturn and motivation problems. Although prior research had explored the potential of hands-on activities such as flight simulation and online learning in university settings, few studies have examined students' motivations for online aviation learning, few studies discussed how these technologies are digitally transformed to a blended learning environment. What this paper adds The pandemic drastically affected students' learning in almost every discipline, but in seriously affected industries such as aviation and tourism, extra efforts are needed to investigate how educators support students to sustain their learning and recover the related industries. Motivation questionnaires and interviews were conducted to paint an initial picture of an online aviation education program across university students from Hong Kong and Mainland China. Implications for practice and/or policy This study shifted to examine the implications of the pandemic-imposed online teaching strategies including flight simulation and virtual tours which could improve future university education after the pandemic. This study showed the need of face-to-face blended learning mode to address university students' learning needs to connect physically with professionals and classmates. This study understood how educators motivate university students in urban cities from Hong Kong and Mainland China to their online teaching in the aviation discipline.

Noetel, M., Griffith, S., Delaney, O., Harris, N. R., Sanders, T., Parker, P., … Lonsdale, C. (2022). **Multimedia Design for Learning: An Overview of Reviews With Meta-Meta-**

Analysis. *Review of Educational Research*, 92(3), 413-454. https://doi.org/10.3102/00346543211052329

Multimedia is ubiquitous in 21st-century education. Cognitive load theory and the cognitive theory of multimedia learning both postulate that the quality of multimedia design heavily influences learning. We sought to identify how to best design multimedia and review how well those learning theories held up to meta-analyses. We conducted an overview of systematic reviews that tested the effects of multimedia design on learning or cognitive load. We found 29 reviews including 1,189 studies and 78,177 participants. We found 11 design principles that demonstrated significant, positive, meta-analytic effects on learning and five that significantly improved management of cognitive load. The largest benefits were for captioning second-language videos, temporal/spatial contiguity, and signaling. We also found robust evidence for modality, animation, coherence/removing seductive details, anthropomorphics, segmentation, personalization, pedagogical agents, and verbal redundancy effects. Good design was more important for more complex materials, and in system-paced environments (e.g., lectures) than self-paced ones (e.g., websites). Results supported many tenets of both theories. We highlight a range of evidence-based strategies that could be implemented by educators.

OCDE. (2022). ***Comment rendre l'accès des élèves à l'apprentissage numérique plus équitable ?*** (L'enseignement à la loupe N° 43). https://doi.org/10.1787/fdf2470c-fr

OCDE : Organisation de coopération et de développement économiques. (2020). ***Making the most of technology for learning and training in Latin America***. Consulté à l'adresse https://www.oecd-ilibrary.org/education/making-the-most-of-technology-for-learning-and-training-in-latin-america_ce2b1a62-en

La numérisation transforme le monde du travail et les sociétés, et crée des possibilités d'apprendre et de développer des compétences selon de nouveaux modes, moments et lieux. Cet ouvrage montre comment les pays d'Amérique latine peuvent exploiter le potentiel des nouvelles technologies pour le développement des compétences dans les écoles et à tous les stades de la vie. Il identifie les obstacles à l'accès aux infrastructures TIC et les limites de la connectivité en Amérique latine, et fournit des recommandations sur la manière de les surmonter pour que tous les étudiants et citoyens puissent bénéficier des nouvelles technologies pour l'apprentissage.

O'Dea, X. (Christine), & Stern, J. (2022). **Virtually the same?: Online higher education in the post Covid-19 era**. *British Journal of Educational Technology*, *53*(3), 437-442. https://doi.org/10.1111/bjet.13211

Okoye, K., Arrona-Palacios, A., Camacho-Zuñiga, C., Achem, J. A. G., Escamilla, J., & Hosseini, S. (2022). **Towards teaching analytics: a contextual model for analysis of students' evaluation of teaching through text mining and machine learning classification**. *Education and Information Technologies*, *27*(3), 3891-3933. https://doi.org/10.1007/s10639-021-10751-5

Recent trends in educational technology have led to emergence of methods such as teaching analytics (TA) in understanding and management of the teaching–learning processes. Didactically, teaching analytics is one of the promising and emerging methods within the Education domain that have proved to be useful, towards scholastic ways to make use of substantial pieces of evidence drawn from educational data to improve the teaching–learning processes and quality of performance. For this purpose,

this study proposed an educational process and data mining plus machine learning (EPDM + ML) model applied to contextually analyze the teachers' performances and recommendations based on data derived from students' evaluation of teaching (SET). The EPDM + ML model was designed and implemented based on amalgamation of the Text mining and Machine learning technologies that builds on the descriptive decision theory, which studies the rationality behind decisions the learners are disposed to make based on the textual data quantification and statistical analysis. To this effect, the study determines pedagogical factors that influences the students' recommendations for their teachers, what role the sentiment and emotions expressed by the students in the SET play in the way they evaluate the teachers by taking into account the gender of the teachers. This includes how to automatically predict what a student's recommendation for the teachers may be based on information about the students' gender, average sentiment, and emotional valence they have shown in the SET. Practically, we applied the Text mining technique to extract the different sentiments and emotions (intensities of the comments) expressed by the students in the SET, and then utilized the quantified data (average sentiment and emotional valence) to conduct an analysis of covariance and Kruskal Wallis Test to determine the influential factors, as well as, how the students' recommendation for the teachers differ by considering the gender constructs, respectively. While a large proportion of the comments that we analyzed (n = 85,378) was classified to be neutral and predominantly interpreted to be positive in nature considering the sentiments (76.4%), and emotional valence (88.2%) expressed by the students. The results of our analysis shows that for the students' comments which contain some kind of positive or negative sentiment (23.6%) and emotional valence (11.8%); that females students recommended the teachers taking into account the sentiments (p = .000). While the males appear to be slightly borderline in terms of emotions (p = .056) and sentiment (p = .077). Also, the EPDM + ML model showed to be a good predictor and efficient method in determining what the students' recommendation scores for the teachers would be, going by the high and acceptable values of the precision (1.00), recall (1.00), specificity (1.00), accuracy (1.00), F1-score (1.00) and zero error-rate (0.00) which we validated using the k-fold cross-validation method, with 63.6% of optimal k-values observed. In theory, we note that not only does the proposed method (EPDM + ML) proves to be useful towards effective analysis of SET and its implications within the educational domain. But can be utilized to determine prominent factors that influences the students' evaluation and recommendation of the teachers, as well as helps provide solutions to the ever-increasingly need to advance and support the teaching–learning processes and/or students' learning experiences in a rapidly changing educational environment or ecosystem.

Özçakır, B., & Çakıroğlu, E. (2022). **Fostering spatial abilities of middle school students through augmented reality: Spatial strategies**. *Education and Information Technologies*, *27*(3), 2977-3010. https://doi.org/10.1007/s10639-021-10729-3
In school mathematics, representations of solid figures and three-dimensional geometric objects generally rely on two-dimensional projective representation modes on students' textbooks. In learning environments, these representation modes create a kind of cognitive filter, which prevents students with low spatial ability to comprehend and envision three-dimensional objects. Studies showed that spatial ability could be improved by means of suitable concrete models and computer created models in learning settings. Thus, fostering students' spatial ability helps to overcome and eliminate negative effects of this cognitive filter. However, some studies suggest that this cognitive filter may

even occur while working with computer created objects since computers generally rely on two-dimensional digitizer panels on screen technology. On the other hand, augmented reality interface allows a new way of learning environment which could help to overcome this cognitive filter by providing unique representation modes and opportunities to foster students' spatial ability. In this study, an intervention with an augmented reality interface to foster students' spatial understandings were reported in terms students' invented strategies for spatial concepts. In this sense, eight seventh graders worked on spatial tasks with an augmented reality interface in learning settings. Findings revealed that while proceeding on spatial tasks, students could invent, use and modify spatial strategies. Moreover, students' spatial understanding was fostered as they progressed on tasks with the designed augmented reality interface. This study is a part of an educational design research which was focused on design and development a proper augmented reality tool to foster spatial ability of students. As a result of this study, with the help of combination of augmented reality interface and spatial tasks, teachers will be provided with a new tool to visualize mathematical concepts and students could be supported with this new tool as a new learning material.

Pascau, J. (2021). ***Digital representations in the context of media and information literacy (MIL) among teachers*** (Phdthesis, Université Michel de Montaigne - Bordeaux III). Consulté à l'adresse https://theses.hal.science/tel-03629392
L'Éducation nationale en 2015 prend le virage du numérique en instaurant des programmes qui ancrent les compétences numériques et la culture de l'information dans le dispositif de l'éducation aux médias et à l'information (EMI). Cette recherche propose une analyse du cadre normatif de l'EMI et de sa perception par les enseignants du premier degré, saisie à travers leurs représentations, leurs usages, leurs pratiques et leur positionnement déclarés. Dans quelle mesure la conception et la définition de l'information dans l'éducation aux médias et à l'information changent-elles avec l'inclusion du numérique ? Comment les enseignants conçoivent-ils leur rôle dans la transmission d'une culture numérique aux élèves ? L'analyse de l'ensemble des discours aboutit à une définition précise de ce qu'est la culture numérique dans le cadre de l'EMI à l'école primaire.

Pearson, H. A., & Dubé, A. K. (2022). **3D printing as an educational technology: theoretical perspectives, learning outcomes, and recommendations for practice**. *Education and Information Technologies*, *27*(3), 3037-3064. https://doi.org/10.1007/s10639-021-10733-7
3D printing is an emerging educational technology that is said to prepare learners for a more technologically designed world. In this review, 3D printing studies are analyzed to identify the dominant theoretical approaches and learning outcomes associated with 3D printing in education. Five theories are identified, including situated learning (Lave & Wenger, 1991), experiential learning (Kolb & Kolb Academy of Management Learning & Education, 4, 193- 212, Kolb & Kolb, 2005), and critical making (Ratto in The Information Society, 27, 252-260, 2011), but concepts from constructionism (Papert & Harel Constructionism, 36, 1-11, 1991) and self-directed learning (Garrison Adult Education Quarterly, 48, 18-33, 1997; Knowles, 1975) are common amongst all approaches. Learning outcomes attributed to 3D printing include critical thinking, creativity, design thinking, and collaboration (Trust et al., 2018; Trust & Maloy Computers in the Schools: Interdisciplinary Journal of Practice, Theory, and Applied Research, 34, 253-266, 2017), with proponents arguing that the domain general outcomes go beyond knowing simply how to use a 3D printer. Given the identified, theoretical approaches, outcomes, and

common barriers to use, recommendations are made for how educators approach and implement 3D printing in the classroom.

Prasad, A., Chaudhary, K., & Sharma, B. (2022). **Programming skills: Visualization, interaction, home language and problem solving**. *Education and Information Technologies*, *27*(3), 3197-3223. https://doi.org/10.1007/s10639-021-10692-z
As a novice, learning computer programming is challenging. It requires learners to be inquisitive and acquire skills to analyze problems to get to solutions critically. Unfortunately, students drop out of programming courses because students think that programming is difficult to understand. The student's understanding of the problem definition is one of the drawbacks that hinder them from accepting to solve problems. In addition to that, students also find the terminologies difficult to grasp. This study aims to determine whether visualization, interactivity, affective teaching, and the use of home language improve students' understanding. In this study, an application is designed to allow students to learn coding and their pre and the post-exam result was analyzed. The application incorporates animation, interaction, and examples in the home language. The result was tested at a 95% Confidence Level. It was found that the use of visualization and home language in teaching improves students' results and enhances their critical thinking and problem-solving skills.

Rani, N., & Chu, S. L. (2022). **Wearables can help me learn: A survey of user perception of wearable technologies for learning in everyday life**. *Education and Information Technologies*, *27*(3), 3381-3401. https://doi.org/10.1007/s10639-021-10726-6
Wearable devices are a popular class of portable ubiquitous technology. These devices are available in a variety of forms, ranging from smart glasses to smart rings. The fact that smart wearable devices are attached to the body makes them particularly suitable to be integrated into people's daily lives. Thus, we propose that wearables can be particularly useful to help people make sense of different kinds of information and situations in the course of their everyday activities, in other words, to help support learning in everyday life. Further, different forms of wearables have different affordances leading to varying perceptions and preferences, depending on the purpose and context of use. While there is research on wearable use in the learning context, it is mostly limited to specific settings and usually only explores wearable use for a specific task. This paper presents an online survey with 70 participants conducted to understand users' preferences and perceptions of how wearables may be used to support learning in their everyday life. Multiple ways of use of wearable for learning were proposed. Asking for information was the most common learning-oriented use. The smartwatch/wristband, followed by the smart glasses, was the most preferred wearable form factor to support learning. Our survey results also showed that the choice of wearable type to use for learning is associated with prior wearable experience and that perceived social influence of wearables decreases significantly with gain in the experience with a fitness tracker. Overall, our study indicates that wearable devices have untapped potential to be used for learning in daily life and different form factors are perceived to afford different functions and used for different purposes.

Rusli, R., & Nurdin, N. (2022). **Understanding Indonesia millennia Ulama online knowledge acquisition and use in daily fatwa making habits**. *Education and Information Technologies*, *27*(3), 4117-4140. https://doi.org/10.1007/s10639-021-10779-7

Social media have influenced millennials of ulama or Muslim scholars in fatwa production. They access and use online knowledge to make daily fatwa according to community requests. However, limited is known about how the millennial ulama acquire and use the knowledge. We carried out an interpretive case study using a theoretical lens from knowledge creation and use in an information technology context and Islamic sociology. Data were gathered through in-depth interviews involving 36 millennial ulama as informants. The interviews were used to understand the respondents' perspectives on knowledge acquisition and use in their daily fatwa making within a provincial level of Indonesia Ulama Council (MUI). The findings show that Indonesia's millennial ulama have intensively acquired and trusted online Islamic knowledge. Also, they construct and use knowledge from online social network interaction in daily fatwa making. This study has implications for the simplicity of Islamic knowledge acquisition and fatwa making. Online knowledge acquisition might have reduced the roles of traditional Islamic education institutions and muftis. Therefore, further research should examine how new knowledge sources have caused this reduction.

Salas-Pilco, S. Z., Yang, Y., & Zhang, Z. (2022). **Student engagement in online learning in Latin American higher education during the COVID-19 pandemic: A systematic review**. *British Journal of Educational Technology*, *53*(3), 593-619. https://doi.org/10.1111/bjet.13190
The COVID-19 pandemic has forced higher education institutions to implement online learning activities based on virtual platforms, allowing little time to prepare and train faculty members to familiarize students with digital technologies. While previous studies have looked at how students engaged with digital technologies in their learning activities, the characteristics of the student engagement in online learning remain underexplored. Therefore, a systematic review of the literature on student engagement in online learning in higher education is much needed. This article synthesizes the findings on student engagement in Latin American higher education institutions during the COVID-19 pandemic. After reviewing the studies on online learning activities, this review examines student engagement from behavioural, cognitive and affective dimensions and identifies the main characteristics of student engagement from these tripartite dimensions. The implications of the findings for online learning in Latin American higher education are as follows: (a) to transform higher education, (b) to provide adequate professional training, (c) to improve Internet connectivity, (d) to ensure quality online learning in higher education and (e) to provide emotional support. These findings will provide valuable guidance for teachers, educational authorities and policy makers and help them make informed decisions to use effective strategies to support online learning in higher education institutions. Practitioner notes What is already known about this topic The COVID-19 pandemic has disrupted the normal operation of higher education institutions across Latin America, impelling a shift from face-to-face instruction to online teaching and learning. Research on online learning in Latin American higher education has been conducted, but the findings and their implications are yet to be widely disseminated among researchers, practitioners and decision-makers. What this paper adds Providing a systematic review of research on student engagement in online learning in Latin American higher education institutions. Analyzing the construct of student engagement in online learning from tripartite dimensions—behavioral, cognitive and affective—in the Latin American higher education context. Identifying the characteristics associated to each dimension of student engagement in online learning. Implications for practice and/or policy The need to transform the higher education

system in Latin America and beyond, at two levels: to improve Internet connectivity at the technological level and to ensure the quality of online education at the pedagogical level. The urgency to offer an adequate professional training regarding the use of new technologies in online learning environments. The significance for higher education institutions to provide emotional support for students during the COVID-10 pandemic.

Seckel, M. J., Vásquez, C., Samuel, M., & Breda, A. (2022). **Errors of programming and ownership of the robot concept made by trainee kindergarten teachers during an induction training**. *Education and Information Technologies*, *27*(3), 2955-2975. https://doi.org/10.1007/s10639-021-10708-8
Computational thinking in the educational environment has awaken a rising interest, having been included as part of the curricula from the very beginnings of education. Programmable robots have become a valuable positive resource in order to succeed in the development of computational thinking, demanding proper training from kindergarten teachers and trainees in order to be able to teach robotic programming. This article has the purpose to 1) identify the frequent errors made by trainee kindergarten teachers when solving a series of robotic problems in a computational thinking module, which develops in the course of Didactics of Mathematics and 2) determine the level of comprehension of the robot concept acquired by the trainees when solving robotics problems. The research developed in a qualitative methodology manner; the data used for this article were collected through the solving of five robotic problems and an open-ended question that had to be answered by each of the 25 participants individually. The results showed that, in general, the most frequent error appeared in problems in which movements were set in a Euclidean space of two dimensions. That is to say, the problems' solving required a selection of different commands: turn, moving forward and/or backwards. Moreover, more than half of the participants who answered the open-ended question succeeded in owning the robot concept once they had solved the problems.

Sendag, S., Toker, S., Uredi, L., & Islim, O. F. (2022). **Predictors of e-democracy applicability in Turkish K-12 schools**. *Education and Information Technologies*, *27*(3), 3321-3340. https://doi.org/10.1007/s10639-021-10748-0
Today, the COVID-19 pandemic has paved the way for a more democratic climate in K-12 schools. Administrators and teachers have had to seek out new ways through which to interact. This raises two questions; "What about the quality of interaction and participation in decision-making?" and "Which factors affect the level of participation in decision-making?" The aim of the current research is to determine the factors that predict the applicability level of e-democracy (i.e., "reporting and declaring opinions" and "decision-making") in K-12 schools. An associational research design was used in order to attain the main goal of the study, with Discriminant Function Analysis (DFA) technique used to analyze the factors predicting the applicability level of e-democracy. Data were collected from a total of 765 inservice K-12 teachers through a questionnaire developed by the researchers. DFA results showed "motivation to participate," "the level of participatory democracy in the country," and higher levels of the "use of Twitter" as the significant determinants of different levels of e-democracy application. Moreover, the results also indicated that those participants with the belief of e-democracy's applicability at the decision-making level found the "motivation level of stakeholders" to be the most critical. Their level of Twitter use was higher. They also believed that the level of participatory democracy in the country was at a higher level. Another result of the

DFA pointed to "security and ethical issues," and lower levels of the "use of Twitter" as factors differentiating the group believing that e-democracy can be applicable with reporting and the declaration of opinions to administrators from the other groups. The discussions highlighted the critical role of participation level in e-democracy within K-12 schools.

Senkbeil, M. (2022). **ICT-related variables as predictors of ICT literacy beyond intelligence and prior achievement**. *Education and Information Technologies*, *27*(3), 3595-3622. https://doi.org/10.1007/s10639-021-10759-x
This study examined the incremental validity of different information and communication technologies (ICT)-related person characteristics over and above intelligence and and prior achievement when predicting ICT literacy across a period of three years. Relative weights analyses were performed to determine the relative contribution of each predictor towards explaining variance in ICT literacy. We used data from German NEPS that tracks representative samples of German students across their school careers. The sample consisted of 14,436 fifteen-year-old German students who provided self-reports on several ICT-related variables: self-confidence, usage motives, breadth of usage, access, experience, usage at home and at school. Data were analyzed cross-sectionally and longitudinally with structural equation models and path analyses, respectively. Cross-sectionally, all ICT-related variables incrementally predicted ICT literacy after controlling for intelligenc (explained variance: 0.4%–14.1%). Longitudinally, ICT self-confidence, ICT-related usage motives, breadth of ICT usage, ICT usage at school, and ICT experience incrementally predict ICT literacy after controlling for intelligence and prior achievement.three years later (explained variance: 0.3%–8.1%). Relative weights providing estimates of relative importance of each predictor showed that intelligence (cross-sectional) and prior achievement and intelligence, respectively (longitudinal) explained the largest portion of variance in ICT literacy, followed by ICT self-confidence, and ICT usage motives as the strongest ICT-related variables. These results emphasize that ICT-related motivational constructs play an important role in the development of ICT literacy.

Shambour, M. K. Y., & Abu-Hashem, M. A. (2022). **Analysing lecturers' perceptions on traditional vs. distance learning: A conceptual study of emergency transferring to distance learning during COVID-19 pandemic**. *Education and Information Technologies*, *27*(3), 3225-3245. https://doi.org/10.1007/s10639-021-10719-5
In recent years, and also due to the COVID-19 pandemic, education institutions worldwide have changed their education paradigm from a traditional to an online system. These institutions have rapidly accomplished their educational programs and activities by supporting various web applications, allowing the completion of the education process remotely. This motivated us to investigate the general perceptions of the faculty members who are teaching different courses for undergraduate students using the distance education system. The proposed technique is based on the use of advanced analysis methods to test the hypothesis of instructors' perceptions of online teaching effectiveness, compared with traditional teaching, will not be affected by the following eight factors, including gender, academic major, age, academic degree, country of teaching, teaching experience in traditional classes, teaching experience in virtual classes (VCs), and whether or not the department/faculty provided e-learning courses before the COVID-19 pandemic. A total of 187 lecturers from 71 departments in 24 educational institutions located in 11 countries participated in this research. Results

indicate that the perceptions of instructors regarding the online teaching system generally do not change based on the studied factors. Furthermore, the quantitative analyses illustrate that no significant differences exist in all dimension scales in terms of gender, major specification, age, country of teaching, and virtual experience. Significant differences are found in the dimension scale of distance education effectiveness in terms of academic degree and the educator status in terms of supporting VCs and traditional experience dimension scales. Additionally, the study provides various recommendations, including that the departments should encourage instructors to positively adapt with online teaching by developing the required skills and knowledge. Moreover, departments and institutions should support the teaching staff with specialized education tools. In addition, instructors should strive to decrease the communication and interaction gap between distance education and traditional in-class teaching.

Shurygin, V., Ryskaliyeva, R., Dolzhich, E., Dmitrichenkova, S., & Ilyin, A. (2022). **Transformation of teacher training in a rapidly evolving digital environment**. *Education and Information Technologies*, *27*(3), 3361-3380. https://doi.org/10.1007/s10639-021-10749-z
Today the increasing level of technology in education requires corresponding skills from the teachers. However, they often do not have them. The purpose of the study is to explore the problem of digital competence of rising teachers and provide recommendations for its improvement. The study generally describes the widespread use of digital tools in the classroom, namely the current situation, barriers and prospects associated with it. The research was conducted using a digital questionnaire that was sent to respondents by e-mail. The survey involved 117 people: 85 university students and teachers. The results showed that today there is every reason to actively introduce digital technologies in educational institutions. Thus, 100% of the respondents have and can use various devices (smartphones, laptops, tablets, etc.); 74% of participants consider it appropriate to introduce digital tools into the educational process. However, only 31% of respondents believe that they have been properly trained in their educational institutions, which would allow them to apply the above technologies in the classroom. The research results can be of interest to those who develop plans for the digitalization of educational institutions, teachers, creators of digital tools and learning programs. This article describes both current problems and possible solutions.

Tarchi, C., Brante, E. W., Jokar, M., & Manzari, E. (2022). **Pre-service teachers' conceptions of online learning in emergency distance education: How is it defined and what self-regulated learning skills are associated with it?** *Teaching and Teacher Education*, *113*, 103669. https://doi.org/10.1016/j.tate.2022.103669
We investigated pre-service teachers' conceptions of online learning during the transition from face-to-face to emergency distance education in Italy, Sweden and Iran. Conceptions of online learning were conceptualised based on how pre-service teachers defined online learning, the self-regulated learning (SRL) skills associated with it and how they compared it to face-to-face education. The participants were asked about the characteristics of their online courses, yielding information about the online learning conditions and experiences. Conceptions of online learning were found to be underdeveloped. Pre-service teachers should develop a flexible approach to SRL that takes into consideration the demands of the specific educational setting.

Tian, J., Koh, J. H. L., Ren, C., & Wang, Y. (2022). **Understanding higher education students' developing perceptions of geocapabilities through the creation of story maps with geographical information systems**. *British Journal of Educational Technology*, *53*(3), 687-705. https://doi.org/10.1111/bjet.13176

The technical skills of using geographical information systems (GIS) are often taught in different higher education disciplines apart from geocapabilities or geographic disciplinary expertise. Theorised to include capabilities such as spatial thinking, geographical imagination and structured ways to explore places, the concept of geocapabilities has been developed from educator perspectives but student perspectives have yet to be empirically examined. Drawing upon recommendations that students can better acquire geocapabilities through research and authentic problem-solving, this study examines how 27 higher education students' perceptions of geocapabilities evolved as they learnt technical skills of web mapping through investigating real-world issues with ArcGIS StoryMaps. Content analyses of students' pre- and post-class reflections suggest that students' perceptions aligned with existing theorisations of geocapabilties in areas such as spatial thinking and geographical imagination. However, students also perceived that geographers need curiosity, interest, enthusiasm, and love for geography, and generic skills for working and living in the world that are not geography-related. Through making story maps with GIS, students' perceptions of geocapabilities shifted significantly in the areas of geographical practice and application, geographical imagination and interdisciplinarity. The implications of these findings for higher education teaching of GIS and how it informs the theorisation of geocapabilities are discussed. Practitioner notes What is already known about this topic Walkington et al. conceptualized geocapabilities from educator perspectives, characterizing it by geographical imagination, ethical subject-hood, integrative thinking about society and environment, spatial thinking, and structured exploration of place. This has not been investigated empirically from students' perspectives. There is preponderant evidence that the use of geographical information systems (GIS) such as ArcGIS Online and other geospatial technologies can improve students' spatial thinking skills and subject knowledge but how it may develop other geocapabilities have not been examined. What this paper adds There were shifts in undergraduates' conceptions of geocapabilities as they learnt ArcGIS StoryMaps by researching and producing story maps about real-world issues through flipped classrooms. Like Walkington et al., students conceived geocapabilities to include spatial thinking and geographical imagination but they perceived the other geocapabilities as interdisciplinarity and geographical practice and application. Students also perceived geographers as needing curiosity, interest, enthusiasm and love for geography, and generic capabilities to manoeuvre different tools and skills for working, ways of thinking and ways of working. Implications for practice and/or policy Students' and educators' view could be synthesized and better defined to create a more comprehensive and inclusive framework of geocapabilties. Students can better develop insights about different geocapabilities when they learn GIS technologies through researching real-world issues. GIS teachers can use flipped classrooms to synthesize teaching and learning about GIS and teaching and learning with GIS.

Tsoni, R., Panagiotakopoulos, C. T., & Verykios, V. S. (2022). **Revealing latent traits in the social behavior of distance learning students**. *Education and Information Technologies*, *27*(3), 3529-3565. https://doi.org/10.1007/s10639-021-10742-6

This paper proposes a multilayered methodology for analyzing distance learning students' data to gain insight into the learning progress of the student subjects both in an individual basis and as members of a learning community during the course taking process. The communication aspect is of high importance in educational research. Additionally, it is difficult to assess as it involves multiple relationships and different levels of interaction. Social network analysis (SNA) allows the visualization of this complexity and provides quantified measures for evaluation. Thus, initially, SNA techniques were applied to create one-mode, undirected networks and capture important metrics originating from students' interactions in the fora of the courses offered in the context of distance learning programs. Principal component analysis and clustering were used next to reveal latent students' traits and common patterns in their social interactions with other students and their learning behavior. We selected two different courses to test this methodology and to highlight convergent and divergent features between them. Three major factors that explain over 70% of the variance were identified and four groups of students were found, characterized by common elements in students' learning profile. The results highlight the importance of academic performance, social behavior and online participation as the main criteria for clustering that could be helpful for tutors in distance learning to closely monitor the learning process and promptly interevent when needed.

UNESCO. (2022). *L'emploi de la technologie pour l'apprentissage multilingue : défis et opportunités: rapport du webinaire à l'occasion de la celebration de la Journée internationale de la langue maternelle 2022* (p. 7). Consulté à l'adresse UNESCO website: https://unesdoc.unesco.org/ark:/48223/pf0000381185_fre?30=null&queryId=N-dadb7767-adac-4188-8a5a-49620aaf7837

Vuorikari, R., Kluzer, S., & Punie, Y. (2022). *DigComp 2.2: The digital competence framework for citizens - with new examples of knowledge, skills and attitudes*. Consulté à l'adresse https://publications.jrc.ec.europa.eu/repository/bitstream/JRC128415/JRC128415_01.pdf
Le cadre européen des compétences numériques pour les citoyens, également connu sous le nom de DigComp, propose une langue commune pour identifier et décrire les domaines clés en matière de compétences numériques. Cet outil doit améliorer les compétences numériques des citoyens, aider les décideurs à formuler des politiques qui soutiennent l'acquisition des compétences numériques et permettre de préparer des projets éducatifs et de formation visant à faire progresser les compétences numériques de certains publics. Ce rapport présente la version 2.2 du cadre européen des compétences numériques pour les citoyens. La première partie fournit plus de 250 nouveaux exemples de connaissances, compétences et comportements qui aident les citoyens à prendre en main les technologies numériques – par exemple des systèmes gérés grâce à l'intelligence artificielle. La seconde partie donne un aperçu des supports de référence existants pour DigComp en vue d'étayer des publications et des références.

Wagner, I., Loesche, P., & Bißantz, S. (2022). **Low-stakes performance testing in Germany by the VERA assessment: analysis of the mode effects between computer-based testing and paper-pencil testing**. *European Journal of Psychology of Education*, *37*(2), 531-549. https://doi.org/10.1007/s10212-021-00532-6

The German school system employs centrally organized performance assessments (some of which are called "VERA") as a way of promoting lesson development. In recent years, several German federal states introduced a computer-based performance testing system which will replace the paper-pencil testing system in the future. Scores from computer-based testing are required to be equivalent to paper-pencil testing scores so that the new testing medium does not lead to disadvantages for students. Therefore, the current study aimed at investigating the size of the mode effect and the moderating impact of students' gender, academic achievement and mainly spoken language in everyday life. In addition, the variance of the mode effect across tasks was investigated. The study was conducted in four German federal states in 2019 using a field experimental design. The test scores of 5140 eighth-graders from 165 schools in the subject German were analysed. The results of multi-level modelling revealed that students' test scores in the computerized version of the VERA test were significantly lower than in the paper-pencil version. Students with a lower academic achievement were more disadvantaged by the VERA computerized test. The results were inconsistent regarding the interactions between testing mode and students' gender and mainly spoken language in everyday life. The variance of the mode effect across tasks was high. Research into different subjects and in other federal states and countries under different testing conditions might yield further evidence about the generalizability of these results.

Xiao, J., Lin, T.-H., & Sun-Lin, H.-Z. (2022). **The role of different levels of multichannel multimodal learning experience delivery in student engagement**. *Education and Information Technologies*, *27*(3), 2939-2954. https://doi.org/10.1007/s10639-021-10731-9
This study aimed to explore the pedagogical dimension of multichannel multimodal learning (MML) and its association with student engagement. Forty-three students from Shanghai Open University participated in the study and their behavioural, emotional, cognitive learning engagement were investigated. Although teaching in the same space, the three instructors developed different MML-integrated pedagogies and delivered different levels of MML experience (i.e., different numbers of modes and channels used and incorporated). A one-factor-three-level ANOVA with a Tukey HSD test was conducted to examine whether students' behavioural, emotional, or cognitive learning engagement on three different levels of MML experience were different. The results showed behavioural and emotional engagement was significantly positively correlated (p = .020 and .026 respectively) to different MML-integrated pedagogies, and students' perception of levels of MML experience was significantly correlated (p = .048) to the levels the present study identified. The present study pointed out the importance of instructors' integrating pedagogies into MML environments. More modes and channels used and incorporated by instructors can better teaching quality by increasing learners' behavioural and emotional engagement.

Xu, W., & Ouyang, F. (2022). **A systematic review of AI role in the educational system based on a proposed conceptual framework**. *Education and Information Technologies*, *27*(3), 4195-4223. https://doi.org/10.1007/s10639-021-10774-y
Artificial Intelligence in Education (AIEd) is an emerging interdisciplinary field that applies artificial intelligence technologies to transform instructional design and student learning. However, most research has investigated AIEd from the technological perspective, which cannot achieve a deep understand of the complex roles of AI in instructional and learning processes and its relationship with other educational elements. To fill this gap, this review research proposes a conceptual framework from complex adaptive systems

theory perspective, uses a systematic literature review approach to locate and summarize articles, and categorizes the roles of AI in the educational system. The review results indicate that when AI is added into an educational system, its roles can be characterized into three categories: AI as a new subject, AI as direct mediator, and AI as a supplementary assistant to influence the instructor-student, student-self, and student-student relationships. Reviewed articles under each category are examined to understand the influences of AI applications on instruction and learning. Based on the results, this systematic review research proposes practical, theoretical, and technological implications of AIEd development.

Yilmaz, M. B., Orhan, F., & Zeren, S. G. (2022). **Adolescent emotion scale for online lessons: A study from Turkey**. *Education and Information Technologies*, *27*(3), 3403-3420. https://doi.org/10.1007/s10639-021-10734-6
People's day-to-day routines have changed drastically since the outbreak of the COVID-19 pandemic. One of the changes to take place has been the transition to online learning due to the changing conditions in learning environments. One of the factors that guide students through learning environments is their emotions. The few existing scales that measure the emotions of adolescents in learning environments have been developed with consideration of face-to-face learning environments and their items do not adequately express the state of online environments. For this reason, this study aimed to develop a scale which reveals the emotions of adolescents that may affect their academic success with regard to this transition of learning environments as they attend online lessons. A total of 3,655 middle and high school students living in Istanbul, Turkey, participated in the study. The scoring system was designed with regard to the frequency with which each student reading an item experiences the relevant emotion for the item in the online learning environment. Exploratory and confirmatory factor analyses conducted show the scale to possess a four-dimensional structure. These dimensions are enjoyment-pride, boredom-hopelessness, loneliness and anxiety. For all dimensions of the scale, Cronbach alpha values range between .93 and .83. 'Positive and Negative Affects Schedule-Children' was used to confirm the scale's criterion-related validity, and correlations between dimensions were examined. After validity and reliability studies, the Adolescent Emotion Scale for Online Lessons was found to be sufficient. The scale can be used by experts and teachers who wish to determine adolescents' emotions during a period of online learning.

Zhan, Q., Chen, X., & Retnawati, E. (2022). **Exploring a construct model for university makerspaces beyond curriculum**. *Education and Information Technologies*, *27*(3), 3467-3493. https://doi.org/10.1007/s10639-021-10761-3
Makerspaces aim to revolutionize the current higher education by providing a means for students to be directly involved in many scientific projects and develop various kinds of skills. While researchers have made progress in understanding different makerspaces and the increase of making in education, the reality is that a specific makerspace may be rather different from many other contexts. As makerspace programs expand around universities in Tianjin, China, it needs a robust framework and a construct model to set the foundation for understanding key makerspace elements beyond curriculum, and to be used for research and verification of these experiences to advance work. Therefore, this paper provides the development and explanation of a construct model of influencing factors for makers in the universities applied beyond curriculum. Methods of questionnaire survey, descriptive statistics, multiple linear regression, and correlation

analysis were used to explore the influencing factors of makerspace. The results are as follows: the innovation awareness of the maker subject is positively correlated with teamwork; the innovation awareness and teamwork are positively related to the effect feedback of the makerspace; Activating interest in maker activities is positively related to deep research, putting into practice, and precise creation; deep research has a positive correlation with putting into practice, and putting into practice has a direct correlation with precision creation. In maker resources, Internet resources positively correlate with the sharing of university resources, and Internet resources and university resources positively correlate with enterprise resources. In this paper, a novel theoretical framework and a construct model of makerspaces beyond curriculum offered enables us to analyze future practices and the resulting development of future-making.

Zhang, L., Carter Jr., R. A., Qian, X., Yang, S., Rujimora, J., & Wen, S. (2022). **Academia's responses to crisis: A bibliometric analysis of literature on online learning in higher education during COVID-19**. *British Journal of Educational Technology*, *53*(3), 620-646. https://doi.org/10.1111/bjet.13191
This paper aimed to provide a holistic view of research that investigated online learning in higher education around the globe during COVID-19 utilizing a bibliometric analysis. The researchers used co-citation analysis and text mining afforded by VOSviewer to document and analyze research patterns and topics reported in peer-reviewed documents published between January 2020 and August 2021. Findings of this study indicated that scholars from 103 countries or regions from the Global North and Global South investigated a wide array of topics, such as use of various technologies and strategies, redesigned curriculum, student perceptions and psychological impacts of the pandemic-imposed online learning. Many researchers applied technology acceptance theories and structural equation modeling to investigate factors associated with adoption and impacts of the pandemic-imposed online learning. Of the large quantity of research, medical education and chemical education were the most investigated disciplines. Inquiry-based learning, discovery learning, hands-on learning and collaborative learning emerged as instructional approaches frequently discussed or utilized across the target studies. This paper discussed (a) ongoing and emerging challenges to online higher education, (b) placing innovative pedagogies at the forefront of online learning, and (c) rapid, but imbalanced distribution of evolving literature based on the findings. Practitioner notes What is already known about this topic Online learning had attracted growing traction as a flexible and affordable means to complement traditional higher education prior to COVID-19. Higher education institutions (HEIs), faculty and students around the globe have encountered various challenges and opportunities regarding online teaching and learning during COVID-19. What this paper adds A bird's-eye-view perspective of how HEIs around the globe responded to the pandemic-imposed online teaching and learning using the bibliometric methodology. Identifications of a large body of research (n = 1061 documents) conducted by scholars from 103 countries or regions that investigated the pandemic-imposed online higher education, indicating an unprecedented level of participation in this area. An analysis of distinct themes arising from research on the pandemic-imposed online learning, such as medical education and psychological impact, chemistry curriculum and laboratory-based instruction and technology acceptance model. Implications for practice and/or policy The large corpus of studies on online higher education from different aspects can provide cross-disciplinary information guiding future research and design of online learning. With technology often conceptualized as the solution to support online learning,

it is imperative to put innovative pedagogy at the forefront of the design of online teaching and learning.

Orientation scolaire et professionnelle

Bastedo, M. N., Bell, D., Howell, J. S., Hsu, J., Hurwitz, M., Perfetto, G., & Welch, M. (2022). **Admitting Students in Context: Field Experiments on Information Dashboards in College Admissions**. *The Journal of Higher Education*, 93(3), 327-374. https://doi.org/10.1080/00221546.2021.1971488
In this paper, we address whether the provision of contextual information about where students live and learn has the potential to expand postsecondary opportunities to students from disadvantaged neighborhoods and high schools. To examine this question, we describe the results of field experiments with admissions officers working in eight universities who re-read real applications from previous admissions cycles with a dashboard of contextual data about the applicant's neighborhood and high school. In this low-stakes context, admissions officers from institutions utilizing holistic admissions practices were more likely to recommend admitting low-SES applicants when provided with contextual data. The experiment also primed admissions readers to treat students from highly disadvantaged high school and neighborhood contexts more favorably relative to the results of the high-stakes official read, even when the dashboard was not shown to study participants. The results of this experiment suggest that contextualized data can improve equity in admissions, but fidelity to holistic admissions practices is crucial.

Caillot, M., Leguy, I., Rolland, D., & Thibau-Leveque, F. (2021). *Impact des modifications apportées aux modes d'accès à l'enseignement supérieur - accès aux grandes écoles inclus. Partie 2 : les recrutements post-bac par concours* (N° 2021-186; p. 45). Consulté à l'adresse IGÉSR website: https://www.education.gouv.fr/media/113778/download

Callender, C., & Melis, G. (2022). **The Privilege of Choice: How Prospective College Students' Financial Concerns Influence Their Choice of Higher Education Institution and Subject of Study in England**. *The Journal of Higher Education*, 93(3), 477-501. https://doi.org/10.1080/00221546.2021.1996169
A hallmark of English higher education (HE) over the last twenty years has been policies seeking to increase provider competition and student choice. Central to this has been student funding policy changes, leading to rising college costs. This article asks if prospective HE students' concerns about college costs and the financial strategies they anticipate using because of them, widen or limit their choice of HE institution and subject of study. It calls on the findings from a nationally representative survey of 1,374 English college applicants and uses latent class analysis to develop a typology of students' planned financial coping mechanisms: Minimizing costs; Managing costs and maximizing returns; and No financial concerns; which prove to be socially stratified. Minimizing costs students are the most disadvantaged and adopt mechanisms which constrain their choices of where and what to study, unlike students in the other groups. Thus, government policies aimed at improving student choice potentially have the opposite effect for the most disadvantaged, perpetuating existing inequalities in access to, and the experience of, HE.

Hanauer, D. I., Graham, M. J., Jacobs-Sera, D., Garlena, R. A., Russell, D. A., Sivanathan, V., … Hatfull, G. F. (2022). **Broadening Access to STEM through the Community College: Investigating the Role of Course-Based Research Experiences (CREs)**. *CBE—Life Sciences Education*, *21*(2), ar38. https://doi.org/10.1187/cbe.21-08-0203

Broadening access to science, technology, engineering, and mathematics (STEM) professions through the provision of early-career research experiences for a wide range of demographic groups is important for the diversification of the STEM workforce. The size and diversity of the community college system make it a prime educational site for achieving this aim. However, some evidence shows that women and Black, Latinx, and Native American student groups have been hindered in STEM at the community college level. One option for enhancing persistence in STEM is to incorporate the course-based research experiences (CREs) into the curriculum as a replacement for the prevalent traditional laboratory. This can be achieved through the integration of community colleges within extant, multi-institutional CREs such as the SEA-PHAGES program. Using a propensity score–matching technique, students in a CRE and traditional laboratory were compared on a range of psychosocial variables (project ownership, self-efficacy, science identity, scientific community values, and networking). Results revealed higher ratings for women and persons excluded because of their ethnicity or race (PEERs) in the SEA-PHAGES program on important predictors of persistence such as project ownership and science identity. This suggests that the usage of CREs at community colleges could have positive effects in addressing the gender gap for women and enhance inclusiveness for PEER students in STEM.

Jabbar, H., Schudde, L., Garza, M., & McKinnon-Crowley, S. (2022). **Bridges or Barriers? How Interactions between Individuals and Institutions Condition Community College Transfer**. *The Journal of Higher Education*, *93*(3), 375-398. https://doi.org/10.1080/00221546.2021.1953339

Institutional practices and conditions at community colleges can improve rates of transfer, as can access to transfer student capital. However, we know little about how institutions attempt to build students' transfer capital, or about students' experiences within community colleges as they accumulate transfer capital. In this paper, we examine how students' institutional experiences, particularly their engagement with student supports at community colleges and transfer destinations, influence their understanding of, and ability to navigate, the transfer process. We view the accumulation of transfer student capital as an interactionist model between the students and their institution, where students' transfer knowledge and success is conditioned by an interaction between their background and institutional conditions. We draw on longitudinal qualitative interview data with transfer-intending community college students over the course of 3 years to understand how students access, receive, and accumulate transfer capital as they work toward their educational goals. By leveraging student experiences, our study can inform community colleges and transfer destinations about practices and policies interpreted as most effective from the perspective of students. Our work also connects to broader conversations about how institutions reproduce, ameliorate, or exacerbate inequalities based on student background.

Jacques, M.-H. (2022). **Entre reconnaissance et qualification : regards sur la variabilité des destins d'apprentis en CAP**. *Formation emploi*, (157), 123-144. https://doi.org/10.4000/formationemploi.10528

Pendant quatre ans après la classe de 3è, une enquête longitudinale par entretiens récurrents a suivi des collégiens aspirant à préparer un certificat d'aptitude professionnelle (CAP) en apprentissage. Cet article s'appuie sur les portraits au long cours de onze d'entre eux, ayant obtenu leur certification par cette voie : en quoi les modalités de reconnaissance qu'ils ont perçues pendant leur apprentissage et qu'ils expriment influent-elles sur leur qualification, comme capacité entérinée par les employeurs à « tenir un poste » ? Cet article propose de lire la variabilité des destins de ces onze jeunes et de rapporter leur degré de qualification (avérée, incertaine ou déniée), à l'aune des supports sociaux et des formes de (non) reconnaissance dont ces apprentis ont fait l'objet au cours de leur alternance.

Jones, D. S., Gillette, D. D., Cooper, P. E., Salinas, R. Y., Hill, J. L., Black, S. J., … Canelas, D. A. (2022). **Cultivating PhD Aspirations during College**. *CBE—Life Sciences Education*, *21*(2), ar22. https://doi.org/10.1187/cbe.20-06-0111
Science, technology, engineering, and mathematics (STEM) career barriers persist for individuals from marginalized communities due to financial and educational inequality, unconscious bias, and other disadvantaging factors. To evaluate differences in plans and interests between historically underrepresented (UR) and well-represented (WR) groups, we surveyed more than 3000 undergraduates enrolled in chemistry courses. Survey responses showed all groups arrived on campus with similar interests in learning more about science research. Over the 4 years of college, WR students maintained their interest levels, but UR students did not, creating a widening gap between the groups. Without intervention, UR students participated in lab research at lower rates than their WR peers. A case study pilot program, Biosciences Collaborative for Research Engagement (BioCoRE), encouraged STEM research exploration by undergraduates from marginalized communities. BioCoRE provided mentoring and programming that increased community cohesion and cultivated students' intrinsic scientific mindsets. Our data showed that there was no statistical significant difference between BioCoRE WR and UR students when surveyed about plans for a medical profession, graduate school, and laboratory scientific research. In addition, BioCoRE participants reported higher levels of confidence in conducting research than non-BioCoRE Scholars. We now have the highest annual number of UR students moving into PhD programs in our institution's history.

Laheyne, C. (2021). **De la trajectoire scolaire aux « signes » de la vocation : la sélection de l'élève de classe préparatoire littéraire au sein d'un établissement privé catholique**. *Les Sciences de l'éducation - Pour l'ère nouvelle*, *54*(1), 53-69. https://doi.org/10.3917/lsdle.541.0053
À partir d'une enquête par entretiens et d'une étude de lettres de motivation d'élèves d'une classe préparatoire littéraire d'un lycée privé catholique (filière « lettres et sciences sociales »), l'article s'intéresse aux catégories de l'entendement professoral qui se manifestent dans le processus de sélection en classe préparatoire. Il évoque dans un premier temps comment elles renvoient à la singularité de l'histoire institutionnelle et aux conceptions de l'éducation propre aux congrégations féminines. Puis, en nous appuyant sur le concept sociologique de vocation, nous montrerons en quoi elles reflètent un mode de sélection basé sur la rencontre entre des dispositions individuelles et des attentes institutionnelles, notamment au profit d'élèves non suffisamment pluridisciplinaires pour s'assurer une place dans cette filière particulièrement sélective.

Lu, B., Deng, Y., Yao, X., & Li, Z. (2022). **Learning Goal Orientation and Academic Performance: A Dynamic model**. *Journal of Career Assessment*, 30(2), 329-344. https://doi.org/10.1177/10690727211043437
Drawing on the reciprocal determinism of self-regulation system, a process-based model is used to examine the relationship of learning goal orientation (LGO) among university students with their academic performance, via reciprocal relationships between initial status and change trajectories in academic self-efficacy and feedback-seeking behaviors. A longitudinal study of 316 Chinese university students throughout their first year in college reveals that students who have high LGO in their first month after entering the university generally have higher academic self-efficacy and seek more feedback. Moreover, initial levels of feedback seeking are positively related to academic performance via linear change in academic self-efficacy over time. Limitations of the study and practical implications are discussed.

Oliveira, R. C., Santos, A., & Severnini, E. (2022). ***Affirmative action with no major switching: Evidence from a top university in Brazil*** (WIDER Working Paper Series N° wp-2022-31). Consulté à l'adresse World Institute for Development Economic Research (UNU-WIDER) website: https://econpapers.repec.org/paper/unuwpaper/wp-2022-31.htm
Affirmative action in higher education may lead to mismatch, a situation where students benefiting from preferential admission struggle with their college-level work because of poor pre-college academic preparation. In the United States, those students can switch majors if they underperform in the originally intended major. Only in the extreme may they drop out. What happens when major switching is not allowed?

Ortega, G., & Grafnetterova, N. (2022). **Examining the Development of Graduate School Aspirations Among Latinx College Athletes**. *Innovative Higher Education*, 47(2), 347-365. https://doi.org/10.1007/s10755-021-09578-2
The percentage of Latinx college athletes in the National Collegiate Athletic Association (NCAA) continues to grow, yet research remains scarce on their experiences. In this qualitative study, we used Yosso's (Race, Ethnicity, and Education, 8(1), 69-91, 2005) Community Cultural Wealth model to explore the experiences of former NCAA Division I Latinx college athletes who decided to attend graduate school. This study utilized one-on-one interviews with seven different Latinx college athletes from over the United States. The themes that that emerged included: (1) family influence and support, (2) athletic department's encouragement, and (3) Latinx faculty representation. First, participants reflected how their family members reminded them that they are setting an example and to value their education. Second, participants shared how athletic department personnel encouraged them to pursue graduate school. Lastly, Latinx faculty representation played a critical role in the participants' decisions to pursue graduate school. The findings can provide insight for academic and athletic stakeholders on how Latinx college athletes can develop skills to excel beyond athletics.

Politique de l'éducation et système éducatif

Abbott, L., & McGuinness, S. (2022). **Change management in Northern Ireland's transformed integrated schools: what we want is a school where you can be who you are and it's a safe place**. *International Journal of Inclusive Education*, 26(6), 576-591. https://doi.org/10.1080/13603116.2019.1707887

Historically, Northern Ireland pupils have attended religiously separate schools, however, a movement by parents in the early 1980s to educate them together resulted in integrated schools becoming part of the educational landscape. Some were new and planned (Grant Maintained Integrated (GMI)) and a second group on which this article focuses sought integrated status through a formal, distinctive process of transformation (Controlled Integrated (CI)). Interviews with Head Teachers in nine transformed schools (primary and post-primary) showed varied reasons for transforming; parents were mostly receptive but needed information and reassurance; and teachers' reactions were largely positive, promoting the integrated ethos by addressing difference and meeting the needs of the minority group with concomitant benefits. Changes in leadership style were attributed to different management structures with Boards of Governors, teachers and parents being much more part of decision-making. There were numerous, varied challenges in the Head's new role, although most could be met, and transformation remained a journey rather than a discrete, one-off change.

Abufhele, A., Bravo, D., Lopez-Boo, F., & Soto-Ramirez, P. (2022). *Developmental losses in young children from pre-primary program closures during the COVID-19 pandemic*. Consulté à l'adresse https://docs.iza.org/dp15179.pdf
Les pertes d'apprentissage et de développement dues à la fermeture des programmes préscolaires en raison de la COVID-19 peuvent être sans précédent. Les perturbations au début de la vie peuvent être de longue durée. Cet article figure parmi les premières publications portant sur l'impact réel des fermetures d'établissements sur le développement de l'enfant. S'appuyant sur un ensemble de données uniques collectée au Chili, où les écoles et garderies sont restées fermées pendant un an, les auteurs se penchent sur le développement des jeunes enfants. Par rapport aux enfants interrogés en 2017, l'article rend compte des impacts négatifs sur les enfants en 2020 dans la plupart des domaines du développement, en particulier celui du développement du langage.

ADEA : Association pour le développement de l'éducation en Afrique, UA-CIEFFA : UA/CIEFFA, Union africaine/Centre international pour l'éducation des filles et des femmes en Afrique, & APHRC : Centre africain de recherche sur la population et la santé. (2022). *Observatoire KIX : Évaluation de l'apprentissage pendant la pandémie de COVID-19 en Afrique*. Consulté à l'adresse https://www.adeanet.org/sites/default/files/publications/evaluation_de_lapprentissage_observatoire_kix.pdf
L'évaluation permet de suivre les résultats scolaires et les progrès des élèves, de déterminer l'efficacité de l'enseignement et d'identifier les besoins d'un système. La pandémie de COVID-19 et les fermetures d'écoles ont complexifié les méthodes traditionnelles de mesure des progrès des élèves qui reposaient en grande partie sur la présence physique des apprenants. Ce rapport fait la synthèse des pratiques d'évaluation de l'apprentissage pendant et après les fermetures d'écoles dans les pays partenaires du Partenariat mondial pour l'éducation.

Agüero, J., Galarza, F., & Yamada, G. (2022). *Do Inclusive Education Policies Improve Employment Opportunities? Evidence from a Field Experiment* (Working Paper N° 2022-07). Consulté à l'adresse University of Connecticut, Department of Economics website: https://econpapers.repec.org/paper/uctuconnp/2022-07.htm
We study the employment opportunity of a college scholarship for high-achieving, low-income students in a labor market where disadvantaged groups are discriminated

against. Using a correspondence audit-study we find that including information of being a scholarship recipient in a resume increases the likelihood of getting a callback for a job interview by 20%. However, the effects are much smaller in jobs and careers where the poor are under-represented. We show that this is consistent with the scholarship also sending a negative signal to employers and helps explain why actual beneficiaries almost never mention the scholarship in their resumes.

Aktas, F. (2022). **The emergence of creativity as an academic discipline: Examining the institutionalization of higher education programs**. *Higher Education Quarterly*, *76*(2), 460-477. https://doi.org/10.1111/hequ.12322
As a result of globalization and the digital revolution, the concept of creativity has become increasingly central to education policy and practice. On the one hand, the calls for creativity are driven by an economic imperative. The argument is that there has been a shift from an industrial-based economy to a knowledge-based economy to a creative economy. The calls for creativity are also driven by the social and personal development of individuals, approaching the concept more holistically. The increasing importance attached to the creativity concept has already resulted in the growth of the degree-, certificate- and award-bearing programs across higher education institutions. Building on a social constructivist perspective and adopting critical discourse analysis, this study examines how universities approach the conceptualization and institutionalization of the concept of creativity by undertaking content analysis of creativity related program mission statements and curriculum materials.

Akyeampong, K., Andrabi, T., Banerjee, A., Dynarski, S., Glennerster, R., Grantham-McGregor, S., … et al. (2022). *Prioritizing learning during COVID-19: the most effective ways to keep children learning during and post-pandemic: recommendations of the global education evidence advisory panel*. Consulté à l'adresse https://thedocs.worldbank.org/en/doc/5f911bdf7c5c8abf060467865acf1abd-0200022022/original/Prioritizing-Learning-GEEAP-Report-Final-01-24-2022.pdf
L'impact à court et à long terme de la crise du COVID19 sur l'éducation des enfants sera profond. Les estimations suggèrent que le coût économique de l'apprentissage perdu se chiffrera en billions de dollars américains si des mesures correctives ne sont pas prises d'urgence. Les dommages sont susceptibles de réduire le bien-être et la productivité des enfants pendant des décennies, faisant de la perturbation de l'éducation l'une des plus grandes menaces pour la reprise à moyen et long terme. En outre, la pandémie offre une occasion rare de repenser l'offre d'éducation afin que tous les enfants, quels que soient leur milieu et leur situation socio-économiques, puissent apprendre et s'épanouir. Ce rapport vise à fournir des conseils pratiques aux décideurs politiques du monde entier en matière d'éducation pour répondre à ces défis complexes.

Allbright, T. N., & Marsh, J. A. (2022). **Policy Narratives of Accountability and Social-Emotional Learning**. *Educational Policy*, *36*(3), 653-688. https://doi.org/10.1177/0895904820904729
The paradigm of test-based accountability has been a dominant force for decades, yet some argue that we have recently witnessed a dramatic change in the key beliefs influencing educational policy. To understand the extent of this transformation, we investigated the policy narrative supporting the adoption of a multiple measure accountability system in California's CORE Districts. Our data revealed a narrative integrating key beliefs about knowledge, accountability, and social-emotional learning.

This narrative continues the major themes of the previous accountability paradigm, but with two notable differences regarding the use of measurement data and role of social-emotional learning.

Altintug, F. A., & Debreli, E. (2022). **A study of literacy teaching in state primary schools of Northern Cyprus: literally critical?** *International Journal of Inclusive Education*, 26(6), 592-608. https://doi.org/10.1080/13603116.2019.1708981
This study explores current literacy education in state primary schools of Northern Cyprus from the perspective of primary school teachers. The Northern Cyprus context is unique in that it has recently been receiving a considerable number of immigrants and state primary schools now include students from various backgrounds. This then raises the need for exploration of the issue of how literacy is taught to these culturally and socially diverse students. Data were collected from 20 classroom teachers teaching at 10 different schools in five districts. Semi-structured interviews were used to gather data. The findings of the study suggest that the recently developed curriculum for primary state schools is not successfully implemented in practice, and that teachers still tend to possess traditional teaching practices, which do not allow student voice or critical pedagogy, as well as integration of students' home lives into the lessons, but are exam focused. A possible reason for this seems to be teachers' lack of awareness of the philosophy of the new curriculum.

Amos, O., Siamoo, P., & Ogoti, E. (2022). **Influence of Collective Decision Making in Participative Leadership Style on Improving the Quality of Education in Public Secondary Schools in Arusha Region, Tanzania**. *British Journal of Education*, *10*(4), 69-85. https://doi.org/10.37745/bje.2013/vol10no4pp.69-85
This study addressed the influence of collective decision-making in participative leadership style on improving the quality of education in public secondary schools in Arusha region, Tanzania. The study was guided by participative system theory. The correlation survey design was adopted to establish the influence of collective decision-making on improving the quality of education. To this end, two hundred and ninety-one (291) respondents from 18 public secondary schools were selected in the mix of stratified and random sampling techniques from three (03) district councils in Arusha region. The study involved three (03) district education officers, eighteen (18) heads of schools, eighteen (18) academic masters/mistresses, one hundred and eighty (180) teachers, and seventy-two (72) students. The study collected data by using multiple instruments such as questionnaires for teachers, students, and academic masters/mistresses, interview schedules for district education officers and headmasters/mistresses, and document analysis schedules. Descriptive statistics such as mean scores, standard deviations, frequencies, and percentages summarized data collected. Multiple Regression Analysis technique was used to analyze inferential statistics by testing hypotheses. The study findings revealed that collective decision-making is the crucial strategy of involving teachers and students in participative leadership by making them be part of the solution to the education challenges confronting the education sector. The academic masters/mistresses appeared to be more involved in collective decision-making than teachers and students. The study concluded that there is an existence of contradiction of application of collective decision making due to the manifestation of a top-down leadership system based on directive decisions from the highest authority. Based on the research findings and conclusions, the study recommended the Ministry of Education, Science, and Technology to develop a clear policy that will guide

headmasters/mistresses towards implementing the collective decision making by involving teachers and students for improving the quality of education in public secondary schools.

Awazi-Mbambi-Kungua, B. É. (2022). *Le système licence-master-doctorat en RD Congo: un levier des pratiques pédagogiques innovantes dans l'enseignement supérieur ?* Consulté à l'adresse https://www.editions-harmattan.fr/livre-le_systeme_licence_master_doctorat_en_rd_congo_un_levier_des_pratiques_pedagogiques_innovantes_dans_l_enseignement_superieur_roger_binzaka_peter_okebukola_joseph_ndayisaba_juma_shabani-9782343243078-73143.html
Comment passer d'un système d'enseignement traditionnel (conservateur, colonial, autoritaire) centré sur des cours et séminaires magistraux d'un professeur savant face à un étudiant passif à un système moderne, réformateur, décolonial, participatif, centré sur l'auto-implication active de l'étudiant dans le processus de transmission des connaissances, le préparant à assumer avec compétence des fonctions bien circonscrites dans le chantier de la reconstruction d'un Congo viable ? L'enseignement supérieur congolais est arrimé au système LMD, créé par l'Union européenne pour s'ajuster aux universités conquérantes anglo-saxonnes en train de se mondialiser. Cela soulève en filigrane la question du suivisme africain et de l'incapacité totale des élites politiques et académiques africaines à repenser et promouvoir des systèmes éducatifs et universitaires en phase avec les défis protéiformes et pluridimensionnels de l'Afrique

Barbetta, G. P., Chuard-Keller, P., Sorrenti, G., & Turati, G. (2022). *Good or Bad? Short-versus Long-Term Effects of Multigrading on Child Achievement* (Tinbergen Institute Discussion Paper N° 22-025/V). Consulté à l'adresse Tinbergen Institute website: https://econpapers.repec.org/paper/tinwpaper/20220025.htm
This paper studies the effect of multigradingâ€"mixing children of different ages in the same classroomâ€"on studentsâ€™ short- versus long-term academic achievement in Italy. We cope with the endogeneity of multigrading (and class size) through an instrumental variable identification strategy based on a law that disciplines class composition. By relying on longitudinal data that follow a cohort of Italian students over their compulsory school career, we show that multigrading has a positive short-term effect on achievements. This effect fades away over time to become negative in the long run if students spend several years in a multigrade class. The analysis of mechanisms points to the fundamental role of teachers and suggests that no negative long-term effect arises when multigrade classes are taught by more experienced and motivated teachers. These results reconcile contrasting findings in the literature based on cross-sectional data and a short-term focus.

Barnes, L. P. (2022). **The Commission on Religious Education, Worldviews and the Future of Religious Education**. *British Journal of Educational Studies*, *70*(1), 87-102. https://doi.org/10.1080/00071005.2021.1871590
This article considers the proposals of the final report of the Commission on Religious Education (CoRE 2018) and its controversial conclusion that the law should require religious education to include teaching about non-religious worldviews alongside religions, presumably in equal measure. Attention is given both to Trevor Cooling's recent defence of CoRE's proposals against already expressed criticisms and to additional criticisms, that of the abstract nature of a worldview as a highly ramified, philosophical concept, which is educationally ill-suited to the interests and intellectual capabilities of

many pupils, and that of the failure of the proposals to indicate in what ways they overcome current systemic weaknesses. It is concluded that religious education should not be reconceptualised as the study of religious and non-religious worldviews nor should it adopt a framework that construes religions primarily as worldviews.

Baron, E. J., Hyman, J., & Vasquez, B. N. (2022). *Public School Funding, School Quality, and Adult Crime* (NBER Working Paper N° 29855). Consulté à l'adresse National Bureau of Economic Research, Inc website: https://econpapers.repec.org/paper/nbrnberwo/29855.htm
This paper asks whether improving the quality of public schools can be an effective long-run crime-prevention strategy in the U.S. Specifically, we examine the effect of school quality improvements early in children's lives on the likelihood that they are arrested as adults. We exploit quasi-experimental variation in school quality due to increases in public school funding, leveraging two natural experiments in Michigan and a novel administrative dataset linking the universe of Michigan public school students to adult criminal justice records. The first research design exploits variation in operating expenditures due to Michigan's 1994 school finance reform, Proposal A. The second design exploits variation in capital spending by leveraging close school district capital bond elections in a regression discontinuity framework. In both cases, we find that students exposed to additional funding during elementary school were substantially less likely to be arrested in adulthood. We show that the Marginal Value of Public Funds of improving school quality (via increases in funding) is greater than one, even when considering only the crime-reducing benefits.

Barthes, A. (2022). **Quels curricula d'éducation au politique dans les questions environnementales et de développement ?** *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18744
Nous clarifions ce que nous entendons par éduquer au politique, puis ce qu'implique concrètement de construire des curricula intentionnels d'une telle éducation. Clarifier les épistémologies de savoirs politiquement situés, multiréférentialiser des rapports sociaux, problématiser et reconnaitre des rapports de pouvoir et d'injustice en sont quelques facettes. Nous proposons une lecture d'une histoire de l'éducation aux questions d'environnement et de développement et des ? courants successifs d'éducation relative à l'environnement, au développement durable et au temps de l'anthropocène dans une perspective de présence ou d'absence d'éducation au politique. Nous mettons également en évidence un changement de paradigme récent, faisant suite à deux décennies d'éducations au développement durable fortement inscrites dans le comportementalisme, vers des éducations au temps de l'anthropocène qui offrent davantage de potentialité de socialisation politique.

Barthes, A., Sauvé, L., & Torterat, F. (2022). **Quelle éducation au politique pour les questions environnementales et de développement ?** *Éducation et socialisation. Les Cahiers du CERFEE*, (63). Consulté à l'adresse https://journals.openedition.org/edso/18788
Présentation du dossier Les préoccupations environnementales et de développement ont généré de nouveaux types de mobilisations sociales depuis les années 1960 (Zaccai et Orban, 2017). Ces mouvements constituent un tournant dans la vie politique à l'ère de l'Anthropocène : ils engagent les populations concernées et un large public vers des

apprentissages d'ordre politique, principalement en contextes non-formels et informels. Par ailleurs, l'éducation formelle est de plus en plus sollicitée po...

Bernard, M. (2022). ***Univers-cité pour le XXIe siècle: Un guide personnel***. Consulté à l'adresse https://www.editions-harmattan.fr/livre-9782140207037?utm_source=phplist&utm_campaign=message_33733&utm_medium=email&utm_content=lienTitre
L'université au XXIe siècle continue plus ou moins de fonctionner, mais l'université pour le XXIe siècle, valorisant des finalités fondamentales, est à imaginer, à créer, à concrétiser. Dans le contexte actuel, la première ne peut globalement assumer la seconde. C'est ce que montrait l'ouvrage précédent, Quelle université pour le XXIe siècle ? Vient donc le temps de l'univers-cité. Mission publique, cette univers-cité ne peut, et pour un temps indéterminé, devenir service public. Il reste des chemins personnels et des activités collégiales avec des micro-chantiers, des relais, des oasis et une convergence de partage et de fonctionnement. Une démarche personnelle communautaire conçue et pétrie par, avec et pour la solidarité.

Bourqia, R. (2022). ***Rapport national PISA 2018***. Consulté à l'adresse https://www.csefrs.ma/wp-content/uploads/2022/02/Rapport-National-PISA-2018.pdf
Ce rapport analyse les performances des élèves marocains dans l'enquête PISA 2018, qui porte sur l'évaluation des compétences des élèves de 15 ans en compréhension de l'écrit, en mathématiques et en sciences. Le Maroc a pris part, pour la première fois, avec la participation de 7218 élèves répartis sur 180 établissements de toutes les régions. Les résultats témoignent d'une faiblesse de performances. Le Maroc se positionne en bas de l'échelle avec les pays qui ont enregistré les scores les plus faibles, et ce, aussi bien en compréhension de l'écrit qu'en mathématiques et sciences. Les écarts enregistrés par rapport à la moyenne de l'OCDE sont considérables (allant de 112 en sciences à 128 en compréhension de l'écrit, soit presque l'équivalent de quatre ans d'école).

Bregvadze, T., & Medjad, K. (2022). **A case of post-Soviet dissidence: Georgia's free doctorate**. *European Journal of Education*, *57*(2), 168-180. https://doi.org/10.1111/ejed.12503
After the collapse of the Soviet Union, the universities of the former Soviet states faced a lack of public funding that left them with tuition fees as their main—and sometimes only—source of revenue. In a context where universities were exclusively focused on their economic survival, the decision of Ilia State University (ISU) to introduce in 2008 a tuition-free doctoral programme in Georgia was thus a striking exception. This free PhD programme still exists and more than a decade later, its rationale and hence, the question of whether its objectives have been achieved, remain controversial. The purpose of this article is to clarify these two aspects, using the perspective of stakeholders as primary data. Our findings challenge the dominant consensus on free higher education, in the sense that they show that the motives behind tuition-free programmes may be more diverse and ambiguous than what the literature suggests. Therefore, they also question the relevance of a standard analytical framework to assess the performance of such programmes. Thus, although local and limited in scope, our study offers directions from various disciplinary perspectives for further analyses of the drivers and results of free education.

Brière, L., Moreau, G., Prud'homme, M., Orellana, I., Marleau, M.-È., & Chatelain, M. (2022). **Soutenir la justice épistémique par la formation réciproque au cœur d'initiatives citoyennes de transition énergétique porteuse de justice sociale**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18638

Le mouvement écocitoyen pour une transition énergétique travaille à transformer le système économico-énergétique dominant dans une visée de justice sociale et de respect de l'environnement. En collaborant avec les acteurs et actrices de cette mobilisation dans le cadre d'une recherche-action, nous avons soulevé les enjeux de justice épistémique inhérents à ce projet politique. Nous avons aussi voulu créer des espaces de formation réciproque qui mettent en valeur la diversité des types de savoirs. Nous avons réfléchi aux besoins cruciaux et aux possibles vecteurs d'intensification de la collaboration et du partage de savoirs entre les différents groupes d'acteurs composant le mouvement : associations syndicales, groupes écologistes et communautaires, comités citoyens et milieux universitaires. Nous avons en outre proposé un cadre conceptuel innovant de la justice énergétique, qui prend en compte les réalités très concrètes des luttes et initiatives écocitoyennes

Buckner, E., Zhang, Y., & Blanco, G. L. (2022). **The impact of COVID-19 on international student enrolments in North America: Comparing Canada and the United States**. *Higher Education Quarterly*, 76(2), 328-342. https://doi.org/10.1111/hequ.12365

Both Canada and the United States enrol a significant number of international students. However, in March 2020, both countries closed their borders and increased restrictions to international travel due to COVID-19, which had a direct impact on international students' ability to travel between their home countries and study destinations. This article examines the impact of COVID-19 on international student enrolments by asking two related questions: first, how did government policy address international students' difficult reality in the wake of COVID-19? And, did international student enrolments change as a result? With regard to policy, we find a stark divergence: Canada's federal policies quickly adapted to support international students and ensure they remained eligible for post-graduate work permits, preserving the appeal of Canada as a study destination. Meanwhile, in the US, federal policies for student visas required international students to maintain physical presence, reflecting a more hostile stance towards immigration, characteristic of the Trump administration. Despite these differences, with regard to enrolments, we find largely similar patterns, with COVID resulting in only a small decline in international student enrolments nationwide. A more worrying trend for both countries is that selective institutions seem to have been less impacted than access-oriented institutions.

Bush-Mecenas, S. (2022). **"The Business of Teaching and Learning": Institutionalizing Equity in Educational Organizations Through Continuous Improvement**. *American Educational Research Journal*, 59(3), 461-499. https://doi.org/10.3102/00028312221074404

The continuous improvement (CI) approach to systems change has rapidly spread across education policy circles in recent years and has been hailed as a promising means to achieve educational equity and social justice. CI's highly routinized, scientific process for improving efficiency and productivity is a somewhat unexpected means to pursue equity. To understand this puzzle, I examine the use of CI to promote equity through two qualitative, multilevel case studies. I draw on institutional theory to understand how CI has integrated logics of racial equity and performance, and how local actors have improvised novel approaches. This analysis illuminates the complex institutional dynamics

at play with CI implementation and identifies the challenges and promise of using CI to promote educational equity.

Butzbach, M. (2022, avril 4). **Handicap à l'école : un sérieux manque de moyens**. Consulté 6 avril 2022, à l'adresse Alternatives Economiques website: https://www.alternatives-economiques.fr/handicap-a-lecole-un-serieux-manque-de-moyens/00102766
Malgré des efforts récents, la scolarisation des enfants handicapés reste un parcours semé d'embûches, en premier lieu à cause du manque d'accompagnants.

Caillot, M., Leguy, I., Rolland, D., & Thibau-Leveque, F. (2021). *Impact des modifications apportées aux modes d'accès à l'enseignement supérieur - accès aux grandes écoles inclus. Partie 2 : les recrutements post-bac par concours* (N° 2021-186; p. 45). Consulté à l'adresse IGÉSR website: https://www.education.gouv.fr/media/113778/download

Capitanescu Benetti, A., Letor, C., Guillemette, S., & Étienne, R. (2022). *Les nouvelles formes du travail scolaire: changer l'école pour la renforcer ?* Consulté à l'adresse https://www.pulm.fr/index.php/les-nouvelles-formes-du-travail-scolaire.html

Champagne St-Arnaud, V., & Samson, G. (2022). **Évaluer l'efficacité de l'éducation relative au changement climatique en milieu non formel : une étude de cas**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, *17*(1). https://doi.org/10.4000/ere.8097
Les outils permettant d'évaluer l'efficacité de l'éducation relative au changement climatique en milieu non formel sont peu nombreux et souffrent souvent de l'absence d'assises théoriques solides. Dans le contexte de la campagne Sors de ta bulle menée par la Fondation Monique-Fitz-Back, un cadre d'évaluation novateur reposant sur douze indicateurs a été élaboré. Ces indicateurs ont servi à évaluer les effets de la participation de jeunes de 12 à 17 ans au Sommet jeunesse sur le changement climatique, l'une des activités de la campagne. Un devis mixte combinant la réalisation d'une enquête en ligne auprès des participant.e.s et un entretien de groupe avec douze d'entre eux a permis de constater que la campagne Sors de ta bulle a contribué à stimuler efficacement le processus d'adoption de comportements écoresponsables selon trois axes : augmentation de la motivation, renforcement du sentiment d'efficacité personnelle et intensification de l'engagement dans la lutte climatique.

Champoux, M., & Agundez-Rodriguez, A. (2022). **Des épistémologies des Suds pour penser une éducation relative aux changements climatiques à portée transformatoire**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.8520
Pour réussir à relever les nombreux défis posés par les changements climatiques, l'humanité a besoin d'élargir le champ des possibles et d'entreprendre une profonde transformation sociale et politique en vue de l'atteinte d'une plus grande justice sociale et environnementale. Pour le sociologue et épistémologue Boaventura de Sousa Santos (2016), la justice mondiale ne pourra pas être atteinte sans la poursuite d'une justice cognitive mondiale. Cette dernière doit reconnaitre l'incomplétude de la rationalité moderne occidentale. Cet article effectue un retour sur l'œuvre Épistémologies du Sud (Boaventura De Sousa Santos, 2016) en tentant de mettre en exergue les principaux concepts développés par l'auteur et qui semblent porteurs pour penser une éducation

relative aux changements climatiques (ERCC) transformatoire, axée sur la justice écosociale et ouverte à des subjectivités et des expérimentations alternatives.

Chang-Bacon, C. K. (2022). **Monolingual Language Ideologies and the Massachusetts Sheltered English Immersion Endorsement Initiative: A Critical Policy Analysis**. *Educational Policy*, *36*(3), 479-519. https://doi.org/10.1177/0895904820901465
With U.S. classrooms increasingly characterized by linguistic diversity, policies mandating teacher training around English learning have proliferated. Recent federal oversight prompted Massachusetts to implement an initiative to endorse its 70,000+ teachers in Sheltered English Immersion (SEI). While policy research has productively emphasized teachers as policy interpreters within such initiatives, almost no research exists on the role teacher educators play in the policy interpretive process. Therefore, this study documents how teacher educators across Massachusetts interpreted and operationalized the SEI endorsement policy. Drawing on document and interview analysis, findings highlight key experiences, contextual factors, and ideological dispositions that informed participants' policy interpretations. Instructors navigated tensions between their own goals to affirm linguistic diversity and the monolingual orientations produced through the state's recently overturned English-only policy. These findings demonstrate the affordances of examining the role of language ideologies in policy interpretation, with implications for large-scale language policy initiatives and educational policy interpretation more broadly.

Charles, N., & Pierronnet, R. (2022, avril 6). **Derrière l'autonomie des universités, des enjeux de société ?** Consulté 12 avril 2022, à l'adresse The Conversation website: http://theconversation.com/derriere-lautonomie-des-universites-des-enjeux-de-societe-180700
Pour augmenter leurs ressources propres, les universités sont incitées à développer la formation continue alors que c'est la formation initiale diplômante qui reste décisive dans la société actuelle.

Charlier, J.-É., & Croché, S. (2022). **De quelle éducation au politique l'évaluation PISA de la « compétence globale » est-elle porteuse ?** *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18410
Adoptés solennellement par les 193 États membres de l'Organisation des Nations unies en septembre 2015, les Objectifs du développement durable (ODD) sont présentés comme « 17 objectifs pour sauver le monde » (United Nations 2015). Ils proposent à tous les pays, sans aucune exception, des réponses aux principaux défis qui se posent à l'humanité, parmi lesquels ceux qui sont « liés à la pauvreté, aux inégalités, au climat, à la dégradation de l'environnement, à la prospérité, à la paix et à la justice » (id.). En cela, ils portent un programme d'éducation au politique qui se lit de façon transversale dans toutes les cibles envisagées, mais qui apparaît de la façon la plus explicite dans certaines de celles qui concernent l'enseignement. Cet article se concentre sur celles qui sont focalisées sur l'éducation au développement durable, et plus précisément encore sur l'évaluation qu'en organise le programme PISA de l'OCDE en prenant la mesure de la « compétence globale ».

Cho, H. J., Wang, C., Bonem, E. M., & Levesque-Bristol, C. (2022). **How Can We Support Students' Learning Experiences in Higher Education? Campus Wide Course**

Transformation Program Systematic Review and Meta-Analysis. *Innovative Higher Education*, *47*(2), 223-252. https://doi.org/10.1007/s10755-021-09571-9

The aims of this paper are to examine the breadth of scholarship that emerged from a large-scale university-wide course transformation program between 2011 and 2021, to investigate how the course transformation program influenced students' perceptions of their learning environment and learning achievement, and to discuss future directions for improving autonomy-supportive learning in higher education. We gathered all quantitative and qualitative publications related to the IMPACT course transformation program, and 35 articles were included in the study. Since the scope of the study topics in the course transformation program varied and program implementation was applied to various study contexts and disciplines, the findings were first summarized in a narrative manner. Additionally, a meta-analysis was conducted to examine the effectiveness of the course transformation based on 10 journal articles that adopted quasi-experimental designs. The findings revealed that the courses redesigned through the program supported students' positive learning experiences, including motivation, satisfaction regarding basic psychological needs, knowledge transferability, and academic performance. This paper discusses implications and future directions to enhance undergraduate students' academic success through course redesign. Further exploration is needed to determine the additional effect of course redesign in higher education.

Chu, Y. (2022). **Sensemaking of University and District Stakeholders in Implementing a Teacher Residency Policy in Louisiana**. *Journal of Teacher Education*, *73*(3), 240-252. https://doi.org/10.1177/00224871211059161

A growing body of research has identified teacher residency's potentials for improving and sustaining preservice teacher learning through a stronger district–university partnership. Drawing on sensemaking perspectives on education policy implementation, this qualitative case study examines how a variety of university and district stakeholders make sense of and implement a state-mandated teacher residency in Louisiana. Findings reveal that stakeholders are primarily making sense of the residency in isolation, leading to incoherent understandings and varied implementation practices. Opportunities to improve stakeholders' collective sensemaking and collaborative implementation and to optimize the benefits and potentials of teacher residency partnerships are discussed. This study has implications for teacher education policy implementation and continuous inquiry into the complexities of teacher preparation.

Classen, A. I., & Westbrook, A. (2022). **Professional credential program: impacting early childhood inclusive learning environments**. *International Journal of Inclusive Education*, *26*(7), 719-736. https://doi.org/10.1080/13603116.2020.1717652

For more than three decades, the inclusion of children with disabilities in early childhood education settings has been developing worldwide in educational research, policy, and real-world practice. The purpose of this study was to examine the impact of a Special Needs Inclusive Practices Credential Program with early educators working in the southeastern region of the United States. Researchers used the Inclusive Classroom Profile (ICP) with a pre-post research design to measure inclusive practice change. Initial results from this study revealed a statistically significant effect on all but two items for the initial cohorts (i.e. 1 and 2). After revising the PD for cohort 3 the analyses did not identify any items from the ICP that were not statistically significant. Importantly the overall analyses (including all 3 cohorts), revealed a statistically significant for within subjects on the total

pre- and post-test score of the Inclusive Classroom Profile (ICPTM) (2016), Wilk's Lambda = .49, F (1, 82) = 83.92, p = .000. The analysis did not identify any items that did not result in a statistically significant change between pre and post evaluations of all cohorts.

Cohen, M. I. (2022). **Business-Inspired School Reform in the Era of Financialization: Not Business as Usual**. *Educational Policy*, *36*(3), 624-652. https://doi.org/10.1177/0895904820904736
Business-inspired school reform policies in the United States date back to the late 19th century. In the last four decades, however, while school reformers have continued to borrow policies and practices from the business world, the dominant business model itself has changed dramatically as part of the financialization of the economy. Once a bureaucratically governed social institution, focused on long-term stability and committed to multiple stakeholders, the corporation has become a destabilized network of temporary contracting relationships, singularly focused on maximizing shareholder value. This conceptual article explores what it means for schools, as public and democratic institutions, to emulate business in the era of financialization. Through analysis of several recent trends in business-inspired school reform policy, I demonstrate the diffusion of financialization logic and practices into public schools. I argue that while business may have historically been a problematic model for educational policy, business is now a uniquely unqualified model.

Colman, A. (2022). **School Leadership, Inspection and Visibility: Panopticism and Post-Panopticism in an English Coastal Area of Deprivation**. *British Journal of Educational Studies*, *70*(1), 3-19. https://doi.org/10.1080/00071005.2021.1897518
This paper contributes to recent debates pertaining to neoliberal technologies of performativity including fabrication, panopticism and post-panopticism. These terms are discussed here in relation to constant visibility from recent school inspection arrangements in England and the impact of this on school leadership. Case study research within one seaside town was drawn from two schools, one, a state primary school and the other, a state secondary school, located within an area of deprivation. Both schools had been judged as requires improvement by Ofsted, but immediately before the fieldwork commenced, the secondary school received a judgment of good. Fourteen semi-structured interviews with thirteen leaders in a range of roles were undertaken to examine the conditions created by school inspection. Data is considered in relation to the features of panopticism and post-panopticism and shows leaders experience constant visibility, the pressures of performing to shifting expectations, and resultant staffing instability. This is not conducive to leaders working to improve schools, particularly those serving areas of deprivation.

Commission européenne. Direction générale éducation, jeunesse. (2022). **Compendium on digital inclusion in education: 8 country case studies and 33 inspiring practices**. Consulté à l'adresse https://op.europa.eu/o/opportal-service/download-handler?identifier=08f98a36-c054-11ec-b6f4-01aa75ed71a1&format=pdf&language=en&productionSystem=cellar&part=
Ce compendium présente 8 études de cas (Belgique, Bulgarie, Danemark, Estonie, France, Italie, Espagne, Suède) et 33 pratiques inspirantes rassemblées dans le cadre de l'étude « Enhancing learning through digital tools and practices: How digital technology in compulsory education can help promote inclusion » dont l'objectif était d'évaluer le rôle des technologies numériques pour promouvoir l'accès, la qualité et l'équité dans

l'enseignement scolaire obligatoire. Il vise à fournir un examen plus approfondi de ce qui se passe actuellement au niveau local, régional et national dans un certain nombre d'États membres de l'UE et à fournir des idées aux décideurs politiques et aux praticiens de toute l'UE qui s'efforcent d'améliorer la qualité et l'inclusivité des systèmes d'éducation et de formation en tirant parti des outils numériques.

Cooling, T. (2022). **The Commission on religious education – a response to l. Philip Barnes**. *British Journal of Educational Studies*, *70*(1), 103-118. https://doi.org/10.1080/00071005.2021.1954142
In a recent article, L. Philip Barnes critiques the Commission on Religious Education (CoRE) Final Report by scrutinising its text and by responding to my interpretation of that text. His particular, but not exclusive, focus is CoRE's proposal that the idea of worldview should be central to RE. His conclusion is that: 'The collective force of these criticisms counsels against implementing the proposals of CoRE. Religious education needs to look elsewhere than to a worldview curriculum to overcome its current travails'. This article responds by arguing that Barnes fails to justify his conclusion because his critique does not meet the standards of a fair and responsible treatment of his chosen focal texts. In particular, it misrepresents and misinterprets the CoRE Report and overlooks the alternative interpretation that I and others offered.

Cullinane, A., McGregor, D., Frodsham, S., Hillier, J., & Guilfoyle, L. (2022). **Transforming a doctoral summer school to an online experience: A response to the COVID-19 pandemic**. *British Journal of Educational Technology*, *53*(3), 558-576. https://doi.org/10.1111/bjet.13195
For the last 28 years, one of the leading international science education organisations has regularly provided a week-long summer school experience for doctoral students. In summer 2020, the COVID-19 pandemic prevented international travel and close-contact interactions between scholars. This required the transformation and relocation of learning interactions between mentors and doctoral students online through a virtual week-long summer school. All doctoral participants, from across the five continents, were invited to reflectively comment on their educative experience after the online event. This paper consequently presents the perspectives of these science education PhD students who engaged with the transformed virtual summer school to consider how the range of varied online interactions maintained the learning opportunities for them and enabled their introduction to an established research community. The study indicates how the digital activities facilitated and maintained high-quality learning exchanges through a varied array of intellectual activities involving both experienced and novice scholars. The findings demonstrate how successful academic outcomes can be achieved remotely while minimising international travel and significantly reducing financial outlay. This was achieved through creatively structuring a week-long virtual experience and combining a series of synchronous and asynchronous learning opportunities for different groupings of participants within the international summer school community. Practitioner notes What is already known about this topic Doctoral students often feel that studying for their research degree is a very solitary experience. Supporting doctoral students to discuss their research with peers and more experienced others can address the feelings of isolation. The pandemic restricting face-to-face interaction constrains how learning can unfold in online contexts. It is possible to provide doctoral support through online means, however, the exact nature of such is not clearly defined. What this paper adds Clear evidence that doctoral learning communities [involving university students and tutors]

can be successfully developed through online virtual environments. That online working can afford and extend doctoral learning, develop beginning researcher identities and provide students the opportunity to become part of an international research community whatever their geographical setting and prior socio-cultural experiences. Clarity about the nature of online activities that ensure an appropriate blend of the kind of synchronous and asynchronous interactions that effectively support virtual online doctoral learning. The Community of Practice COP theoretical framework can offer a useful way of looking at different dimensions of higher degree learning. Implications for practice and/or policy This paper provides advice for those who would like to develop their own virtual learning networks that bring together learners from universities and wider organisations to develop a community of learning. That an appropriate blend of synchronous and asynchronous interactions can mediate and support doctoral students, aiding them to effectively become more knowledgeable members of an international research community within a short space of time. That international virtual events can successfully achieve learning outcomes while also minimising overseas travel, significantly reducing financial expenditure and individual carbon footprints.

Delplancke, M., & Chalak, H. (2022). **Potentialités et limites des curricula de SVT : quelles contributions des questions environnementales pour une éducation au politique ?** *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18529
L'enjeu central de cet article est de caractériser les conditions d'une éducation scientifique qui permette de prendre en charge la double dimension politique et scientifique des questions environnementales (QE). Notre réflexion porte sur une analyse des curricula, portés par les nouveaux programmes et les manuels scolaires de SVT et d'Enseignement Scientifique, spécifiquement sur les thématiques environnementales. Nos analyses montrent que la manière dont les QE sont traitées privilégie la technologie comme source de solutions aux problèmes humains, participe d'une conception positiviste de la science, et relève d'une approche anthropocentrée. Les programmes et manuels transmettent implicitement un rapport au monde très ancré dans le paradigme de la modernité. Nous discutons des leviers possibles pour re-politiser ces questions en classe, au moyen de leur (re)problématisation dans un contexte d'instabilité des savoirs, de problèmes complexes flous pour contribuer à une éducation citoyenne, à même de répondre aux enjeux de l'anthropocène.

Deslauriers, A. (2022). **Lorsque la création rencontre les grands défis socioécologiques en enseignement des arts plastiques au secondaire**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.7674
Cet article présente certains résultats préliminaires d'une recherche doctorale visant à développer un modèle éducationnel en enseignement des arts plastiques au secondaire. Ce modèle conjugue éducation artistique et éducation relative à l'environnement, rejoignant des éléments clés du Programme de formation de l'école québécoise. Au sein de ce modèle, l'éducation artistique s'intéresse aux horizons extradisciplinaires du domaine des arts, comme la prise en compte de questions socioécologiques, en particulier celle du changement climatique, conséquence d'une dégradation environnementale sans précédent.

Dionne, L., & Lefebvre, I. (2022). **L'éducation relative à l'environnement et au changement climatique : l'appui d'ententes internationales pour son institutionnalisation.**

Éducation relative à l'environnement. Regards - Recherches - Réflexions, (Volume 17-1). https://doi.org/10.4000/ere.8543
Les changements climatiques constituent la plus grande menace pour l'Humanité à ce jour. En plus de compromettre la paix mondiale par les risques de mouvements forcés de populations, les changements climatiques affectent l'équilibre des écosystèmes terrestres et font disparaître de nombreuses espèces vivantes. Nous devons prendre des mesures plus strictes pour réduire les émissions de gaz à effet de serre de manière à ne pas dépasser 1,5 °C de réchauffement. Une des clés pour changer les comportements consiste à éduquer à l'environnement et au changement climatique. La Convention des droits de l'enfant de l'ONU précise que l'enfant doit, durant sa scolarisation, acquérir des notions de respect du milieu naturel, tout en lui garantissant un environnement sain. Notre propos, appuyé par des textes légaux, propose des éléments qui supportent un changement de paradigme au sein de nos systèmes éducatifs pour institutionnaliser sans tarder l'éducation relative à l'environnement et au changement climatique.

Dupuis, C. (2022). **Québec ZéN : une initiative de la société civile pour coconstruire le Québec carboneutre de demain**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.8393
L'histoire environnementale du Québec met en évidence le rôle majeur des acteurs de la société civile pour repérer, exiger et opérer les changements majeurs qui s'imposent. En particulier, l'examen des mobilisations au fil des dernières décennies montre l'importance de la coconstruction des savoirs, du dialogue social et de l'expérience de l'action concertée pour favoriser le développement d'un pouvoir citoyen permettant de contribuer à la transformation des réalités socio-écologiques. S'inscrivant dans une telle dynamique, cet article présente les fondements et le cheminement d'un mouvement social d'envergure qui depuis quelques années, s'est saisi de la question climatique.

Ecton, W. G., & Dziesinski, A. B. (2022). **Using Punctuated Equilibrium to Understand Patterns of Institutional Budget Change in Higher Education**. *The Journal of Higher Education*, 93(3), 424-451. https://doi.org/10.1080/00221546.2021.1985884
In this paper, we employ Punctuated Equilibrium Theory to consider institutions' shifting goals, priorities, and constraints, and to explore the nature of change at colleges and universities in the United States. By exploiting annual changes in institutional budget decisions over a 29-year period, we seek to understand the extent to which institutions exhibit patterns of punctuated equilibrium, which are characterized by long periods of relative equilibrium (stasis) and of occasional extreme changes (punctuations). Broadly, we find that institutions of higher education allocate funds in a pattern characteristic of Punctuated Equilibrium, and that certain types of institutions are more likely than others to exhibit this pattern. Taken in whole, this paper calls into question a prevailing perspective on change in higher education — that change is slow-moving, moderate, and incremental. Instead, we posit that a framework of Punctuated Equilibrium may better describe how researchers and practitioners should consider institutional change within higher education.

Ekpenyong, D. O., & Aniekwu, R. O. (2022). **The Availability of Physical and Human Resources on the Implementation of Adult Education Programmes in Cross River State, Nigeria**. *British Journal of Education*, *10*(4), 58-68. https://doi.org/10.37745/bje.2013/vol10no4pp.58-68

This study investigated the availability of physical and human resources on the implementation of adult education programmes in Cross River State, Nigeria. Two research questions were formulated. Descriptive survey research design was adopted for the study. A sample of 600 respondents were selected from eighteen local government areas using stratified and simple random sampling techniques. The instrument used for data collection was 20 items, modified rating scale questionnaire titled "Availability of Physical and Human Resources and Implementation of Adult Education programmes Rating Scale (APHRIAEPRS)" was used for data collection. The instrument was dully validated by experts and its reliability estimate was established at .84 using Chronbach Alpha reliability method. Data collected were analysed using simple percentages. The findings from the results revealed that availability of physical resources on the implementation of adult education programmes was inadequate while availability of human resources for the implementation of adult education programmes was 50% average in the study area. Based on the findings, it was recommended among others that there should be adequate provision of physical resources to boost the implementation of adult education programmes

EM2030 : Equal Measure 2030. (2022). **Mise à profit des données et des partenariats: renforcer l'éducation des filles en situations d'urgence avec les ODF**. Consulté à l'adresse https://equalmeasures2030.org/wp-content/uploads/2022/03/GAC-policy-report-spread-pages-French.pdf

En 2021, le gouvernement du Canada a décidé d'appuyer un partenariat avec Equal Measures 2030 - un groupe d'ONG, fondations et entreprises - et ses partenaires au Kenya et au Burkina Faso, afin de recenser les moyens de renforcer la prestation équitable d'une éducation pour les filles et les femmes. Les filles cherchant à poursuivre leur éducation dans les contextes d'urgence au Kenya et au Burkina Faso sont confrontées à deux scénarios notablement différents, aggravés par la pandémie. Le Kenya doit améliorer les résultats scolaires dans les zones où vivent des centaines de milliers de réfugiés. Au Burkina Faso, c'est la menace de la violence extrémiste qui empêche, du moins en partie, les filles d'être scolarisées. Le point de vue essentiel des organisations de défense des droits des femmes (ODF) de la base est souvent absent des débats. Intervenant en première ligne. Les ODF ont pourtant une connaissance unique des réalités vécues par les filles qui cherchent à être scolarisées dans les zones touchées par les crises et les conflits.

Fadda, N., Marinò, L., Pischedda, G., & Ezza, A. (2022). **The effect of performance-oriented funding in higher education: evidence from the staff recruitment budget in Italian higher education**. *Higher Education*, *83*(5), 1003-1019. https://doi.org/10.1007/s10734-021-00725-4

This study, which aims to investigate some potential effects derived from the adoption of performance-oriented funding in the higher education system, is focused on competitive allocative mechanism to provide universities with the staff recruitment budget in the Italian Higher Education System using panel data spanning the period 2012–2018 for 58 public universities. Results show that the geographical area in which universities operate influences their capacity to increase performance and thus financial resources. Indeed, universities located in Northern areas, the wealthier part of Italy, received a higher amount of resources than those located in the rest of the country. These findings reveal the key role played by external factors, which are beyond the control of management, in universities' capacity to achieve better performance. Results also suggest that policy-

makers should identify the correct trade-off between the quest for higher performance within the Italian Higher Education System and equity in resource allocation.

Fahm, A. O., Azeez, A. L., Imam-Fulani, Y. O., Mejabi, O. V., Faruk, N., Abdulrahaman, M. D., … Surajudeen-Bakinde, N. T. (2022). **ICT enabled Almajiri education in Nigeria: Challenges and prospects**. *Education and Information Technologies*, *27*(3), 3135-3169. https://doi.org/10.1007/s10639-021-10490-7
The Almajiri children in Nigeria are deserving of special interventions to reduce the life-long divide in educational achievement, social status, and economic empowerment. One way of speedily achieving this is through the use of Information and Communication Technologies (ICTs). This study examined the prospects and challenges of using ICT in the teaching and learning processes of Almajiri children's education in Nigeria. A descriptive research methodology was adopted and data were collected from the Almajiri children, their teachers, and parents from communities with a high concentration of Almajiri schools. The results showed that while the official language of instruction in schools in Nigeria is English, the language often spoken by children and teachers was Hausa. Also, while teachers and parents were quite familiar with ICTs such as mobile phones, computers, and television, the Almajiri children were more familiar with television and mobile phones, and very few had used a computer. Some strategies proposed for successful adoption of ICT in Almajiri education include the use of indigenous languages in courseware development and the use of one-to-many ICT facilities, such as multimedia teaching aids, projectors, and smart televisions.

Ferencz, I., & Rumbley, L. E. (2022). **Europe's post-pandemic internationalisation: Challenges and possibilities in a decidedly networked future**. *Higher Education Quarterly*, *76*(2), 276-292. https://doi.org/10.1111/hequ.12381
Several specific characteristics have affected the way the European higher education sector has responded to the multiple crises engendered by the pandemic and will help shape the post-pandemic picture in relation to internationalisation. Mobility, internationalisation at home, and the region's social responsibility agenda are areas that have been both particularly affected by the pandemic and will be of ongoing importance in the post-pandemic era. Meanwhile, the increasing prevalence of strategic actorhood in helping to define the profiles of European higher education institutions (HEIs) has a direct bearing on how HEIs have been navigating the circumstances presented by the pandemic. Affiliation with meta-organisations, and collaboration through (strategic) partnerships and alliances (particularly in the form of the newly launched European Universities) have emerged as important avenues for institutional development and strategic action. Networked approaches—with an array of challenges and opportunities embedded in these collaborations—will play a key role in the future of internationalisation in Europe.

Gallardo-Montes, C. del P., Caurcel Cara, M. J., & Rodríguez Fuentes, A. (2022). **Technologies in the education of children and teenagers with autism: evaluation and classification of apps by work areas**. *Education and Information Technologies*, *27*(3), 4087-4115. https://doi.org/10.1007/s10639-021-10773-z
Mobile apps represent a resource with great potential for encouraging the development of many skills, given the high number of apps available and the quick access to them. Many professionals and families include these resources in the education and therapy of children with autism. For a group with such particular needs, a review of the apps is great

importance, since, due to their characteristics, the apps must provide content, design and pedagogical aspects that fit those needs. Through a previously validated system of indicators, 155 free apps on Google Play were evaluated, using "autism" in English and in Spanish. We determined which work area each app developed, as well as which were the most multifaceted. Having evaluated the recorded data, we calculated frequencies, percentages and reliability, as well as parametric contrast and correlation statistics. We found that the focus of most apps was on executive functions, language and entertainment, with a minority devoted to the emotional sphere or time management. However, 98.06% of the apps worked on several areas, which makes them more functional but with the downside of not being specialized. Most apps were placed in the "recommendable" level but with margin for improvement in increasing their functionality.

Garver, R. (2022). **For Some and for All: Subgroup Entitlement Policies and Daily Opportunity Provision in Segregated Schools**. *American Educational Research Journal*, *59*(3), 574-609. https://doi.org/10.3102/00028312221079302
Educators in economically and racially segregated schools enact subgroup entitlement policies, such as Title III and IDEA (Individuals with Disabilities Education Act), as they negotiate the diverse and underserved needs throughout the student body. How do subgroup entitlement policies for English learners and students with disabilities shape daily opportunity provision—the day-to-day distribution of resources—in segregated schools? This ethnographic study of a public middle school reveals that the implementation of subgroup entitlement policies shaped the opportunity structure for all students through (1) creating tracks that offered distinct conditions for learning, (2) fragmenting the organizational structure and inhibiting coordination, (3) exposing the school to increased compliance pressure that hierarchized priorities, and (4) utilizing subgroup-specific resources for general education students.

Gerashchenko, D. (2022). **Academic leadership and university performance: do Russian universities improve when they are led by top researchers?** *Higher Education*, *83*(5), 1103-1123. https://doi.org/10.1007/s10734-021-00732-5
Studies that have examined organizations' productivity and their leaders have found a rather weak relationship between a leader's personal characteristics and organizational output. Similar empirical studies have also been conducted in relation to universities. These studies have concentrated on university leaders' individual academic performance as a quantifiable individual characteristic. They have yielded rather contradictory results. In this study, I take a theoretical approach to quantify the effects of top leadership on university research performance. I assume that top leaders may influence university research productivity, but this influence should be visible. I theorize two types of university leader: the "strategic manager" who seeks to reallocate resources to make it of use for the whole university and the "politician" who reallocates resources to benefit certain research areas, especially the one they specialize in. It is hypothesized that (1) if a leader is a strategic manager, an increase in overall university research productivity would be observed; and (2) if a leader is a politician, there will be an increase in university performance in the research field in which the leader specializes. Using an extensive sample of Russian universities, it is demonstrated that while there is no observable relationship between overall university research productivity and the university leader's academic excellence, there is a positive influence by university leader's academic productivity on the research performance of his/her specific research

field. This study finds evidence that leaders qua "politicians" can have a profound effect on their respective research areas' productivity.

Gicquel, S., & Le Moigne, F. (2022). *L'Église dans l'enseignement secondaire: les institutions catholiques en France, XIXe-XXIe siècles*. Consulté à l'adresse https://books.openedition.org/pur/163381?lang=fr
Comme l'État, l'Église a joué un rôle de premier plan dans les progrès de l'enseignement secondaire en France au cours de la période contemporaine, ce qui se traduit par une floraison d'institutions secondaires catholiques. Alors qu'en 1854, au lendemain de la loi Falloux, on en compte 256, auxquelles il convient d'ajouter une bonne centaine de petits séminaires, on en dénombre plus de 1300 en 1958, à la veille de la loi Debré. Observer ce dynamisme au ras du sol, en plaçant ces établissements au cœur de la réflexion, est l'objectif de cet ouvrage. Ainsi l'enseignement secondaire catholique n'apparaît-il pas comme un bloc monolithique, mais comme un agrégat d'institutions appelées tantôt écoles, tantôt pensionnats, séminaires, collèges, alumnats ou, plus récemment, lycées. Ce livre, qui est le fruit d'échanges entre des chercheurs issus de plusieurs champs disciplinaires, met simultanément en lumière la complémentarité et la rivalité de ces institutions dans le champ scolaire. Il présente leurs caractéristiques propres sur le temps long, du XIXe siècle à aujourd'hui, en faisant une large place aux fondateurs, aux projets éducatifs et aux mutations des dernières décennies, qu'elles soient institutionnelles ou religieuses. avec le soutien de l'université Bretagne Occidentale

Gin, L. E., Pais, D., Cooper, K. M., & Brownell, S. E. (2022). **Students with Disabilities in Life Science Undergraduate Research Experiences: Challenges and Opportunities**. *CBE—Life Sciences Education*, *21*(2), ar32. https://doi.org/10.1187/cbe.21-07-0196
Individuals with disabilities are underrepresented in postsecondary science education and in science careers, yet few studies have explored why this may be. A primary predictor of student persistence in science is participating in undergraduate research. However, it is unclear to what extent students with disabilities are participating in research and what the experiences of these students in research are. To address this gap in the literature, in study 1, we conducted a national survey of more than 1200 undergraduate researchers to determine the percent of students with disabilities participating in undergraduate research in the life sciences. We found that 12% of undergraduate researchers we surveyed self-identified as having a disability, which indicates that students with disabilities are likely underrepresented in undergraduate research. In study 2, we conducted semistructured interviews with 20 undergraduate researchers with disabilities. We identified unique challenges experienced by students with disabilities in undergraduate research, as well as some possible solutions to these challenges. Further, we found that students with disabilities perceived that they provide unique contributions to the research community. This work provides a foundation for creating undergraduate research experiences that are more accessible and inclusive for students with disabilities.

Gladu, S., & Curadeau, M. (2022). **Implantation d'une nouvelle approche éducative visant l'engagement environnemental des citoyens. Biodôme, Espace pour la vie**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.7543
Depuis 1992, le Biodôme de Montréal s'emploie à exposer le vivant dans toute sa complexité et ses interconnexions à travers la représentation de cinq écosystèmes. Une de ses missions : « S'engager à protéger l'environnement en favorisant une prise de

conscience individuelle et collective ». Sa division Programmes publics et éducation se penche sur une façon de concrétiser davantage cette mission à travers ses activités. Le présent article fait état de la démarche qui accompagne cette réflexion. Pour l'essentiel, il s'agit de la proposition d'une nouvelle approche éducative s'appuyant sur un modèle développé au cœur même du Biodôme : « La pyramide d'interventions ». Une approche qui appelle les visiteur.euse.s à passer à l'action. Y sont également présentés les principaux défis qui accompagnent l'implantation d'une telle approche, ainsi que les dispositions mises en place pour faciliter cette dernière.

Global Education Monitoring Report Team. (2021). *International review of study/training leave policies - Background paper prepared for the GEM Report « Non-state actors in education »*. Consulté à l'adresse UNESCO website: https://unesdoc.unesco.org/ark:/48223/pf0000380097

Goger, A., Parco, A., & Vegas, E. (2022). **The promises and perils of new technologies to improve education and employment opportunities**. In *https://veille-et-analyses.ens-lyon.fr/Rapports/DetailRapport.php?parent=actu&id=3573* [Report]. Consulté à l'adresse Brookings Institution (États-Unis) website: https://www.brookings.edu/wp-content/uploads/2022/03/Digital-innovations_FINAL.pdf
Digital technologies are rapidly developing and transforming the way individuals work, learn, and participate in civic life. As digital innovations become more available and present opportunities to make quality learning and career opportunities more accessible across the globe, educational institutions, administrative data systems, and regulatory frameworks have struggled to adapt. Through research on the landscape of digital micro-credentials, we hope to provide insights and policy recommendations to decisionmakers and stakeholders, such as education and labor policymakers, to expand access to skills and quality jobs to the most disadvantaged learners and workers across the world.

Gonzales, L. D., & Shotton, H. (2022). **Coalitional refusal in a neoliberal academy**. *International Journal of Qualitative Studies in Education*, 35(5), 540-552. https://doi.org/10.1080/09518398.2022.2025472
In this project, we share how we—two differently situated Women of Color, one Indigenous and one Chicana, with myriad other identities (e.g. mothers, partners, daughters, friends, co-conspirators, academics)—grew to be friends, and how we foster our friendship as a site of coalitional refusal for creating a more just academy. We offer our reflections in hopes that they will be useful to others who also want to work towards coalition and refuse the neoliberal academy.

González Gaudiano, E. J. (2022). **L'éducation relative à l'environnement sous l'ère néolibérale : ombres et lumières à l'heure du changement climatique**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18133
Une analyse de la trajectoire de l'éducation relative à l'environnement depuis 1987 permet de mettre au jour les conséquences institutionnelles et pédagogiques de la promotion de l'éducation au développement durable. Celle-ci fait partie intégrante de la stratégie néolibérale globale visant la mise en place de conditions sociales plus favorables à la phase actuelle du capitalisme où les fins économiques prévalent sur les normes culturelles. La dimension éducationnelle de cette problématique est examinée ici en portant une attention toute particulière au cas du Mexique. Il importe que

l'éducation se saisisse de l'emprise du néolibéralisme et en particulier du problème de la consommation et sa promesse illusoire d'ascension et de distinction sociale, ainsi que ses conséquences socio-environnementales sur les océans, l'atmosphère, la biodiversité, les sols, la santé, les inégalités, les migrations, etc. Nous nous attarderons enfin plus spécifiquement au problème du changement climatique, mettant en évidence les enjeux politico-pédagogiques qu'une telle crise globale soulève.

Gossin, F. P., & Simon, É. (2022). **Un aménagement de l'horaire pour une meilleure gestion des activités d'éducation scolaire et extra-scolaire : une question de partenariat, d'attentes et d'équité**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.17924
Cet article revient sur l'évaluation scientifique d'un projet pilote proposant une mesure d'aménagement du temps scolaire permettant aux élèves qui le souhaitent de quitter la classe pour participer à des cours de musique dispensés par des professionnels, ou pour bénéficier de mesures particulières. Ce projet, intitulé « Travail autonome encadré », devrait permettre une meilleure gestion des activités scolaires et extra-scolaires par une plus grande considération et intégration de ces dernières, ainsi qu'une collaboration plus étroite entre l'école et les institutions culturelles locales. Il s'agit dans cet article de présenter le positionnement des personnes impliquées par la réorganisation de la grille-horaire. Le problème de recherche cherche à répondre à la question suivante : comment les différentes parties prenantes perçoivent-elles ce réaménagement de la grille horaire en termes de conciliation des temps scolaire et extrascolaire, de partenariat et de justice scolaire ?

Gourdon, J. (2022, avril 18). **Plus de boursiers, moins de Parisiens… Les nouveaux visages de l'Ecole du Louvre**. *Le Monde.fr*. Consulté à l'adresse https://www.lemonde.fr/campus/article/2022/04/18/plus-de-boursiers-moins-de-parisiens-l-ecole-du-louvre-se-democratise_6122570_4401467.html
Jadis chasse gardée de « jeunes filles de bonne famille », l'Ecole du Louvre fait sa mue. Le profil des étudiants de cette grande école d'histoire de l'art évolue et conduit cette vieille institution à s'adapter à cette nouvelle génération, non sans accrocs.

Gousse-Lessard, A.-S., & Lebrun-Paré, F. (2022). **Regards croisés sur le phénomène « d'écoanxiété » : perspectives psychologique, sociale et éducationnelle**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.8159
Le vocable « écoanxiété » a récemment fait son entrée dans le discours médiatique, celui des mouvements sociaux et au sein des milieux éducatifs. Si le milieu de la recherche n'est pas en reste, trop peu d'écrits, particulièrement en français, se sont penchés sur le phénomène que le terme « écoanxiété » tente de saisir et sa prise en compte en éducation. En vue de contribuer à combler cet écart, cet article mobilise des perspectives ancrées en psychologie et en sociologie critique, fondées sur une recension d'écrits et les résultats d'une recherche empirique exploratoire. Il a pour objectifs 1) de clarifier les contours de cette notion, 2) d'exposer certaines stratégies de régulation de l'écoanxiété et les enjeux qui y sont associés, et 3) de fournir des pistes de réflexion pour l'intervention en éducation relative à l'environnement (ERE).

Grammenos, S. (2022). **European comparative data on Europe 2020 and persons with disabilities Labour market, education, poverty and health analysis and trends**. In

https://veille-et-analyses.ens-lyon.fr/Rapports/DetailRapport.php?parent=actu&id=3541 [Report]. Consulté à l'adresse European Commission (Transnational) website: https://op.europa.eu/fr/publication-detail/-/publication/0b6a78a6-9916-11ec-8d29-01aa75ed71a1

The European Union (EU) is strongly committed to ensuring equal opportunities and removing economic and social barriers for people with disabilities, as demonstrated among others by the ratification of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), the EU Disability Action Plan 2003-2010 and the multi-annual European Disability Strategy 2010-2020. The European Commission furthermore aims, and is bound by Article 10 of the Treaty on the Functioning of the European Union, to mainstream disability issues into all policies and actions that might affect the lives of people with disabilities, such as the Europe 2020 Strategy and the European Pillar of Social Rights. European Disability Expertise (EDE) provides independent scientific support to the Commission's policy Unit responsible for disability issues. It aims to mainstream disability equality in EU policy processes, including implementation of the United Nations Convention on the Rights of Persons with Disabilities. Task 2 aims to collect, analyse and provide independent data, information and analysis on the situation of persons with disabilities. It is important to note here the power of quantitative indicators in convincing people when personal perceptions and past attitudes resist to change. But this requires a high quality of statistical data and related estimates. Voir aussi le résumé analytique en anglais (14 p.) (pdf, 149 pages)

Heng, L., Quinlivan, K., & du Plessis, R. (2022). **Deconstructing initial teacher education: a critical approach**. *International Journal of Inclusive Education*, 26(6), 609-621. https://doi.org/10.1080/13603116.2019.1708982

The paper explores the development and facilitation of a new initial teacher education (ITE) programme underpinned by critical perspectives. It looks at the past and existing influences that have shaped the ways schooling is understood and operationalised in Aotearoa New Zealand. Through an 11-month ethnographic case study approach, the paper discusses an investigation of how a cohort of teacher educators attempt to highlight and deconstruct inequities underlying contemporary educational practices to student teachers. The purpose is to prepare emergent teachers who will be socially conscious of the purposes of education and to reconceptualise teaching with the learning outcomes of classroom students at the centre of education.

Hernandez, M., Pellerano, J. A., & Sanchez, G. (2022). *Conditional cash transfers and high school attainment: Evidence from a large-scale program in the Dominican Republic* (IFPRI Discussion Paper N° 2109). Consulté à l'adresse International Food Policy Research Institute (IFPRI) website: https://econpapers.repec.org/paper/fprifprid/2109.htm

Conditional cash transfer (CCT) programs are widely implemented in developing countries but evidence of their medium- and long-term effects on educational achievements is still relatively scarce. This paper examines the impact of a large-scale CCT program on high school attainment in the Dominican Republic. We implement a quasi-experimental approach combining extensive educational, administrative, and household records from program participants across the country and exploiting variations in the scheme (amount) of school transfers received among program participants. We find that receiving additional transfers specific for high school education is, on average, associated with an 11.7-13.2 percentage points higher probability of completing high school relative to not receiving these transfers. We do not find major

differences across urban and rural areas nor between female and male students. The transfers seem to play an important role during the last high school year of targeted students. The estimated impacts point to non-negligible effects on employment, salaries, and delayed parenthood. Several robustness checks support our findings.

Holgerson, M. (2022). **The management and commercialisation of intellectual property in European universities**. In *https://veille-et-analyses.ens-lyon.fr/Rapports/DetailRapport.php?parent=actu&id=3543* (p. 27) [Report]. Consulté à l'adresse European Commission (Transnational) website: https://op.europa.eu/fr/publication-detail/-/publication/cfa4b8b0-99d7-11ec-83e1-01aa75ed71a1

This report presents the results of an empirical study that explores intellectual property (IP) management practices among universities in the European Union. The report presents models and processes of IP management and research commercialisation – and their interdependencies. Furthermore, the report identifies four main challenges for IP management, including lack of funding for proof-of-concept work, resource constraints, a broad range of technologies and industries with which technology transfer offices (TTOs) need to work, and a non-existent local industry combined with legitimacy problems when trying to partner internationally. All in all, these challenges typically make IP management in the university setting more difficult than in the private industry setting. The dominant and linear IP management process that focuses primarily on value capture – the appropriation model – is criticised, and interviewees see a need to shift focus to better interact with industry and focus more on value creation and utilisation rather than only on appropriation.

Holme, J. J., Castro, A. J., Germain, E., Haynes, M., Sikes, C. L., & Barnes, M. (2022). **Community Schools as an Urban School Reform Strategy: Examining Partnerships, Governance, and Sustainability Through the Lens of the Full-Service Community Schools Grant Program**. *Educational Policy*, 36(3), 520-549. https://doi.org/10.1177/0895904820901479

The community school concept has become a popular school reform model that has gained traction in urban school systems. To date, however, few studies have looked across contexts to see how various communities are conceptualizing the reform: the aims that are articulated, the partnerships that are being created, or sustainability plans. In this study, we explore these questions through an analysis of 32 funded proposals from the federal Full-Service Community Schools grant program. We examine the goals, aims, and plans of reformers and ask questions about governance, inclusion, and sustainability, situating our analysis in the policy implementation literature.

Huang, F. (2022). **Impacts of the COVID pandemic on international faculty's academic activities and life in Japan**. *Higher Education Quarterly*, 76(2), 260-275. https://doi.org/10.1111/hequ.12369

The purpose of this study is to explore impacts of the pandemic on the academic activities and life of full-time international faculty at Japanese universities, drawing on findings from semi-structured interviews with them. Main findings include three points. First, although the vast majority of the interviewees believed that the pandemic has had more negative impacts on their academic activities and life, the case study of Japan suggests that there are both negative and positive impacts from the pandemic that are unique on international faculty's academic activities and life. Second, the study reveals that the

impacts on international faculty vary according to the backgrounds of the interviewees such as their academic disciplines, countries of origin, and work roles and duties. Finally, participants may have experienced discrimination etc., but not felt comfortable talking about it. It seems that no interviewees, particularly those from China and other parts of Asia, experienced social exclusion and xenophobic attitudes and, at times, became victims of discrimination and verbal assaults.

Huang, F., Crăciun, D., & de Wit, H. (2022). **Internationalization of higher education in a post-pandemic world: Challenges and responses**. *Higher Education Quarterly*, *76*(2), 203-212. https://doi.org/10.1111/hequ.12392
This editorial discusses the impact from the COVID-19 pandemic on the internationalization of higher education, focusing on what general and specific challenges internationalization of higher education in individual countries and systems has faced and will face, and what strategies they developed to deal with these challenges in a post-pandemic world. Moreover, it outlines the COVID-19 pandemic and both institutional and national policies for internationalization of higher education in a comparative and global perspective. Finally, it presents key findings from nine articles that are included in the Special Issue.

Hunter, F., Sparnon, N., & Latorre, P. (2022). **Moving internationalisation beyond exceptionalism using the MARS model**. *Higher Education Quarterly*, *76*(2), 311-327. https://doi.org/10.1111/hequ.12385
This paper considers the changing nature of internationalisation in higher education in response to the COVID-19 pandemic and how this change has required institutions to strengthen the case for internationalisation by linking it more explicitly to institutional purpose. It argues that this development requires institutions to formulate approaches to internationalisation that are explicitly linked to vision and mission statements, that often directly cite the support and development of society in general and local communities specifically, as strategic institutional priorities. In turn, this requires an examination of how internationalisation is addressed in strategic statements and the implications for practical delivery. The paper is underpinned by the authors' understanding of the nature and operation of institutions of higher education which is exemplified by the MARS model. It briefly describes this model and argues that within it, internationalisation activities should be seen as a transversal theme, which affects all operations of the institution in a coordinated matter, rather than an isolated or "exceptional" activity which can be allocated exclusively to specialised units such as the International Office—termed "exceptionalism". Exploring this theme further, the paper sets out how internationalisation should be embedded into all aspects of institutional operations in a way that is consistent with the hierarchy of priorities set out in the MARS model. A case study from Latin America in which this approach was adopted is presented in which some of the practical implications are considered. The paper concludes by exploring the implications of these outcomes and the potential for, and the nature of, future applications of the MARS model to the development and delivery of re-imagined internationalisation strategies in the post-COVID-19 world.

Jarraud, F. (2022a, avril 8). **Terra Nova pour la libéralisation totale de la formation professionnelle**. Consulté 12 avril 2022, à l'adresse Le café pédagogique website: http://www.cafepedagogique.net/lexpresso/Pages/2022/04/08042022Article637849972

002068441.aspx?actId=ebwp0YMB8s1_OGEGSsDRkNUcvuQDVN7aFZ1E4yS5hsZMczVe0o
RbhmAPNiXrAmaf&actCampaignType=CAMPAIGN_MAIL&actSource=515762
Jarraud, F. (2022b, avril 20). **L'Unesco alerte sur le décrochage des garçons**. Consulté 20
septembre 2022, à l'adresse Le café pédagogique website:
http://www.cafepedagogique.net/lexpresso/Pages/2022/04/20042022Article637860334
466546988.aspx?actId=ebwp0YMB8s1_OGEGSsDRkNUcvuQDVN7aFZ1E4yS5hsZMczVe0o
RbhmAPNiXrAmaf&actCampaignType=CAMPAIGN_MAIL&actSource=515998
Phénomène jusque là réservé aux pays les plus développés, le décrochage scolaire des
garçons gagne aujourd'hui les pays les plus pauvres. C'est ce que montre un nouveau
rapport de l'Unesco. La pauvreté reste le facteur principal de décrochage. Mais
l'Unesco pointe aussi la culture viriliste et les stéréotypes de genre.

Jingru, Q. (2022). **Urban-Rural Differences under the Context of China's Political Textbook
System: Student Perspectives**. *Education and Urban Society*, *54*(4), 423-444.
https://doi.org/10.1177/00131245211012360
The term "life-related," a significant characteristic of new political textbook(s) in China's
new curriculum reform at senior high school level, means that the textbook(s) should be
based on the learners' life experiences and designed to enhance learning in daily life.
There has been little relevant research about student perspectives on how "life-related"
a textbook is, especially on comparing students from urban and rural areas. This paper
has two aims: Firstly, to compare the perspectives of the urban and rural students about
how "life-related" a textbook is; and secondly, to concentrate on identifying the
effecting factors on the student perspectives. In this study, the results of questionnaire
survey (N = 569), with 285 students from a urban school and 284 students from a rural
school, indicated that the political textbook (Politics and Life, in short P&L) is more related
to urban students' daily life. Findings from semi-structured interviews and content analysis
of the textbook suggested that public resource, family background, and the urban-
oriented textbook content may explain the urban-rural difference of students'
perceptions on political textbook.

Jouan, S. (2022). **La classe à plusieurs cours à l'épreuve du modèle de la classe
homogène. Une organisation pédagogique subversive de la forme scolaire ?** *Éducation
et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.17798
Partant du constat que près d'un élève sur deux est aujourd'hui scolarisé en France en
classe à plusieurs cours, cet article met en évidence le hiatus entre la fréquence de cette
configuration de classe, historiquement ancrée dans le paysage scolaire français depuis
le 19ème siècle sous la forme initiale de la classe unique, et la très faible considération à
l'égard de ces classes de la part de l'institution scolaire d'État. Après un exposé de l'état
de l'art sur les performances des classes à plusieurs cours françaises, une analyse de
plusieurs écrits institutionnels depuis la fin du 19ème siècle permet de corroborer
l'hypothèse selon laquelle les réticences à l'égard de ces classes peuvent s'expliquer
par l'attachement à un modèle pédagogique incompatible avec la réalité d'une classe
à plusieurs cours : modèle de l'enseignement simultané, consubstantiel à la forme
scolaire, prescrivant la constitution de classes homogènes. La classe à plusieurs cours, en
particulier celle qui rassemble plus de deux cours, apparaît alors comme potentiellement
subversive de cette forme scolaire.

Karimian, Z., Farrokhi, M. R., Moghadami, M., Zarifsanaiey, N., Mehrabi, M., Khojasteh, L.,
& Salehi, N. (2022). **Medical education and COVID-19 pandemic: a crisis management**

model towards an evolutionary pathway. *Education and Information Technologies*, *27*(3), 3299-3320. https://doi.org/10.1007/s10639-021-10697-8

The COVID-19 crisis has had a profound effect on higher education, especially medical education due to its sensitive nature, dealing with people's life and wellbeing. This study presented a crisis management model of how to direct medical education during crises. A qualitative design was used via a focus group among 83 medical education administrators at Shiraz University of Medical Sciences. Four major challenges emerged regarding medical education during the COVID-19 pandemic including "The health and wellbeing of faculty members and students"; "Spatial constraints"; "Time constraints", and "Access to resources". A total of 13 strategies were suggested to tackle the challenges, including virtualization, technological support, empowerment, participation, sharing, helping, integration, compression, omission, flexibility and diversity, severance, protection; and monitoring. For a sustainable educational pathway in medical education, personalized approach to education via the incorporation of technology is essential. This provides opportunities to tackle the issues caused by the crisis, by provision of any time and anywhere approach to education via flexible technologies/platforms adjusted based on the audiences. The scope of crisis management expands not only on individual and academic levels but also on social and global relations.

Keevy, J., Shiohira, K., Matlala, R., & Molokwane, P. (2021). ***New qualifications and competencies for future-oriented TVET: volume 3 : TVET delivery: providing innovative solutions**.* Consulté à l'adresse https://unevoc.unesco.org/pub/new_qualifications_and_competencies_for_future-oriented_tvet_-_vol_3.pdf

Kemper, R., Bradt, L., Keygnaert, I., Pulinx, R., Van Avermaet, P., & Derluyn, I. (2022). **Separating newcomers: pragmatism or ideology? Schools' responses to newly arrived migrants in Flanders**. *International Journal of Inclusive Education*, 26(6), 622-641. https://doi.org/10.1080/13603116.2020.1711537

This paper focusses on the organisational responses of secondary schools to newly arrived migrant students. In Flanders (the Dutch-speaking part of Belgium), as in many other European regions, newly arrived students are placed in segregated classes that aim to prepare them for integration in mainstream education. Deriving from, on the one hand, academic critiques on the principle of segregated classes and, on the other hand, the autonomy that schools have regarding practices for newly arrived students, the paper aims to shed detailed light on the organisational choices schools make regarding newcomers and how professionals in these schools experience and relate to these choices. Based on representative survey-data and in-depth interviews, gathered for a research project for the Flemish Department of Education, the results address class allocation, interaction with mainstream classes and transition procedures in the education for newly arrived students. The findings indicate that education for newcomers, in spite of being poorly embedded in the mainstream educational system, opts for organisational practices similar to those in mainstream education and very typical for the basic grammar of schooling. Professionals in these schools express doubt and ambiguity over many of these choices, sometimes paving the way for departure from customary practices.

Khan, S., Kambris, M. E. K., & Alfalahi, H. (2022). **Perspectives of University Students and Faculty on remote education experiences during COVID-19- a qualitative study**.

Owing to COVID-19 the Ministry of Education in the United Arab Emirates mandated educational institutions to shift to remote learning. In this study the perspectives on remote learning, of both students and faculty, from the Science major, in a public university in Dubai have been explored. A qualitative research was conducted through focus group discussions using a semi-structured interview guide. All discussions were recorded and transcribed verbatim. Thematic content analysis was carried out following coding and analyzing content using NVivo 12. Recurrent, emerging and diverging views were identified and represented under themes. Participants believed that altered human interaction was a major consideration in remote learning. Assessments were modified to reduce cheating however increasing students' accountability and prudent use of questions was suggested as a more effective strategy. Challenges associated with technology, changes to the learning environment, wellbeing and institutional policies were highlighted. Advantages of remote learning included more inclusivity, flexibility, availability of recorded sessions and time efficiency. Also, remote learning had compelled faculty to enhance their technological skills. Including class participation as a graded component of courses, clear institutional guidelines on assessments, use of recordings and methods of communication were recommended. It was evident that students' stances for learning were based on courses and disciplines, with a preference for synchronous lessons. Culture influenced interaction, assessments, acceptability, and accessibility of remote education. The views from this research will contribute to improving the adoption and outcomes of digital education in higher education in the field of science, while considering the sociocultural influences of the region.

Kiebler, J. M., & Stewart, A. J. (2022). **Student experiences of the COVID-19 pandemic: Perspectives from first-generation/lower-income students and others**. *Analyses of Social Issues and Public Policy*, 22(1), 198-224. https://doi.org/10.1111/asap.12288
Twenty-eight University of Michigan students (12 first-generation/low-income and 16 from more educated, affluent families) were invited online to provide open-ended responses and photographs representative of their experiences during COVID-19, in a modified Photovoice approach. Given the literature, we expected that cultural mismatch, class stereotypes, and relative deprivation would be relevant features of the accounts of self-identified first-generation/lower-income students' experience, in contrast to their peers. Using thematic analysis, three themes differentiated the written accounts of the experiences of the two groups of students: changed environmental demands, comparison to similar or different other students, and change or continuity in the availability of institutional support. Both groups of students shared concerns about issues with mental health, and concern for family. While first-generation/lower-income students reported that they experienced less access to space and quiet for their schoolwork, their counterparts reported that their conditions for studying were better. Additionally, when comparing themselves to others, first-generation students mentioned their best guesses about the experiences of more affluent students, while nonfirst-generation students tended to compare themselves to those like themselves. Finally, while nonfirst-generation students wrote of continued institutional support and dedication to schoolwork, first-generation students reported having fewer resources for academic success.

Kloetzer, L., Clarke-Habibi, S., Mehmeti, T., & Zittoun, T. (2022). **Welcoming mobile children at school: institutional responses and new questions**. *European Journal of Psychology of Education*, *37*(2), 459-488. https://doi.org/10.1007/s10212-021-00534-4
Switzerland, like other countries in Europe, has long depended on migration and mobility for its economy. Facilitating the integration of migrant children in school, primarily through the acquisition of the local language, has therefore been a priority for policymakers. In recent years, mobility has been on the increase and mobility trajectories have become more diverse. A growing percentage of families arriving in the country have experienced repeated mobility and may not plan to settle in Switzerland for good. This paper examines institutional responses to the increasing number of mobile children in Swiss public schools, in particular, the manner in which such children are welcomed. It presents the main findings of an exploratory research project focused on children in repeated mobility, defined as having lived in multiple countries before their arrival in Switzerland, regardless of family background or legal status. Adopting a sociocultural psychological approach, the paper examines the macro-social level of cantonal educational policies regarding welcome processes, the meso-social level of local school policies, and the microsocial level of teachers' practices and interactions in classrooms that welcome mobile children. Data include documentary analysis, interviews, and observations. Our analysis shows that a deficit view of mobile children and the preoccupation with language proficiency dominate policies and practices, resulting in the diversion of mobile children into special integration classes (so called "classes d'accueil" in the French speaking region, and "Integrationsklasse" in the Swiss German-speaking region). Mobility is conceptualized by Swiss policymakers, school directors, and teachers in terms of its challenges. In particular, school directors and teachers conceptualize mobility as increasing heterogeneity of the classroom. However, the situation varies greatly according to the personal orientations of school directors and teachers' personal engagement. The paper emphasizes the ambiguous role of the integration classes: while they may impair the long-term chances of educational success by reducing academic expectations for non-native-speaking mobile children, they may also be used as "third spaces" which afford pedagogical freedom for dedicated teachers, potentially of benefit for children. The paper examines these propositions in the light of sociocultural educational literature and draws upon the case of welcoming mobile children to question a series of assumptions about the ultimate purposes of public schooling in Europe today.

Kyaw, M. T. (2022). **Policy for promoting teacher educators' research engagement in Myanmar**. *Teaching and Teacher Education*, *113*, 103680. https://doi.org/10.1016/j.tate.2022.103680
This qualitative case study investigates the policy context for teacher educators' research engagement during Myanmar's reform to develop education colleges into higher education institutions. The data were obtained from document analysis and semi-structured interviews with teacher education authorities. The study found that, despite pitfalls, teacher educators' research engagement has been promoted through policy encouragement. It suggests that, among teacher educators, research engagement requires a supportive policy context through sustained encouragement to achieve realistic goals. However, such policies may be problematic if research engagement is pursued for competition or promotion rather than professional growth.

La Provoté, S. de. (2022). *Mise en oeuvre de la réforme de l'accès aux études de santé, bilan après deux ans : des progrès, mais peut mieux faire*. Consulté à l'adresse Sénat website: http://www.senat.fr/notice-rapport/2021/r21-590-notice.html

Lahaye, M. (2022). *Remettre l'École au cœur de la République*. Consulté à l'adresse https://m.fondation-res-publica.org/Remettre-l-Ecole-au-coeur-de-la-Republique_a1497.html

Le Cocq, C. (2021). *Transforming university in France after May 68 : the University of Nanterre 1971-1988* (Phdthesis, Université de Nanterre - Paris X). Consulté à l'adresse https://theses.hal.science/tel-03636144
Cette thèse est une contribution à l'Histoire des universités françaises : en effet, après la crise de Mai 68, la société entame un profond processus de transformations sociales, politiques et culturelles : en novembre 1968, le ministre français de l'Éducation Nationale, Edgar Faure initie une loi-cadre qui va mettre fin à l'ancien système des facultés, issu du XIXème siècle. Avec cette loi radicale, les universités en France deviennent officiellement autonomes et pluridisciplinaires. Le but de cette étude est d'évaluer les conséquences réelles de la loi sur le temps long, via l'analyse concrète d'une université en particulier : l'université de Nanterre, qui a vu la contestation étudiante apparaître sur son campus en 1968. Donc, dans cette thèse, nous étudierons d'abord les aspects politiques de l'université de Nanterre après 1968 : nous analyserons la fonction de président d'université et les différents conseils, mais nous essaierons surtout de comprendre les mécanismes de la culture politique de l'université de Nanterre après 1968. Ensuite, nous examinerons la transformation des missions de l'université : en effet, nous étudierons comment de nouveaux enseignements furent créés, comment de nouvelles disciplines et laboratoires furent fondés, et nous explorerons plusieurs initiatives originales de la période comme le téléenseignement ou l'éducation permanente. Finalement, nous verrons les évolutions sociologiques des étudiants, de leurs enseignants et du personnel administratif.

Lee, B. L., & Johnes, J. (2022). **Using network DEA to inform policy: The case of the teaching quality of higher education in England**. *Higher Education Quarterly*, *76*(2), 399-421. https://doi.org/10.1111/hequ.12307
Current literature on higher education (HE) performance only considers the production of graduates and not graduate employment. The latter needs to be factored into the HE production model as it not only measures the true impact of HE institutions (HEIs), but also provides policy implications on how resources should be allocated. Furthermore, the current literature on HE does not incorporate student responses into outputs, which should be in order to evaluate the teaching quality of HEIs. This study contributes to the existing literature by employing a network data envelopment analysis model that truly reflects the production process of HEIs and incorporates qualitative and quantitative data drawn from the UK Teaching Excellence Framework (TEF) to capture the effects from teaching quality and the graduate employment outcomes. The study allows us to compare the actual TEF outcomes with the teaching efficiency scores and determine the sources of inefficiencies which lead to policy implications.

Lee, J.-H., & Fuller, B. (2022). **Does Progressive Finance Alter School Organizations and Raise Achievement? The Case of Los Angeles**. *Educational Policy*, *36*(3), 587-623. https://doi.org/10.1177/0895904820901472

State finance reforms have raised per-pupil spending and elevated the achievement of disadvantaged students over the past half-century. But we know little about how fresh funding may alter teacher staffing or the social and curricular organization of schools, mediating gains in learning. We find that US$1.1 billion in new yearly funding—arriving to Los Angeles high schools after California enacted a progressive weighted-pupil formula in 2013—led schools to rely more on novice and probationary teachers. Schools that enjoyed greater funding modestly reduced average class size and the count of teaching periods assigned to staff in five subsequent years. Yet, high-poverty schools receiving higher budget augmentations more often assigned novice teachers to English learners (ELs) and hosted declining shares of courses that qualified graduates for college admission. Mean achievement climbed overall, but EL and poor students fell further behind in schools receiving greater funding.

Legardez, A., Cadet-Mieze, M., & Jeziorski, A. (2022). **L'éducation au politique sur des questions socialement vives (QSV) liées au développement durable (DD) et aux objectifs de développement durable (ODD)**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18473
Les travaux de recherche menés sur les questions socialement vives (QSV) peuvent-ils contribuer à une éducation au politique ? De nombreux auteurs qui se réclament des QSV s'inscrivent dans une perspective d'éducation à une écocitoyenneté politique dans une perspective transformative-critique. Nous proposons d'illustrer ces relations par l'étude de questions liées à l'éducation au développement durable (EDD), dans une perspective didactique et, plus spécifiquement, par la présentation-discussion d'une formation-action-recherche collaborative : le projet FECODD (Formation, Education et Compétences et Objectifs de Développement Durable). Comment l'éducation au DD – via les ODD - peut-elle contribuer à une meilleure compréhension et appréhension des enjeux politiques qui en émanent ?

Lelièvre, C. (2022, avril 13). **Le lycée professionnel, enfin sujet de débats ?** Consulté 13 avril 2022, à l'adresse The Conversation website: http://theconversation.com/le-lycee-professionnel-enfin-sujet-de-debats-180808
Au premier tour, les candidats à l'élection présidentielle se sont positionnés sur la voie professionnelle. S'agissait-il d'une mise en lumière inédite pour ces filières ? Éclairage historique.

Lenesley, P. (2022, avril 24). **Réformer les formations pour faire évoluer le système de santé**. Consulté 21 septembre 2022, à l'adresse The Conversation website: http://theconversation.com/reformer-les-formations-pour-faire-evoluer-le-systeme-de-sante-181096
Si la santé est un bien commun, la réforme des études de médecine et celle des formations paramédicales devraient être l'affaire de tous. Voici quelques éclairages sur les enjeux en cours.

Leonard, N. M., & Smyth, S. (2022). **Does training matter? Exploring teachers' attitudes towards the inclusion of children with autism spectrum disorder in mainstream education in Ireland**. *International Journal of Inclusive Education*, 26(7), 737-751. https://doi.org/10.1080/13603116.2020.1718221
Seventy-eight primary school teachers completed an online questionnaire comprised of demographic questions and a standardised measure of attitudes towards inclusion. It

was found that the teachers who completed the questionnaire had predominantly negative or neutral attitudes towards the inclusion of children with Autism Spectrum Disorder (ASD) in mainstream education. Gender, number of years teaching experience, training in Special Educational Needs (SEN) and/or inclusion or type of training in SEN and inclusion did not influence attitudes. However, teachers who believed they had the adequate resources to facilitate inclusion had significantly more positive attitudes than teachers who did not believe they had the adequate resources to facilitate inclusion. Although future research is needed to further explore the impact of student profile on teacher attitudes towards the inclusion of students with ASD, thought needs to be given to the type and content of teacher training in SEN and inclusion.

Lewis, J. (2022). **Skills and post-16 education bill: progress of the bill**. In *https://veille-et-analyses.ens-lyon.fr/Rapports/DetailRapport.php?parent=actu&id=3575* [Report]. Consulté à l'adresse https://researchbriefings.files.parliament.uk/documents/CBP-9394/CBP-9394.pdf
The Skills and Post-16 Education Bill [HL] was introduced in the House of Lords on 18 May 2021 and received its first reading in the House of Commons on 26 October 2021. It passed its report stage and third reading in the Commons on 21 February 2022. Consideration of amendments took place between 24 March and 7 April 2022. The Bill is now awaiting Royal Assent. The Bill aims to improve how the skills and post-16 education system functions in England. It supports the Lifetime Skills Guarantee, announced by the Prime Minister in September 2020. The Bill would implement reforms set out in the Department for Education (DfE) White Paper, Skills for Jobs: Lifelong Learning for Opportunity and Growth (January 2021). These included giving employers a greater say in skills development and introducing a Lifelong Loan Entitlement. The Bill also includes measures to address some of the recommendations of the Independent Panel Report to the Review of Post-18 Education and Funding (the Augar report), published in May 2019, particularly around increasing opportunities for flexible, lifetime learning.

Li, M., & Ai, N. (2022). **The COVID-19 pandemic: The watershed moment for student mobility in Chinese universities?** *Higher Education Quarterly*, *76*(2), 247-259. https://doi.org/10.1111/hequ.12383
As COVID-19 drastically affects cross-border mobility, virtual mobility emerges as a viable alternative to cope with the crisis. This article reports on the integrated findings of an exploratory sequential mixed methods design to understand benefits and challenges of virtual mobility at a Chinese university and future projection of outbound student mobility. The mixed methods design used in this study is characterized by an initial quantitative phase of data collection and analysis, followed by a phase of qualitative data collection and analysis, with a final phase of integration or linking of data from the two separate strands of data. The study suggests Chinese students appreciate the flexibility and economic advantages of virtual mobility but also express concerns on several limitations. Online mobility may be viewed as a complement or alternative for Chinese institutions when the COVID-19 crisis is over. As Chinese universities are promoting internationalization at home, the number of virtual programmes available to Chinese students will surge. In this context, coupled with the stress of geopolitical instability, the growth in Chinese student mobility may be entering a period of contraction, which may exert profound impacts on a global scale.

Logemann, M., Aritz, J., Cardon, P., Swartz, S., Elhaddaoui, T., Getchell, K., … Stapp, J. (2022). **Standing strong amid a pandemic: How a global online team project stands up to the public health crisis**. *British Journal of Educational Technology*, *53*(3), 577-592. https://doi.org/10.1111/bjet.13189

The annual instructional virtual team Project X brings together professors and students from across the globe to engage in client projects. The 2020 project was challenged by the global disruption of the COVID-19 pandemic. This paper draws on a quantitative dataset from a post-project survey among 500 participating students and a qualitative narrative inquiry of personal experiences of the faculty members. The findings reveal how innovative use of a variety of collaboration and communication technologies helped students and their professors in building emotional connection and compassion to support each other in the midst of the crisis, and to accomplish the project despite connectivity disruptions. The results suggest that the role of an instructor changed to a coach and mentor, and technology was used to create a greater sense of inclusion and co-presence in student-faculty interactions. Ultimately, the paper highlights the role of technology to help the participants navigate sudden crisis affecting a global online instructional team project. The adaptive instructional teaching strategies and technologies depicted in this study offer transformative potential for future developments in higher education. Practitioner notes What is already known about this topic The modern workplace calls for cross-cultural, digital collaboration skills, and this need has increased potentially after the impacts of the pandemic on moving a lot of work to remote settings—permanently. While instructional virtual teams are being used as part of diverse curricula to add an international, experiential element for students, universities still struggle helping students to acquire the whole spectrum of skills needed for the global digital workplace: virtual teamwork, project management, and comfort on working with digital business collaboration platforms. Virtual team research has studied impacts of the pandemic on organizational teams but there is little research on instructional online teams during the pandemic crisis. What this paper adds This paper adds evidence-based knowledge how virtual instructional teams, and their instructors navigated the broken connectivity situation when a global external health crisis forced students to transition from campuses to home environments in the middle of the collaboration project. It offers practical ideas how faculty used technology to connect with students and maintain class community in cases of inequal access to technology from home environments by using multiple platforms, and both, computer, and mobile enabled communication. It offers examples of student-centered, coaching-like teaching strategies and how these were applied when the global health crisis affected students in instructional teams. Implications for practice and policy The study offers implications for development of digital pedagogies for future; specifically, how to develop students' virtual intelligence and to promote intercultural awareness and collaboration skills in future higher education. The pandemic experiences shed additional light on the need to develop and acquire soft skills among students, for them to be able to navigate struggles and crisis in global, digital real workplace.

Main, J. B., Wang, Y., & Tan, L. (2022). **Preparing Industry Leaders: The Role of Doctoral Education and Early Career Management Training in the Leadership Trajectories of Women STEM PhDs**. *Research in Higher Education*, *63*(3), 400-424. https://doi.org/10.1007/s11162-021-09655-7

While gender diversity in leadership has been shown to benefit organizations and promote innovations, women continue to be underrepresented in leadership positions in

the industry sector. With increasing numbers of women pursuing PhDs in science, technology, engineering, and mathematics fields, it is critical to examine how PhD programs contribute to the career paths of PhDs. This study examines the role of doctoral education preparation in communication, management, and technical skills, as well as post-PhD early career management training (ECMT), on PhDs' attainment of leadership positions in industry. Data come from the National Science Foundation Survey of Doctorate Recipients, National Science Foundation Survey of Earned Doctorates, and National Research Council Rankings of PhD programs. Using regression analyses, results indicate that ECMT is associated with a higher likelihood of attainment of leadership positions. PhD preparation in management skills also contributes to the attainment of leadership positions. Previous literature has shown that structural inequities and workplace bias contribute to limiting women's progress to leadership positions and that it is critical to address systemic and workplace biases. Research findings suggest that PhD program preparation and increased access to professional development opportunities can help contribute to the enhancement of women's pathways to leadership roles. Structural changes in doctoral education preparation in management skills and increases in ECMT opportunities offered by employers also have the potential to increase the participation of STEM PhDs in leadership roles in industry.

Mangin, C., & Gousse-Lessard, A.-S. (2022). **Les sciences cognitives face aux changements climatiques : apports et limites pour l'éducation relative à l'environnement**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.8307
La nécessité d'apporter des réponses adéquates aux changements climatiques pose pour l'éducation relative à l'environnement (ERE), plusieurs défis quant à la diffusion des connaissances et leur traduction en actions, dans un contexte de déni persistant sur fond de polarisation idéologique. Certaines sciences cognitives, telle la psychologie cognitive, jettent un éclairage sur ces défis qui peut s'avérer riche en enseignements pour l'ERE. Toutefois, ces travaux s'exposent à au moins deux catégories de critiques. Les premières, d'ordre épistémologique et méthodologique, questionnent la reproductibilité et la validité externe des résultats et mettent au jour des penchants déterministes et centrés sur l'individu. Les autres, d'ordre éthique et politique, s'inquiètent des tendances post-démocratiques des solutions suggérées. Dès lors, que pourrait retenir l'ERE des enseignements des sciences cognitives pour favoriser l'action climatique et de quoi devrait-elle se garder ? Cette question est explorée à travers une analyse critique de ces enseignements, soulignant l'importance du développement de compétences métacognitives et de la lutte contre l'individualisme, et la nécessité d'approches plus démocratiques.

Marcel, J.-F., Tardif, M., & Piot, T. (2022). ***Trente ans de politiques de professionnalisation des enseignants: regards internationaux***. Consulté à l'adresse https://pum.univ-tlse2.fr/~Trente-ans-de-politiques-de~.html

Matsko, K. K., Ronfeldt, M., & Nolan, H. G. (2022). **How Different Are They? Comparing Teacher Preparation Offered by Traditional, Alternative, and Residency Pathways**. *Journal of Teacher Education*, 73(3), 225-239. https://doi.org/10.1177/00224871211015976
Nontraditional teacher preparation pathways were designed to offer different forms of preparation meant to attract different populations of teachers; however, prior literature suggests they may not provide as much of an alternative as initially intended. Drawing

on surveys of nearly 800 preservice student teachers and their mentor teachers, we offer a descriptive overview comparing traditional, alternative, and residency pathways preparing teachers in Chicago Public Schools. Our study provides evidence that nontraditional forms of teacher preparation in Chicago do indeed provide unique routes of entry into the profession. We find substantive differences in the kinds of preparation that these pathways offer, including features of preparation such as program and student teaching duration and methods course load, which are often assumed to differ. We also find differences in features not historically studied including mentor characteristics and experiences, types of mentoring provided, and supports received by mentors.

Maxwell, B., Booth, J., Bevins, S., Halliday, J., Hotham, E., Nelson, J., … Andrade, J. (2022). *Supporting science teachers to engage with and carry out research: research report*. Consulté   à   l'adresse https://www.nfer.ac.uk/media/4897/supporting_science_teachers_to_engage_with_and_carry_out_research_report.pdf
Ce rapport rend compte d'une recherche sur les effets d'un soutien supplémentaire visant à aider les enseignants à s'engager ou à mener des recherches pédagogiques sur l'enseignement des sciences et sur les types de soutien les plus utiles au Royaume-Uni. Il montre que ces programmes de développement professionnel (DPC) peuvent contribuer à un meilleur enseignement des sciences. L'utilisation de la recherche est plus efficace dans les écoles qui encouragent les enseignants à discuter, expérimenter et planifier de manière collaborative. L'impact est aussi plus marqué quand la direction permet aux enseignants de disposer du temps approprié. Différents types de DPC sont nécessaires pour soutenir l'utilisation de la recherche, en fonction des étapes de carrière, du rôle, des intérêts et des enseignants.

McNaughtan, J., Thacker, R., Eicke, D., & Freeman, S. (2022). **Committed to their craft: Understanding the relationship between job crafting and work commitment among faculty in the United States**. *Higher Education Quarterly*, *76*(2), 367-384. https://doi.org/10.1111/hequ.12293
Faculty engage in several institutional activities typically categorised as teaching, research and service. Within those activities there are numerous potential tasks, and research denotes that faculty often bemoan this work which can lead to turnover and lack of commitment. We present the job crafting framework as one way to allow faculty to be active participants in increasing their work commitment. The focus of this analysis was understanding which of the three concepts of job crafting (e.g., task, cognitive and relational) is most associated with work commitment among academic staff, or faculty. Employing a polychoric correlation matrix and confirmatory factor analysis to develop a structural equation model accounting for the relationships between job crafting and work commitment, we utilised a unique data set to answer three research questions. Our sample includes associate and full professors (N = 771) from 20 states in the continental United States. Findings highlight the importance of dissecting the construct of job crafting to better understand work commitment as evidenced by the strong positive relationships between work commitment and the relational and cognitive tenets of the job crafting framework. Implications include the potential for positive work commitment when administrators allow faculty more autonomy to define their work.

Mencacci, N. (2022). **Les conditions de la problématisation pour favoriser l'accès au politique : le cas de l'huile de palme à l'école primaire**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18220

L'article s'intéresse aux éducations à, et aux conditions de leur mise en œuvre, afin que la capacité à problématiser (Caparros-Mencacci, 2014) des apprenants soit suscitée. La perspective est ici de « replacer l'éducation dans son rôle de formation vers une citoyenneté politique engagée » (Barthes, 2017). Le cas particulier d'une éducation au développement durable va être étudié. Il s'agit d'un projet mené en classe de Cours Moyen 2° année sur la question de l'huile de palme dans le cadre des projets DAFIP/SFERE. Quatre résultats ressortent. Le premier est que la connaissance par l'enseignant du type de problème d'éducation à et du processus de problématisation des élèves constitue une base d'orientation de l'action qui pourrait lui permettre d'analyser a priori le problème, d'anticiper l'action mais aussi de s'y orienter. Le deuxième est que des artefacts médiateurs habilement choisis – par exemple le procès et le débat – favorisent les interactions problématisantes et le dépassement des points de vue initiaux. Le troisième est que la problématisation ne surgit pas de la défense d'un point de vue –fut-il argumenté – contre un autre, mais lorsque les élèves sont instruits de la totalité de points de vue étudiés et lorsque ces derniers peuvent être intégrés afin de construire une réponse. Ici, et c'est le quatrième résultat, la capacité de l'enseignant d'exercer un questionnement qui pousse les élèves à réfléchir est déterminante.

Millemaci, E., & Patti, A. (2022). *Nemo Propheta in Patria: Empirical Evidence from Italy* (FEEM Working Paper N° 319966). Consulté à l'adresse Fondazione Eni Enrico Mattei (FEEM) website: https://econpapers.repec.org/paper/agsfeemwp/319966.htm

In recent years, young brain drain within Italian provinces has increased at higher speed than ever. While is premature to assess whether this process is transitory or permanent, it should be analysed and monitored by researchers and policy makers for its many socio-economic consequences. Previous empirical studies have demonstrated that Italian net skilled migration is influenced by economic factors, such as income per capita and employment, and, with a less extent, by the search of places endowed with more amenities. In the crossroad between these factors, this paper investigates corruption as key element of the Italian skilled mobility. To this end, a comprehensive framework with Zero-Inflated Poisson and Pseudo-Poisson Maximum Likelihood with High Dimensional Fixed Effects models for bilateral data on the Italian students' flows is used. Results suggest the dual role of push and pull mechanisms at play, as high corruption incentivizes Italian skilled mobility to destinations that, instead, exhibit lower corruption. Moreover, sensitivity of the prospective tertiary students to corruption varies according to their field of study of interest. Finally, empirical evidence on skilled flows from the lagging Mezzogiorno to the North of Italy, suggests that the push and pull effects of corruption stir up the endurance of the well-known socio-economic dualism between these two parts of the country.

Minaeva, E., & Taradina, L. (2022). **Internationalization in Russian universities during the pandemic of COVID-19: Lessons for succeeding in the new reality**. *Higher Education Quarterly*, *76*(2), 293-310. https://doi.org/10.1111/hequ.12387

The pandemic of COVID-19 became a resilience test for internationalization in Russia and emphasized many systemic trends, both promising and concerning. The turbulence and instability during the pandemic initiated the growth of internationalization activities at the institutional level in two directions: first, it increased attention to the quality of work with

current international students, including student support, adaptation issues, student engagement, and second, due to the risks in student enrolment, it brought universities to rethink their internationalization instruments and strategies for work with international applicants and future students. Indeed, the ongoing changes in global education call for reconsideration of the priorities and methods of internationalization: new forms of internationalization become widespread practices, new instruments are necessary for student recruitment, and new push and pull factors come into play. While internationalization of education in Russia during the pandemic was addressed at the national level to a degree, the universities carried out the key activities and had to come up with solutions "in the field". The paper aims to provide a comprehensive analysis of Russia's transition through the pandemic and tackle the changes at the university level, based on a comparison of data of the survey of international departments of Russian universities conducted in 2020 and the survey of 2021, supported by semi-structured interviews. The research offers insights on the capacity for change and resilience in Russian universities within the internationalization domain and can help to develop data-driven approaches for improvement of organizational capacity of universities.

Ministère de la culture. (2022). ***Dites-le en français ! Vocabulaire de l'éducation et de la recherche 2022***. Consulté à l'adresse https://eduscol.education.fr/document/39464/download?attachment
Ce livret, mis à jour en 2022, rassemble des termes, expressions et définitions concernant l'éducation, l'enseignement supérieur et la recherche proposés par la Commission d'enrichissement de la langue française.

Mira, C. (2022a, avril 4). ***Augmentation des conventions Cifre : illustration d'un nouveau paradigme d'action de l'État ? Observations croisées avec les politiques d'éducation prioritaire***. Présenté à Journées d'études - Recherche sous contraintes. Consulté à l'adresse https://hal.science/hal-03653562

Mira, C. (2022b, mars 15). ***Co-agir dans les dispositifs d'orientation en territoires d'éducation prioritaire : enjeux de proximités, de ressources, de reconnaissances et de représentations***. Présenté à Continuum Sco-Sup. Consulté à l'adresse https://hal.science/hal-03653560
Les dispositifs d'orientation sur les territoires en éducation prioritaire sont envisagés ici par les sciences de l'éducation et de gestion pour proposer une étude liant deux disciplines qui le sont rarement. Nous étudions les consortiums d'acteurs pour comprendre leurs effets sur les parcours d'orientation des jeunes. Les politiques d'éducation prioritaire mettent en réseau les acteurs publics, associatifs et privés pour accompagner les trajectoires des jeunes. Ces relations sont envisagées dans une analyse multi-niveaux (intra-, inter-, organisationnel). La gouvernance en place pose les proximités, les ressources, les reconnaissances et les représentations comme enjeux qui induisent les positionnements des acteurs.

Mohamed Hashim, M. A., Tlemsani, I., & Matthews, R. (2022). **Higher education strategy in digital transformation**. *Education and Information Technologies*, *27*(3), 3171-3195. https://doi.org/10.1007/s10639-021-10739-1
Digital transformation in the global higher education industry determines the future roadmap to a sustainable education management strategy. This research paper aims to develop a qualitative model that advocates how digital transformation as a propelling

force could be used to build competitive advantages for universities. Building competitive advantage is a relative, evolving, and important concept in strategy formulation. In recent years, specifically in the education industry, the notion of building competitive advantage is challenged by global phenomena such as digital transformation globalization, information exchange, digitization and social media in most of the global industries. These phenomena have collectively made the process of building competitive advantage rapidly changing, short-term and contextual. These findings aid the evolution of strategic management practices in universities by providing empirical insights in determining the impactful changes and their connection to evolutionary learning. It also stresses the importance of using the developed model as a decision support system to generate, regulate and retain student experience and expectations. This research paper provides first-hand insight into the impactful changes affecting universities' vision and how they can turn these changes to their advantages and set a road map to design-develop models to integrate and regulate these essential changes in their strategies using evolution learning mechanism and digital transformation strategy.

Moignard, B., & Rubi, S. (2021). **Lectures sociologiques des désordres scolaires dans la recherche française. 30 ans de construction de l'objet. 1985-2015. Deuxième partie. Un nouvel âge des désordres scolaires : analyse des politiques éducatives et transformations de l'objet**. *Revue française de pédagogie. Recherches en éducation*, (213), 105-141. https://doi.org/10.4000/rfp.11104

Cette note de synthèse s'intéresse aux travaux de recherche français qui, entre 1985 et 2015, traitent des désordres scolaires au travers de différents objets sociologiques. Les désordres scolaires sont considérés comme une notion à partir de laquelle il est possible de rendre compte d'une pluralité d'objets qui, s'ils sont traités de manière disjointe, participent d'une mise en cohérence de ce qui fait problème à l'école comme de la désignation de « ceux » qui lui font des problèmes. Dans le premier volume de cette note paru dans le numéro 208, nous avons abordé divers débats et tensions qui traversent les travaux sur les désordres scolaires et, ce faisant, les institutions engagées au travers des productions scientifiques : ont ainsi été restituées les interrogations relatives aux marges d'action et aux résistances déployées par les acteurs, au libre arbitre de l'individu, à l'incidence des « contextes » en éducation, au positionnement de l'école comme acteur local ou comme école-sanctuaire, aux inégalités de scolarisation, au travail de la norme scolaire, à l'emprise de la forme scolaire sur les espaces éducatifs, etc. Le traitement quantitatif des productions scientifiques a d'ores et déjà commencé à montrer les tendances les plus récentes de la recherche relative aux désordres scolaires, l'écrasement du champ en certaines périodes par certains objets et les relations, alors étroites, entre commande publique, agenda politique et recherche en éducation. Nous revenons dans ce second tome sur ces relations comme sur l'émergence de paradigmes qui se diffusent tant du côté des travaux de recherche sur les désordres scolaires que plus globalement en sociologie de l'éducation. Nous interrogeons le traitement politique des désordres scolaires, en montrant comment de nouvelles problématiques scolaires mais aussi éducatives s'extraient de la scène scolaire pour se structurer comme problèmes publics. Ce nouvel âge des désordres scolaires rend compte d'une tentation de décontextualiser les modalités de production et de structuration de ces problèmes, comme des formes de leur prise en charge. Dès lors, nous cherchons à interroger la manière avec laquelle les recherches questionnent ces transformations, et ce qu'elles disent de l'évolution de la sociologie de l'éducation en général.

Mok, K. H., & Zhang, Y. (2022). **Remaking international higher education for an unequal world**. *Higher Education Quarterly*, *76*(2), 230-246. https://doi.org/10.1111/hequ.12366
Prior to the current global health crisis, the value, and benefits of international education for different social groups have been questioned. Critics of the internationalisation of education emphasise that international student mobility only favours the elites in society but has disadvantaged for those groups with less fortunate socioeconomic status. In view of the COVID-19 pandemic, leading scholars in the field of international higher education believe that a broad-based global crisis for higher education has emerged, of which one major consequence is intensifying inequality in education during and after the pandemic crisis. This article sets out against the COVID-19 pandemic crisis context to critically examine whether and how Asian students would continue going abroad for studies. Special attention is given to those major factors that shape the destination choices of students and their desire for international education. Based on a survey on Asian students' overseas learning preferences, this article reflects upon the future of international higher education from the geo-political and socio-psychological perspectives. This article also highlights the major challenges that hinder international higher education development and draws crucial lessons from the impact of the COVID-19 crisis on such a development.

Na, V. S., Wang, A. C., & White, H. H. (2022). **A letter to future scholars in the struggle for justice**. *International Journal of Qualitative Studies in Education*, *35*(5), 478-495. https://doi.org/10.1080/09518398.2021.1982058
As institutions of higher education continue to evolve and adopt neoliberal ideologies, doctoral student socialization is increasingly shaped by logic and exacerbated for students of color. In this paper, we use the five tenets, privatized consumerism, precarity, competitive individualism, surveillance, and declining morality, offered by Museus and LePeau derived from a postsecondary education context. To understand this experience, we as three Asian American women in an education doctoral program utilize Kimoto's theorization of restiveness and collaborative autoethnography to examine and untangle our complicities in contributing to neoliberal doctoral socialization. By employing a restive orientation, we acknowledge and discuss our complicities as a pathway towards continual collective consciousness-raising, self-reflexivity, and collective care.

Nano, E. (2022). *Electrifying Nigeria: the Impact of Rural Access to Electricity on Kids' Schooling* (IHEID Working Paper N° 03-2022). Consulté à l'adresse Economics Section, The Graduate Institute of International Studies website: https://econpapers.repec.org/paper/giigiihei/heidwp03-2022.htm
As of 2020, 770 million people still lack access to electricity worldwide and 10% of this population is in Nigeria. Nevertheless, the country has received so far little attention in this respect from the academic community. The economic literature also does not generally agree on the impact of access to electricity on education outcomes, despite being the object of several programmes and policies, and one of the key SDGs of the 2030 Agenda. This paper aims at filling these gaps in the literature by providing a medium-term analysis of the effect of village-level electricity access on kids' schooling in rural Nigeria. It also contributes to the methodological debate using a novel instrument in this context, namely the frequency of lightning strikes in the area surrounding households. The results show that electricity access leads to an increase in school enrolment and a decrease in

the grade-for-age (GFA) gap, a measure of educational performance. The paper also discusses some of the mechanisms that can lead to the observed findings, their robustness and heterogeneity, as well as the role of the quality of electricity received.

Natow, R. S. (2022). **Research Use and Politics in the Federal Higher Education Rulemaking Process**. *Educational Policy*, *36*(3), 689-716. https://doi.org/10.1177/0895904820917363
This case study examined how research has been used in the federal higher education rulemaking process, through which the U.S. Department of Education implements programs under the Higher Education Act. Findings indicate that in this high-conflict policymaking process, politics infuses various forms of research use to create several overlapping categories of use (political-instrumental, political-conceptual, and political-imposed) that existing typologies of research use omit. This study demonstrates how previous conceptualizations of forms of research use should be expanded to account for these politically infused forms of research use. This study also uncovered consequences of widespread political research use in rulemaking, including a general distrust of research presented in the process and political actors using the same or similar data to reach different conclusions.

Ng, D. T. K. (2022). **Online aviation learning experience during the COVID-19 pandemic in Hong Kong and Mainland China**. *British Journal of Educational Technology*, *53*(3), 443-474. https://doi.org/10.1111/bjet.13185
The COVID-19 pandemic has triggered an unexpected digital revolution, speeding up universities' digital transformation worldwide. It has brought heavy disruptions to travel and mobility worldwide, but it drives the opportunity for hosting region-wide or even international academic exchanges through learning programs, workshops, and conferences via an alternative online mode. This study reports on a case study of a 1-month online aviation learning program that engaged 108 university students from Mainland China and Hong Kong during the lockdown. At first, we first recruited students in Hong Kong; however, the program registration was unsatisfactory. This could be attributed to the students' perceived future aviation career prospects and readiness of emergent remote teaching during the pandemic. In the program, we designed an alternative blended learning approach to attract students to sustain their aviation learning. First, we transformed the activities from face-to-face (F2F) to online settings using digital technologies including flight simulation and virtual visits in a web-conferencing environment. Second, we extended the reach of the event and attracted a larger audience in the neighbouring regions in Mainland China. It turned out that we could successfully recruit 108 students from 20 cities. In the end, students' interviews and motivational surveys indicated that this online learning experience could effectively enhance students' knowledge and motivational gain. Since the government has relaxed the policy of homeschooling, we organised two F2F meetings for students in Hong Kong to connect them together. This blended mode of teaching favoured the students in Hong Kong who showed a greater motivation than those in Mainland China. Furthermore, follow-up interviews for teachers revealed how they invest in new technological equipment and knowledge to support the radical changes. Overall, the virtual event eliminates geographical barriers which successfully motivate a larger audience and gain some online collaboration between universities. This article offered useful evidence for engineering educators to reflect on online informal learning, lab settings and academic exchanges, and motivate more students to revitalise aviation education and industry. Practitioner notes What is already known about this topic Emergency remote teaching

(ERT) caused a temporary shift of instructional delivery to an alternate online mode due to crisis circumstances. After months, educators gained rich online teaching experience and resources, and developed strategies to digitally transform teaching online. During the COVID-19 pandemic, many aviation educators were facing various teaching challenges due to the industry downturn and motivation problems. Although prior research had explored the potential of hands-on activities such as flight simulation and online learning in university settings, few studies have examined students' motivations for online aviation learning, few studies discussed how these technologies are digitally transformed to a blended learning environment. What this paper adds The pandemic drastically affected students' learning in almost every discipline, but in seriously affected industries such as aviation and tourism, extra efforts are needed to investigate how educators support students to sustain their learning and recover the related industries. Motivation questionnaires and interviews were conducted to paint an initial picture of an online aviation education program across university students from Hong Kong and Mainland China. Implications for practice and/or policy This study shifted to examine the implications of the pandemic-imposed online teaching strategies including flight simulation and virtual tours which could improve future university education after the pandemic. This study showed the need of face-to-face blended learning mode to address university students' learning needs to connect physically with professionals and classmates. This study understood how educators motivate university students in urban cities from Hong Kong and Mainland China to their online teaching in the aviation discipline.

OCDE. (2022). **_Comment rendre l'accès des élèves à l'apprentissage numérique plus équitable ?_** (L'enseignement à la loupe N° 43). https://doi.org/10.1787/fdf2470c-fr

O'Dea, X. (Christine), & Stern, J. (2022). **Virtually the same?: Online higher education in the post Covid-19 era**. _British Journal of Educational Technology_, _53_(3), 437-442. https://doi.org/10.1111/bjet.13211

OECD. (2022). **_OECD Reviews of Evaluation and Assessment in Education: Bosnia and Herzegovina_**. Consulté à l'adresse https://www.oecd-ilibrary.org/fr/education/oecd-reviews-of-evaluation-and-assessment-in-education-bosnia-and-herzegovina_a669e5f3-en
Bosnia and Herzegovina (BiH) has high levels of educational attainment and performs similar to other Western Balkan economies in international assessments of student learning, like the Programme for International Student Assessment (PISA). However,...

Oleksiyenko, A. V. (2022). **World-class universities and the Soviet legacies of administration: Integrity dilemmas in Russian higher education**. _Higher Education Quarterly_, _76_(2), 385-398. https://doi.org/10.1111/hequ.12306
This paper explores integrity dilemmas experienced by Russian academics in the context of building a world-class university. Interviews with professors and managers of major research universities in Moscow provide critical insights into the organisational and attitudinal incongruities generated by a coercive state—a challenge that Russia has been unable to rise above following the collapse of the Soviet Union. Scepticism as to the "master model" of competitive performance is evident in relation to the Russian 5-100-2020 excellence scheme, the overseers of which prioritise "reputation management" over integrity in governance and performance. In addition to exposing the

consequences of deficient institutional autonomy, which prevail in the context of a post-totalitarian society, this paper calls for enhanced critical inquiry into university excellence programmes imposed by performativist and vanity-driven governments.

Palmisano, F., Biagi, F., & Peragine, V. (2022). **Inequality of Opportunity in Tertiary Education: Evidence from Europe**. *Research in Higher Education*, 63(3), 514-565. https://doi.org/10.1007/s11162-021-09658-4
This study provides comparable lower-bound estimates of inequality of opportunity for tertiary education (EIOp) for 31 countries in Europe, by using the two EU-SILC waves for which information on family background is available (2005 and 2011). The results reveal an important degree of heterogeneity, with Northern European countries showing low levels of inequality of opportunity and Mediterranean and Eastern European countries characterized by significant degrees of unfair educational inequalities. Parental education and occupation are the most relevant circumstances in the great majority of the countries considered. This study also exploits the two point-in-time observations available and analyses the relationship between some country-specific characteristics and inequality of opportunity in tertiary education. The analysis documents a negative association between EIOp and real GDP per capita, possibly indicating that higher equality of opportunity in tertiary education and economic growth are complementary objectives. Two results emerge as especially robust: in all the specifications we find a positive association between EIOp and the students/teacher ratio, and a negative one between EIOp and public spending in tertiary education. While we do not claim that such correlations should be interpreted causally, we think that they might indicate a meaningful underlying relationship between equality of opportunity in tertiary education and the availability of financial and non-financial resources.

Parey, B. (2022). **Accommodations for the inclusion of children with disabilities in regular schools in Trinidad: a mixed methods approach**. *International Journal of Inclusive Education*, 26(6), 559-575. https://doi.org/10.1080/13603116.2019.1701719
This paper examines the accommodations for the inclusion of children with disabilities in regular schools in Trinidad. A multiphase mixed methods design consisting of three phases is used. In the first phase, the environmental accommodations essential for the inclusion of children with disabilities in schools are identified. This information is obtained through interviews with parents and advocates of children with various disabilities. Five themes emerge, namely, qualified human resources, educational materials, physical access, supportive learning systems, and supportive school policies and rules. A questionnaire is then developed in the second phase based on these qualitative findings which is administered to a representative sample of primary and secondary schools in the third phase. Qualitative data are also collected in the third phase. Particularly, data on inclusive education policy are collected from primary and secondary schools and data on legislation supporting inclusion from government officials. The integrated findings indicate that existing environmental accommodations, law, and policy do not fully support the inclusion of children with disabilities in Trinidad. They further illustrate the need for national discourses to move beyond access to maximum participation, and for stronger legislation to ensure inclusion in schools.

Partenariat mondial pour l'éducation. (2022). ***Cadre opérationnel pour l'Accélérateur de l'éducation des filles. Version préliminaire***. Consulté à l'adresse https://assets.globalpartnership.org/s3fs-public/document/file/2022-03-cadre-

operationnel-accelerateur-education-
filles.pdf?VersionId=iYAC7UwC_SyxwZoTWwYIekY5tVCXFdSw

L'Accélérateur de l'éducation des filles octroie un financement thématique en faveur de l'égalité des genres en mettant l'accent sur l'éducation des filles. Cette ressource a pour vocation d'inciter les pays à être plus ambitieux en matière d'égalité des genres et d'accélérer le changement transformationnel des systèmes vers l'égalité des genres dans et par l'éducation, là où les filles sont le plus en retard. Ce financement supplémentaire qui ne peut être utilisé qu'en étant associé avec l'un ou les deux financements principaux du GPE pour la transformation du système, et en y étant intégré. Ce document définit le cadre opérationnel de l'Accélérateur de l'éducation des filles.

Peltier, C. (2021). ***L'objet pédagogique territorialisé pour enseigner les transitions et l'agroécologie : l'exemple de l'enseignement agricole français engagé dans le plan stratégique « Enseigner à produire autrement »*** (Phdthesis, Université Bourgogne Franche-Comté). Consulté à l'adresse https://theses.hal.science/tel-03633992

Cette thèse s'inscrit dans les recherches sur l'éducation au développement durable et la formation des professionnels de l'agriculture vers une transition agroécologique. Elle emprunte à une approche pluridisciplinaire, en éducation, géographie, agronomie, économie et philosophie, organisée autour d'un corpus théorique qui combine la didactique professionnelle et les pédagogies constructivistes problématisées. Son objectif est d'étudier le travail de préparation et d'enseignement de séquences de formation auprès d'élèves ou apprentis, réalisées par des professeurs de l'enseignement agricole, cherchant à répondre aux prescriptions de transition de l'enseignement agricole vers un enseignement de l'agroécologie. Nous examinons aussi le rôle de l'accompagnement sur les apprentissages, prises de conscience, orientation de l'activité de ces enseignants.Pour cela nous avons mis en place un dispositif d'observation qui saisit les enseignants dans la conception d'une nouvelle séquence d'enseignement, et leur accompagnement ; préparation, mise en œuvre, séquences de rencontre avec l'accompagnateur, réajustements, mise en œuvre, bilan. Quatre cas sont examinés : le blaireau, le poulet d'élevage, le verger maraîcher, la luzerne en collectif. Tous sont conçus à partir d'une proposition qu'est l'objet pédagogique territorialisé proposé comme hypothèse favorisant des apprentissages de la durabilité et de la transition pour les élèves.Les résultats montrent que les activités des enseignants, de problématisation et de conceptualisation des savoirs permettant aux apprenants de s'y connaître en termes de transition, sont capitales pour que ces derniers puissent à leur tour identifier et nommer les voies possibles de ces dites transitions. Ils montrent également que notre démarche de recherche constitue une aide pour que les enseignants considèrent la durabilité, l'agroécologie, la transition comme des concepts donnant aux apprenants de la puissance d'agir sur les situations pédagogiques, professionnelles, auxquels ils peuvent être confrontés. Nous dégageons ainsi les conditions pour enseigner et apprendre autrement les transitions et l'agroécologie qui se retrouvent dans les dimensions de l'objet pédagogique territorialisé. Nous dégageons également des profils et trajectoires d'enseignants engagés dans l'enseignement des transitions et de l'agroécologie.

Pérez Diez, A., García Vinuesa, A., M. Bisquert i Pérez, K., & Á. Meira Cartea, P. (2022). **L'éducation relative au changement climatique dans la recherche, les politiques climatiques et les curriculums de l'éducation secondaire**. *Éducation relative à*

l'environnement. *Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.7877

Cet article présente la démarche et les résultats de deux recherches doctorales réalisées dans le cadre du projet Resclima de la Universidade de Santiago de Compostela (Galice). Ces recherches sont complémentaires : elles offrent un état de la question de l'ERCC à l'échelle académique, politique et scolaire, plus spécifiquement dans l'enseignement secondaire. La première consiste en une analyse bibliométrique visant à caractériser la recherche portant sur le changement climatique (CC) à l'école secondaire. La deuxième permet de dresser un portrait de l'état général de la recherche actuelle sur l'éducation relative aux changements climatiques (ERCC) dans les programmes scolaires à travers ses principaux axes d'articulation : les politiques climatiques et éducatives, le développement des curricula ainsi que l'analyse de manuels scolaires et des pratiques pédagogiques innovantes. Ces deux recherches mettent en évidence l'importance de se doter d'un agenda international de recherche éducative sur l'ERCC, ainsi que la nécessité de développer de curricula nationaux qui placeraient la lutte contre le CC au centre de l'éducation formelle.

Point, C. (2022). **L'université à l'ère de l'anthropocène : repenser l'éducation au politique par l'écologie**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18168

Ce travail imagine un dialogue fictif entre Hannah Arendt et Greta Thunberg au sujet de la place de l'écologie politique à l'université. Ainsi, l'objectif de notre travail est d'interroger le cadre théorique nécessaire à l'inscription à l'université d'une éducation à l'écologie politique. Dans un premier temps, nous interrogeons ce qui empêche pour l'heure de développer une véritable pédagogie universitaire sur ce sujet. Plus spécifiquement, nous prenons l'exemple de la pensée de Hannah Arendt pour illustrer les dualismes conceptuels entre l'enfant et le monde, l'éducation et la politique, l'éducation et l'instruction, qui, selon nous, nous empêchent de penser pédagogiquement et politiquement la place de l'écologie au sein des universités. Les dégâts de ces dualismes sont ensuite illustrés à partir de notre façon d'appréhender l'éco-anxiété. Enfin, nous proposons quelques pistes prospectives et générales pour inscrire l'écologie comme cadre épistémologique de recherche, d'enseignement et de formation universitaires.

Poisson, M. (2022). *Élaborer des politiques de données ouvertes sur l'école : principes de base*. Consulté à l'adresse https://unesdoc.unesco.org/ark:/48223/pf0000378493_fre/PDF/378493fre.pdf.multi

Un nombre croissant de pays publient des données sur leurs écoles, c'est-à-dire toutes les informations communiquées au public sur les moyens et les processus mis en œuvre, ainsi que sur les résultats. Ces données dotent les citoyens d'un outil puissant pour exercer un contrôle social sur l'utilisation des subsides publiques. Afin d'aider les décideurs comme les planificateurs et les gestionnaires de l'éducation à prendre des décisions éclairées lors de l'élaboration des politiques de données ouvertes sur les écoles, ce document formule huit principes de clés. Il s'agit notamment de considérer ces données ouvertes comme un bien public s'appuyant sur les systèmes d'information en place, de privilégier les données susceptibles d'induire un changement positif et de prendre en compte les risques éthiques dès le départ.

Portz, J., & Beauchamp, N. (2022). **Educational Accountability and State ESSA Plans**. *Educational Policy*, *36*(3), 717-747. https://doi.org/10.1177/0895904820917364
This paper examines different state approaches to educational accountability in response to the Every Student Succeeds Act. Cluster analysis reveals three groups of states with similar indicator weights and rating systems, and principal component analysis identifies two dimensions underlying these clusters. We find that state-level demographics are correlated with the types of assessment policies adopted by states: policy liberalism is associated with putting greater weight on school quality and student success, while economic variables are associated with traditional performance measures, such as graduation rates and testing. These clusters reveal different approaches to measuring accountability and prioritizing different kinds of information, which can in turn influence the nature of education politics.

Prévost-Zuddas, J. (2021). *Obstacles et facilitateurs à l'inclusion scolaire des élèves allophones dans l'enseignement secondaire en France et incidences didactiques* (Phdthesis, Universié de Lorraine). Consulté à l'adresse https://hal.univ-lorraine.fr/tel-03635166
Notre recherche porte sur l'inclusion scolaire d'élèves dits «allophones» en cours ordinaires dans le secondaire public en France. Ces élèves – migrants et ne parlant pas encore la langue de scolarisation – sont ainsi nommés par l'institution scolaire.De type qualitatif, l'étude repose sur l'analyse d'un corpus quinquangulaire (travaux, questionnaires, entretiens d'élèves, écrits autobiographiques, bulletins scolaires) recueilli auprès de 33 apprenants et de 6 enseignants (Académie de Nancy-Metz). Cette étude éclaire la situation métropolitaine. La problématique allophone relève d'une agrégation de multiples facteurs. Nous étudions des facilitateurs et des obstacles à l'inclusion scolaire des élèves allophones par l'étude des discours des élèves et des démarches didactiques des enseignants participant à notre recherche.Nos questions de chercheure se sont imposées en lien avec notre expériencie professionnel et nos lectures. Trois hypothèses de recherche y sont subordonnées. D'abord, le contexte socio-économique familial n'est pas le seul obstacle à la réussite scolaire des élèves allophones suivis. Ensuite, l'affiliation en cours disciplinaire de français des élèves allophones suivis permet un apprentissage mieux maitrisé du FLSco. Enfin, l'inclusion en cours disciplinaire de français permet aux élèves allophones suivis d'investir davantage l'école.Il ressort de cette étude que les apprenants suivis partagent un contexte socio-économique fragile et que la composition familiale et la taille de la fratrie distinguent les élèves suivis. Toutefois, ces éléments n'apparaissent pas comme des facteurs freinants en soi la réussite scolaire. Si la majorité est en difficulté, certains apprenants suivis réussissent à l'école. Cependant, les disparités langagières perdurent sur l'année, voire se creusent. L'expression d'un projet scolaire n'est pas interdépendante de leur affiliation en classe régulière, elle est plutôt liée à leurs origines culturelles.Les démarches didactiques des enseignants participant à notre recherche sont hétérogènes. Elles dépendent de ressources intellectuelles et contextualisées. Les enseignants ne sont pas toujours sensibles aux particularismes culturels de leurs élèves – ce qui peut desservir les élèves suivis – parce qu'ils n'y sont pas assez formés. Cette étude montre que le modèle de la formation initiale et continue des enseignants devrait évoluer, en lien plus étroit avec la recherche.En dépit d'un cadrage national, les aménagements spécifiques pour la scolarisation des élèves allophones varient sur le plan académique, voire départemental. Cela se traduit, sur le terrain, par des inégalités scolaires. Dans notre *corpus*, il apparait que les ressources mobilisées par les élèves et leurs enseignants sont

hétérogènes. Ainsi, l'environnement scolaire est l'un des facilitateurs à l'inclusion et à la réussite scolaire.Apparait également une distorsion entre les prescriptions institutionnelles et la réalité des terrains qui s'explique par le dilemme auquel fait face l'institution scolaire. Cette dernière doit donner toute sa place à la langue française mais également offrir un espace à l'identité des apprenants issus de la diversité. La gestion verticale de la problématique allophone, sa mise en œuvre – complexifiée par le grand nombre de partenaires – et un état de la recherche-formation insuffisant déséquilibrent les conditions de scolarisation des allophones. La question allophone nécessiterait d'être considérée de manière holistique.

Provost & Kohnen. (2022). **A Full Spectrum of Interpretation: A Discourse-Historical Analysis of One Community College's Mission Statement**. *Community College Journal of Research and Practice*, 46(5), 318-334. https://doi.org/10.1080/10668926.2020.1841690
This study analyzes the internal and external forces that led to the creation and revisions of a community college's mission statement over the course of its 53-year history. We used discourse-historical analysis to examine published college mission statements, transcripts of interviews with the founding dean of the college, and the college's archives (including meeting minutes, accreditation reports, and other internal correspondence). Emerging findings were further contextualized through additional primary sources. We found that the college's founders were influenced by the humanistic education movement and crafted a mission statement that reflected humanistic ideals of self-actualization and positive growth for the betterment of humanity. This original mission statement was nearly unaltered for the first 15 years of the college's existence. However, external forces, including the rise of neoliberalism within education, led to a complete rewrite of the mission statement. The revised statement, reflecting a neoliberal understanding of the purpose of community college education, remains in place. This study demonstrates the influence of external forces, including those contrary to the college's founding principles, on its mission. Given the fact that community colleges serve a vast majority of disadvantaged students, the impact of neoliberal policy is particularly concerning.

Reed, H. E., Aptekar, S., & Hsin, A. (2022). **Managing Illegality on Campus: Undocumented Mismatch Between Students and Staff**. *Harvard Educational Review*, 92(1), 32-54. https://doi.org/10.17763/1943-5045-92.1.32
Contributing to the literature on the institutional experiences of undocumented youth, this article by Holly E. Reed, Sofya Aptekar, and Amy Hsin explores undocumented and "DACAmented" students' experiences managing their illegality on campus and how college staff and faculty manage that illegality while organizing programs and support. Their analysis of in-depth qualitative interviews conducted with more than one hundred undocumented college students and former students and thirty-five faculty and staff members at the City University of New York identifies multiple points of tension. The "undocumented mismatch" between campus management of illegality and student experiences was evident in the exclusion and alienation of non-Latinx undocumented students, stress around legal status disclosure, and challenges around the issue of data confidentiality.

Régnier, J.-C. (2022). **Usage de méthodes et techniques statistiques dans la formation doctorale.Réflexion sur les apports méthodologiques et épistémologiques du raisonnement statistique dans les recherches du domaine de l'éducation et sur les**

précautions à prendre. *Démarches de recherche quantitatives en sciences de l'éducation : raisonnement statistique, initiation, apports*, 58. Consulté à l'adresse https://hal.archives-ouvertes.fr/hal-03607138

L'objectif de cette communication est de partager, dans un esprit de coopération, notre réflexion centrée sur le raisonnement statistique et la formation de l'esprit statistique. Nous considérons que l'esprit statistique naît lorsqu'on prend conscience de l'existence de fluctuation d'échantillonnage et que sa formation qui passe par une formation en statistique minimale, requiert un certain renoncement à l'usage systématique de l'idée de vérité pour chercher à maîtriser celle de vraisemblance et de plausibilité (Régnier, 1998). Cette formation tire bénéfice d'être organisée, en particulier, autour d'activités fondamentales que sont la modélisation statistique, l'analyse statistique et l'interprétation statistique. Dans des articles déjà anciens (Régnier, 2002, 2005a, 2005b), nous avons tenté d'aborder cette question et d'apporter quelques éléments d'éclaircissement. En tenant d'adopter une posture de praticien-chercheur [en formation] réflexif, nous pouvons nous interroger sur la place de la statistique dans la formation en sciences humaines et sociales. En relation à notre pratique, nous nous intéressons davantage à la place de la statistique dans la formation en sciences de l'éducation. Nous avons entrevu pour la discipline statistique, au moins cinq positions : •Discipline de base, •Discipline de service, discipline-outil, •Discipline d'ouverture, •Discipline-objet de la didactique de la statistique, •Discipline-objet de la recherche en statistique dans son application à la recherche en sciences de l'éducation, Nous pouvons tenter d'identifier ce qu'induit la prise en considération de chacune de ces positions dans une formation doctorale non spécialisée en statistique. Toutefois il ressort que la place la plus habituelle à considérer ici est celle de Discipline de service, discipline-outil. Notre communication tentera de rester guidée par la prise de conscience et l'identification des apports méthodologiques et épistémologiques de la mise en œuvre de méthodes statistiques basées sur le raisonnement statistique dans les recherches du domaine de l'éducation.

Reimers, F., & Opertti, R. (2021). ***Apprendre à reconstruire un meilleur avenir pour l'éducation : leçons d'innovations pédagogiques durant la pandémie de COVID-19***. Consulté   à   l'adresse http://www.ibe.unesco.org/sites/default/files/resources/apprendre_a_reconstruire_un_meilleur_avenir_pour_leducation.pdf

Cet ouvrage vise à contribuer à l'élaboration de stratégies opérationnelles de changement en éducation afin de préparer les élèves pour l'avenir, tout en abordant l'impact de la pandémie de COVID-19 et à rendre les systèmes éducatifs plus résilients. Il examine 31 innovations éducatives dans le monde ayant ont vu le jour pendant la pandémie et qui sont alignées sur la vision sur les futurs de l'éducation. Ces innovations peuvent être regroupées dans les cinq catégories suivantes : soutenir l'apprentissage centré sur l'élève, soutenir un apprentissage plus approfondi, soutenir le développement socio-émotionnel et le bien-être des élèves, perfectionner le développement professionnel des enseignants et des directeurs d'école, engager la famille.

Roberts, J., & Webster, A. (2022). **Including students with autism in schools: a whole school approach to improve outcomes for students with autism**. *International Journal of Inclusive Education*, 26(7), 701-718. https://doi.org/10.1080/13603116.2020.1712622

In the last two decades there has been a rapid increase in the number of students with autism who are enrolled in mainstream schools. Since the publication of the Salamanca

Statement in 1994, the right to inclusive education for all children, including those with disabilities, has been increasingly recognised. This has created tensions and challenges in schools as staff struggle to meet the unique needs of these students and their families. Previous research has found that school staff often lack knowledge about the specific characteristics and needs of students with autism and the practices that effectively support these students in inclusive education settings. A comprehensive approach is needed to build capacity of school leaders and staff to create autism-friendly cultures, implement evidence-based strategies, and improve outcomes for students with autism. This paper describes the development and theoretical foundation of the School-wide Autism Competency approach, which provides schools with a whole-of-school approach to supporting students with autism. The approach brings together research on effective practices of school leaders and evidence-based practices for students with autism.

Rodriguez, A. J., Ciftci, A., Howell, K., Kokini, K., Wright, B., & Nikalje, A. (2022). **Promoting Equity, Diversity and Social Justice Through Faculty-Led Transformative Projects**. *Innovative Higher Education*, *47*(2), 201-222. https://doi.org/10.1007/s10755-021-09560-y
We present a transformative professional development project with a focus on equity, diversity and social justice (EDSJ) to raise cultural awareness among faculty, increase agency, and promote positive change through transformative projects. Twenty-three faculty members from nine different colleges located at a Research I university were provided with critical cultural awareness workshops and then supported to develop transformative projects related to EDSJ. Based on focus group interviews and pre-post surveys, we identified four themes and five categories: two outcome-related (Building Community and Transformative Actions) and two operational themes (Barriers and Facilitators). We conclude that faculty-centered and transformative professional development projects could significantly benefit all those interested in establishing a culturally inclusive, positive and responsive climate. Our study also contributes to the emerging research on scholar activism and provides a practical model for implementation.

Rodriguez, A., Rodriguez-Wilhelm, D., Lebioda, K., Kapp, R., & Wilson, N. (2022). **Skin in the Game: A Policy Implementation Study of How School-Level Bureaucrats Set and Rationalize Advanced Placement Exam Fees for Low-Income Students**. *Research in Higher Education*, *63*(3), 369-399. https://doi.org/10.1007/s11162-021-09652-w
As part of their strategies to increase college readiness and reduce educational inequalities, at least 29 states subsidize Advanced Placement (AP) exam fees for low-income students. However, while Michigan's state-level policy subsidized low-income student exams to $5 per exam, we found wide-ranging fee structures at high schools—from $0 to $50. Through a lens of policy implementation theory and using an embedded case study approach, this study examined this disjuncture between the state and school policies using interview data from 33 school personnel—counselors, AP Coordinators, administrators—in 31 high schools and state personnel in Michigan; state policy artifacts; and publicly available school data. We identified three major challenges—many schools hedged and set higher fees because they were unsure how much the legislature would approve each year; the state subsidy did not account for additional exam costs (e.g., exam proctors) that were passed down to the student; and the policy as written lacked enforceability and accountability. Policymakers were largely unaware of the amount schools ultimately charged low-income students. In the presence of an ambiguous policy

and constrained resources, school personnel relied on their personal perspectives on fees and behavior (e.g., the need to reduce moral hazard and increase "skin in the game") to rationalize low-income students fees. Together, these findings help explain how low-income students pay vastly different AP exam fees depending on the high school they attend in Michigan—with some schools severely impeding low-income students' college preparatory opportunities.

Roelens, C. (2022). **Penser éducation au politique et questions environnementales dans la démocratie**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18710
Ce texte confronte l'éducation au politique au révélateur que constituent les questions environnementales, du point de vue de la philosophie politique de l'éducation. Nous posons d'abord les jalons de ce que peut-être une épistémologie de l'éducation au politique dans la démocratie et ce que cette dernière permet ensuite en termes de travail intellectuel (1). Nous tâchons ensuite de voir comment ce modèle peut nous aider à penser l'autonomie humaine face aux questions environnementales (2). Se pose ensuite la question des lieux les plus adéquats pour penser l'éducation au politique face auxdites questions. Les domaines de l'expérience, de l'éducation informelle et du rapport individuel aux productions culturelles contemporaines apparaissent alors comme privilégiés. Une brève étude illustrative de la démarche et de l'œuvre du groupe de musique canadien Les Cowboys fringants (3), témoigne de la manière dont ce type d'éducateurs informels peut jouer un rôle important pour fournir des ressources à l'autonomie humaine et des propositions d'influences face aux questions environnementales dans le cadre politique démocratique.

Roth, X. (2022). **« Éducation » et « Politique » : enquête conceptuelle sur les limites d'une justification libérale de l'éducation au développement durable**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18103
En visant la transformation des pratiques sociales, l'éducation au développement durable ravive l'un des plus épineux problèmes de l'éducation en général : celui de ses justifications. Les recherches actuelles montrent que la plupart des éducateurs en appelle au respect des libertés individuelles et à la tolérance. Mais n'est-il pas paradoxal de justifier par des valeurs libérales, des actions éducatives qui se caractérisent précisément par leur intention normative ? Afin d'élucider ce paradoxe, on mobilisera la méthode d'analyse conceptuelle. Celle-ci révèle que l'éducation au développement durable réclame logiquement une réflexion politique sur la nature de la vie bonne et du bien commun, qui ne saurait se limiter à la seule affirmation du respect des libertés individuelles.

Saltes, N. (2022). **'It's all about student accessibility. No one ever talks about teacher accessibility': Examining ableist expectations in academia**. *International Journal of Inclusive Education*, 26(7), 674-700. https://doi.org/10.1080/13603116.2020.1712483
Drawing from perspectives in critical disability studies, this article examines the teaching experiences of 9 disabled graduate students in Canada and the United States. Participants took between 2 and 6 photographs that illustrated their experience teaching with a disability. Follow-up interviews were conducted to gather descriptive accounts of the meaning and significance of the photos. Thematic analysis was used to analyse the data and uncover the core themes of mobility, disclosure and teaching performance, accommodation, and careers goals. The findings shed new light on the barriers that

graduate students with disabilities face navigating the dual role of learners and teachers. Data reveal that there are overt and tacit ableist expectations in academia about how those in a teaching role perform and carry out their duties. Participants in this study internalised these ableist expectations and believed that an academic career was an unlikely career option.

Sgarzi, M. (2021). ***New qualifications and competencies for future-oriented TVET: volume 2 : TVET advocacy: ensuring multi-stakeholder participation***. Consulté à l'adresse https://unevoc.unesco.org/pub/new_qualifications_and_competencies_for_future-oriented_tvet_-_vol_2.pdf
Réalisé dans le cadre du projet BILT, ce deuxième volume d'un document organisé en trois volets vise à donner aux parties prenantes de l'EFTP au niveau méso une meilleure compréhension de leur rôle dans l'écosystème élargi de l'EFTP. Il examine les outils potentiels d'identification, d'intégration et de mise en œuvre des cadres nationaux de certification pour les systèmes d'EFTP ainsiq que les éléments d'action pour une collaboration plus étroite entre les différentes parties prenantes.

Shambour, M. K. Y., & Abu-Hashem, M. A. (2022). **Analysing lecturers' perceptions on traditional vs. distance learning: A conceptual study of emergency transferring to distance learning during COVID-19 pandemic**. *Education and Information Technologies*, *27*(3), 3225-3245. https://doi.org/10.1007/s10639-021-10719-5
In recent years, and also due to the COVID-19 pandemic, education institutions worldwide have changed their education paradigm from a traditional to an online system. These institutions have rapidly accomplished their educational programs and activities by supporting various web applications, allowing the completion of the education process remotely. This motivated us to investigate the general perceptions of the faculty members who are teaching different courses for undergraduate students using the distance education system. The proposed technique is based on the use of advanced analysis methods to test the hypothesis of instructors' perceptions of online teaching effectiveness, compared with traditional teaching, will not be affected by the following eight factors, including gender, academic major, age, academic degree, country of teaching, teaching experience in traditional classes, teaching experience in virtual classes (VCs), and whether or not the department/faculty provided e-learning courses before the COVID-19 pandemic. A total of 187 lecturers from 71 departments in 24 educational institutions located in 11 countries participated in this research. Results indicate that the perceptions of instructors regarding the online teaching system generally do not change based on the studied factors. Furthermore, the quantitative analyses illustrate that no significant differences exist in all dimension scales in terms of gender, major specification, age, country of teaching, and virtual experience. Significant differences are found in the dimension scale of distance education effectiveness in terms of academic degree and the educator status in terms of supporting VCs and traditional experience dimension scales. Additionally, the study provides various recommendations, including that the departments should encourage instructors to positively adapt with online teaching by developing the required skills and knowledge. Moreover, departments and institutions should support the teaching staff with specialized education tools. In addition, instructors should strive to decrease the communication and interaction gap between distance education and traditional in-class teaching.

Shughart, W. F. (2022). **On the Virginia school of antitrust: Competition policy, law & economics and public choice**. *Public Choice*, *191*(1), 1-19. https://doi.org/10.1007/s11127-022-00967-5

Competition policy (antitrust policy in the United States) engages the subfields of microeconomics (price theory), industrial organization, law and economics, and public choice. The last was a latecomer to the list because of the persistence of naïve "public interest" explanations for competition policy's origins, purposes, and effects. Even after a half-century of policy analyses in general and of public regulation of prices and conditions of entry into myriad industries around the world—showing that such interventions almost always benefit politically powerful special interests rather than society at large—most scholars still carelessly and mistakenly assume that private plaintiffs, attorneys called to the antitrust bar, the public law enforcement agencies, prosecutors, judges and other parties involved in antitrust proceedings have no motivations beyond preserving competitive marketplaces. My aim here is to bring antitrust policy more firmly within the ambit of public choice reasoning, which helps explain why antitrust intervention often either is ineffective or perverse. Competition law enforcement is a first cousin of economic regulation and, hence, should be evaluated as such.

Slimani, M. (2022). **L'éducation au politique à travers les questions environnementales : ancrages épistémologiques et alignement avec l'éducation au développement durable**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18138

Les apprentissages politiques concernant les questions environnementales sont disséminés dans les « éducations à ». Ils se retrouvent aussi au croisement de différentes logiques éducatives formelle, non formelle et informelle. Il en résulte la double fragilité épistémologique et pédagogique de tels apprentissages. Cet article aborde la problématique du besoin d'ancrages épistémologiques et pédagogiques supportant la construction de curriculums appropriés pour une éducation au politique à travers les questions environnementales. Dans une première partie, les apprentissages politiques sont formalisés selon une perspective épistémologique qui les considère comme des processus de production d'un savoir politique. Puis, dans une deuxième partie, des ancrages pédagogiques sont explorés en termes de relations productives possibles entre les apprentissages politiques et les apprentissages associés à aux Objectifs de développement durable (ODD).

Slungaard Mumma, K. (2022). **The Effect of Charter School Openings on Traditional Public Schools in Massachusetts and North Carolina**. *American Economic Journal: Economic Policy*, *14*(2), 445-474. https://doi.org/10.1257/pol.20190457

The Effect of Charter School Openings on Traditional Public Schools in Massachusetts and North Carolina by Kirsten Slungaard Mumma. Published in volume 14, issue 2, pages 445-74 of American Economic Journal: Economic Policy, May 2022, Abstract: The rapid expansion of charter schools has fueled conce...

Song, M., Garet, M. S., Yang, R., & Atchison, D. (2022). **Did States' Adoption of More Rigorous Standards Lead to Improved Student Achievement? Evidence From a Comparative Interrupted Time Series Study of Standards-Based Reform**. *American Educational Research Journal*, *59*(3), 610-647. https://doi.org/10.3102/00028312211058460

This study was designed to assess the effects of states' adoption of more rigorous standards as part of the current wave of standards-based reform on student achievement using comparative interrupted time series analyses based on state-level NAEP data from 1990 to 2017. Results show that the effects of adopting more rigorous standards on students' mathematics achievement were generally small and not significant. The effects on students' reading achievement were also generally small, but negative and statistically significant for Grade 4. The study also revealed that the effects of states' adoption of more rigorous standards varied across NAEP subscales and student subgroups.

Strunk, K. O., Cowen, J., Goldhaber, D., Marianno, B. D., Theobald, R., & Kilbride, T. (2022). **Public School Teacher Contracts and State-Level Reforms: Assessing Changes to Collective Bargaining Restrictiveness Across Three States**. *American Educational Research Journal*, 59(3), 538-573. https://doi.org/10.3102/00028312211048950
In many school districts, the policies that regulate teaching personnel are governed by collective bargaining agreements (CBAs). While there is significant policy attention that has affected the scope of these agreements, there is relatively little research on how CBAs vary over time, or whether they change in response to states' legislative reforms. Using a panel data set of over 1,200 CBAs across three states, we compare CBA change before and after reforms in two states (Michigan and Washington) relative to a state with no statutory changes (California). We show that the state policy reforms lessened the restrictiveness of CBAs, as intended. The results suggest when reforms limit bargaining negotiations, unions are unable to compensate for the substantial reductions in working conditions.

Symeonidou, S. (2022). **Teacher education for inclusion and anti-oppressive curriculum development: innovative approaches informed by disability arts and narratives**. *International Journal of Inclusive Education*, 26(7), 659-673. https://doi.org/10.1080/13603116.2020.1711819
This paper engages with the issue of teacher education for inclusion and particularly with the approach of employing disability arts and narratives of people with disabilities in university based courses for inclusion. It draws on three examples of anti-oppressive curricula that were developed as part of a graduate university module in Cyprus that encouraged student teachers to engage with disability arts and narratives in order to understand key ideas developed in disability studies and inclusive education. The three examples presented in this paper are representative of the three approaches all the participating student teachers followed, and indicate the strategies they used and the nature of the materials they chose. The discussion considers how these approaches can further inform teacher education for inclusion and how using disability arts and narratives can inform the discussion on other issues concerning teacher education of inclusion.

Tachine, A. R., Patel, P. R., & Daché, A. Z. (2022). **Time-traveling through land and sea: unearthing the past to cultivate seeds of present and future solidarity**. *International Journal of Qualitative Studies in Education*, 35(5), 496-509. https://doi.org/10.1080/09518398.2021.1983663
In order to understand our present and future work in planting the seeds of solidarity, we excavate the past, through an exploration of transnational solidarity and the vestiges of U.S. legislative policy and philanthropy. Through life notes and sharing circles, we examine policies (Morrill Act of 1862, Refugee Act of 1980, and the Gates Millennium

Scholars Program of 1999) that shaped our experiences as researchers, benefactors, and peoples of lands. Through a process of truth-telling and time traveling, we explore questions, tensions, and contradictions of our histories, our place in this world, and our interconnections with each other. We offer seeds that recognizes the juxtaposition of solidarity, a knowing of others' deep history, perplexing the abject and magical, and clairvoyance reflexivity. The work examines how we bond in difference and in the struggle, in qualitative research and in our lives.

Tardif, S. (2021). ***La résilience scolaire de bacheliers vivant avec un trouble développemental du langage*** (Phd, Université du Québec à Chicoutimi). Consulté à l'adresse https://constellation.uqac.ca/id/eprint/8066/
Les jeunes vivant avec un trouble développemental du langage (TDL) rencontrent des défis avec l'acquisition, le développement et la maitrise de leur langage. Qui plus est, leur scolarisation au primaire et au secondaire est empreinte d'expériences négatives. Les études actuelles permettent de comprendre pourquoi plusieurs d'entre eux peuvent abandonner leurs études avant d'avoir obtenu un premier diplôme qualifiant ou exercent un métier qui ne convient pas à leurs capacités et à leurs aspirations professionnelles. Toutefois, les écrits scientifiques sont silencieux en ce qui a trait au processus de résilience scolaire de ceux qui déjouent les pronostics en obtenant un diplôme universitaire. Dans cette recherche, le modèle social du handicap et le concept de résilience scolaire étudiée de manière écosystémique ont servi d'ancrage pour comprendre comment s'est développée la résilience scolaire de bacheliers québécois vivant avec un TDL. Plus précisément, trois objectifs ont été établis : 1) Identifier les facteurs de risque individuels et environnementaux qui ont accru la possibilité que les bacheliers vivant avec un TDL ne poursuivent pas leurs études jusqu'à l'obtention de leur diplôme universitaire; 2) Identifier les facteurs de protection individuels et environnementaux qui ont limité les risques que les bacheliers vivant avec un TDL ne poursuivent pas leurs études jusqu'à l'obtention de leur diplôme universitaire et 3) Dégager l'influence de ces facteurs de protection sur les facteurs de risque. Une étude multicas auprès de quatre bacheliers québécois vivant avec un TDL a ainsi été réalisée. En plus d'un journal de bord, trois méthodes de collecte de données inspirées de l'approche biographique ont été privilégiées, soit un questionnaire ouvert portant sur leur historique médical et leur parcours scolaire, la sélection de 16 artéfacts (images ou photos liées à l'objet d'études) et un entretien individuel sous forme de récit de vie. Des analyses descriptives et thématiques verticales et horizontales ont permis d'interpréter les données recueillies. Les résultats amènent à comprendre comment s'est développée la résilience scolaire de quatre bacheliers vivant avec un TDL en s'intéressant aux interactions qu'ils ont eues avec leur environnement tout au long de leur parcours scolaire. Ces derniers ont surtout précisé avoir rencontré des difficultés langagières et d'apprentissage, en plus de vivre de l'isolement et de l'intimidation. Ils ont également côtoyé des intervenants scolaires qui auraient pu faire en sorte d'accroitre le risque qu'ils abandonnent leurs études avant l'obtention de leur diplôme universitaire en ne croyant pas en leur potentiel. Ces difficultés langagières, scolaires ou sociales les ont amenés à cheminer avec le sentiment d'être différent de leurs pairs. En revanche, les résultats indiquent que tous les bacheliers considèrent que leur engagement dans leurs études, leur persévérance ou l'établissement d'objectifs sont les principales raisons de leur réussite. Des membres de leur famille, des intervenants et des amis ont également adopté des comportements empathiques, rassurants et aidants tout au long de leur parcours scolaire pour les soutenir. Ils ont aidé les bacheliers à reconnaitre leurs

capacités, de même qu'à mettre en place différentes stratégies pour qu'ils puissent les démontrer. Les mesures adaptées et les sessions allégées au postsecondaire ont également permis aux bacheliers de vivre plusieurs réussites scolaires dans la mesure où elles se conjuguaient efficacement avec leur rythme d'apprentissage. Ces résultats amènent à présenter trois repères d'action pour favoriser le développement de la résilience scolaire des jeunes vivant avec un TDL: amener les intervenants scolaires à adopter le modèle social du TDL, recourir à des approches inclusives tout au long de leur parcours scolaire et les soutenir dans leur processus d'orientation scolaire. Bien que les bacheliers consultés puissent avoir évité d'aborder certains évènements difficiles ou en avoir oublié d'autres, elle permet tout de même d'apporter un éclairage critique sur l'influence négative de leur environnement sur leur vécu scolaire et confirme que des efforts doivent continuer d'être mis en place pour valoriser l'idée que la réussite se traduit différemment d'un apprenant à l'autre. Young people living with a developmental language disorder (DLD) face difficulties with the acquisition, development and proficiency of their language. Furthermore, their schooling is marked by negative experiences. Existing studies make it possible to understand why many of them abandon school before obtaining a first qualifying diploma or choose to work in a profession that does not suit their abilities and professional aspirations. However, the scientific literature remains silent on the process of academic resilience of those who defy the odds by obtaining a university degree. In this research, the social model of disability and the concept of school resilience studied in an ecosystemic fashion served as a reference to understand how the academic resilience of university degree graduates living with a DLD developed. Three precise objectives have been established: 1) Identify the individual and environmental risk factors that have increased the possibilities that university graduate living with DLD abandon their studies before obtaining their diploma; 2) Identify the individual and environmental protection factors that have limited the risks of abandon of the university graduate living with DLD before obtaining their university degree and 3) Expose the influence of the protection factors on risk factors. Therefore, a multicase study with four Quebec bachelor's degree graduate living with a DLD was carried out. In addition to a logbook, three methods of data collection inspired by the biographical approach were favored, namely an open questionnaire relating to their medical history and their school career, the selection of 16 artifacts (images or photos related to the subject of study) and an individual interview in the form of a life story. Vertical and horizontal descriptive and thematic analyzes were used to interpret the data collected. The results showed how the academic resilience of four university graduates living with a DLD was developed by looking at the interactions they had with their environment throughout their school career. The four subjects especially said that they encountered language and learning difficulties, in addition to experiencing isolation and bullying. They also encountered school personnel who could have increased the risk of them dropping out before graduating from university by not believing in their potential. These language, academic or social difficulties have led them to live with the feeling of being different from their peers. However, the results indicate that all four of the university graduates consider their commitment to their studies, their perseverance or the setting of goals to be the main reasons for their success. Family members, school personnel and friends have also adopted empathetic, reassuring and helpful behaviors throughout their school career to support them. They helped the graduates to recognize their abilities, as well as to put in place different strategies so that they could demonstrate them. The adapted measures and the reduced sessions at the post high school level have also enabled baccalaureate holders to experience several academic successes as long as

they were combined effectively with their pace of learning. These results lead to the presentation of three benchmark actions to promote the development of the educational resilience of young people living with DLD: encourage school personnel to adopt the social model of DLD, use inclusive approaches throughout their school career and support them in their school orientation process. Although the graduates consulted may have avoided revealing certain difficult events or have forgotten others, it nonetheless allows us to shed a critical light on the negative influence of their environment on their school experience and confirms that efforts must continue to be put in place to promote the idea that success is reflected differently from one learner to another.

Tsiligkiris, V., & Ilieva, J. (2022). **Global engagement in the post-pandemic world: Challenges and responses. Perspective from the UK**. *Higher Education Quarterly*, *76*(2), 343-366. https://doi.org/10.1111/hequ.12390
Higher education (HE), particularly its international mobility element, is one of the sectors that have suffered an immediate and substantial impact by the pandemic. The disruption in international travel and the local restrictions to physical contact has caused disruptions in the academic planning and delivery of higher education worldwide. Many argue that the recent pandemic and the move to online and blended learning delivery will define the future of HE. In this paper, we explore two main themes. Firstly, we explore the pre-Covid trends in international higher education. Using national and international data from UNESCO, OECD and other sources, we analyse the global developments in international student mobility. Secondly, we focus on the UK to study the position, share and interplay between the international student and transnational education (TNE) markets. We reflect on the findings of our analysis and discuss the pivot to online education and its pedagogical and regulatory implications. The role of sustainability as a central strategic objective for HEIs is examined through the lenses of TNE in generating local impact and promoting the United Nations (UN) Sustainable Development Goals (SDGs).

Tubbs Dolan, C., Kim, H. Y., Brown, L., Gjicali, K., Borsani, S., Houchaimi, S. E., & Aber, J. L. (2022). **Supporting Syrian Refugee Children's Academic and Social-Emotional Learning in National Education Systems: A Cluster Randomized Controlled Trial of Nonformal Remedial Support and Mindfulness Programs in Lebanon**. *American Educational Research Journal*, *59*(3), 419-460. https://doi.org/10.3102/00028312211062911
Experimental evidence on strategies to support refugee children's integration into host-country public schools is needed. We employ a three-arm, site-randomized controlled trial to test the impact of short-term access to two versions of nonformal remedial programming infused with social-emotional learning (SEL) among Syrian refugee children in Lebanese public schools. Remedial programming with classroom climate-targeted SEL practices improved children's perceptions of public schools (effect sizes [ES] = 0.48–0.66) only. The remedial program with both classroom climate-targeted SEL and skill-targeted activities had positive impacts on children's perceptions of public schools (ES = 0.43–0.50) and on certain basic academic skills (ES = 0.08–0.14), and marginally significant positive and negative impacts on some SEL outcomes (ES = 0.16–0.31). We found no impacts of either version on children's global literacy or numeracy competence.

UNESCO & BREDA : Bureau régional pour l'éducation en Afrique. (2022). *Éducation en Afrique : 5 enjeux démographie, financement, inclusion, qualité, emploi des jeunes*.

Consulté   à   l'adresse
https://unesdoc.unesco.org/ark:/48223/pf0000381101/PDF/381101fre.pdf.multi
A huit ans de l'échéance des objectifs de 2030, le continent africain reste confronté à des défis aussi nombreux dans le secteur de l'éducation et de la formation. Le Bureau pour l'Afrique de l'Institut international de planification de l'éducation de l'UNESCO a défini cinq enjeux majeurs de l'éducation en Afrique afin de guider ses actions et orientations stratégiques : la démographie, le financement de l'éducation, l'inclusion, la qualité de l'éducation et l'emploi des jeunes.

UNESCO Équipe du Rapport mondial de suivi sur l'éducation. (2021). ***Les acteurs non étatiques dans l'éducation : Qui décide ? Qui est perdant ?*** Consulté à l'adresse https://unesdoc.unesco.org/ark:/48223/pf0000379875
40 % des élèves de maternelle, 20 % des élèves du primaire et 30 % des étudiants du secondaire et du supérieur sont aujourd'hui scolarisés dans des établissements privés dans le monde. Le Rapport mondial de suivi sur l'éducation (GEM) met en garde contre la progression des inégalités et de l'exclusion due aux coûts élevés de l'enseignement privé et au manque de réglementations étatiques. Il appelle à un meilleur encadrement de l'enseignement privé pour réduire les inégalités et exhorte les gouvernements à considérer l'ensemble des établissements, des élèves et des enseignants comme faisant partie d'un système unique. Les normes, les données, les mesures incitatives et la redevabilité doivent aider les gouvernements à protéger, à respecter et à faire valoir le droit à l'éducation de tous.

UNESCO : Organisation des Nations unies pour l'éducation, la science et la culture. (2022a). ***Leave no child behind: global report on boys' disengagement from education***. Consulté à l'adresse https://unesdoc.unesco.org/ark:/48223/pf0000381105
Selon ce rapport, si les filles ont plus de difficultés à accéder à l'éducation et constituent la majorité des enfants non scolarisés au niveau primaire, les garçons sont quant à eux confrontés à des risques croissants de décrochage dans les niveaux supérieurs. À l'échelle mondiale, on ne compte que 88 hommes inscrits dans l'enseignement supérieur pour 100 femmes. Dans 73 pays, les jeunes hommes sont moins nombreux que les jeunes femmes à s'inscrire dans l'enseignement secondaire supérieur, alors que ce n'est le contraire que dans 48 pays. Ces nouvelles données mettent en évidence un phénomène mondial : le travail des enfants et la pauvreté, entre autres facteurs, empêchent les garçons de s'engager pleinement dans l'apprentissage et contribuent au redoublement et au décrochage scolaire.

UNESCO : Organisation des Nations unies pour l'éducation, la science et la culture. (2022b). ***Projet de stratégie pour l'enseignement et la formation techniques et professionnels (EFTP) (2022-2029) : transformer l'EFTP pour des transitions réussies et justes***. Consulté à l'adresse https://unesdoc.unesco.org/ark:/48223/pf0000380775_fre
Adoptée le 8 avril 2022 par le Conseil exécutif, la nouvelle stratégie de l'UNESCO pour l'enseignement et la formation techniques et professionnels (EFTP) s'attachera à susciter un élan mondial en faveur de l'EFTP, en contribuant à la reprise sociale et économique post-COVID-19 et en accélérant les progrès de la réalisation de l'Objectif de développement durable 4. Elle aura pour but d'instiller une ambition renouvelée pour l'EFTP chez les États membres et d'élaborer une vision commune pour transformer les marchés du travail, les économies et les sociétés. Elle se concentre sur trois domaines stratégiques prioritaires : développer les compétences des individus pour

l'apprentissage, le travail et la vie ; développer les compétences pour des économies inclusives et durables dans la perspective des transitions numériques et vertes ; développer les compétences pour l'avènement de sociétés inclusives et pacifiques.

UNESCO : Organisation des Nations unies pour l'éducation, la science et la culture, UNICEF : Fonds des Nations unies pour l'enfance, & Banque mondiale. (2022). ***Where are we on education recovery?*** Consulté à l'adresse https://www.unicef.org/media/117626/file/Where%20are%20we%20in%20Education%20Recovery?.pdf
Ce rapport étudie les répercussions de la pandémie de Covid-19 et les fermetures d'établissements scolaires sur les enfants dans divers pays, et fait l'état des lieux des acquis de l'apprentissage avant la pandémie. Il souligne notamment que 147 millions d'enfants ont manqué plus de la moitié des heures d'apprentissage en classe au cours des deux dernières années, soit un déficit de 2.000 milliards d'heures à l'échelle du globe. Outre les retards d'apprentissage constatés, ce rapport met au jour de nouvelles données indiquant qu'un grand nombre d'enfants ne sont pas retournés en classe lorsque les écoles ont rouvert. Dans 32 pays et territoires, le niveau d'apprentissage était déjà désespérément faible avant la pandémie – un bilan qui s'est certainement aggravé étant donné l'ampleur du déficit d'éducation engendré par cette dernière.

UNGEI : United nations girl's education initiative. (2022). ***Social norms and girls' education: a study of eight sub-Saharan African countries. Gender at the centre initiative (CGI) policy paper***. Consulté à l'adresse https://www.ungei.org/sites/default/files/2022-04/GCI_Policy_Paper_V3.pdf
Combinant les principales conclusions de la littérature sur les normes sociales et l'éducation des filles avec de nouvelles preuves, le document présente les défis relatifs à l'éducation des filles et à l'égalité des sexes dans la région, analyse la politique continentale et régionale en la matière et présente des études de cas des huit pays de l'Initiative priorité à l'éducation (présentation des politiques et législations sur le genre, identification des points d'entrée potentiels et des approches prometteuses pour la transformation des normes sociales). Le document émet enfin des recommandations destinées aux décideurs politiques, aux praticiens du genre, aux ministères, aux ONG et à la société civile.

Varty, A. K. (2022). **Promoting Achievement for Community College STEM Students through Equity-Minded Practices**. *CBE—Life Sciences Education*, *21*(2), ar25. https://doi.org/10.1187/cbe.21-09-0237
Community colleges have an opportunity to promote achievement of more science, technology, engineering, and mathematics (STEM) students and meet larger goals of scientific advancement and educational equity. Understanding community college students' needs and backgrounds is key to increasing students' success in STEM fields and realizing this potential. The objective of this paper is to use data from the U.S. Department of Education's National Center for Education Statistics and other sources to characterize community college students and their academic achievement and to offer equity-based approaches to increase success, particularly in STEM. Here, I document that community college students, who constitute approximately one-third of U.S. undergraduates, are a unique population with greater proportions of underrepresented STEM minorities, parents, and students requiring developmental education. They are also more likely to be older, working, part-time, low-income, and first-generation students and

more likely to differ demographically from faculty. I also found lower rates of academic achievement among community college students, including lower rates of retention and STEM degree attainment with evidence of even lower achievement for STEM underrepresented groups. The data point to the need for equity-based strategies to address achievement disparities for STEM community college students, including increasing community college faculty diversity and sensitivity to diverse students' needs and experiences; adopting inclusive, active-learning pedagogies; and reforming developmental education.

Watson, E. (2022). **Keeping Up with the (Zh)oneses: Language Immersion and School Choice**. *Education and Urban Society*, *54*(4), 445-469. https://doi.org/10.1177/00131245211027364
Dual language immersion programs are growing in popularity across America. This article examines the explanations middle-class parents of various racial/ethnic backgrounds give for enrolling their children in Mandarin Immersion Programs. The author addresses the following questions: Why do American parents enroll their children in Mandarin Immersion Programs? How do parents from different racial groups frame the benefits of immersion? The analysis relies on a mixed-method approach using survey data (N = 500) to highlight motivations of parents without an ethnic background related to the language, supplemented with 15 semi-structured interviews with Black and White parents of children enrolled in schools with Mandarin Immersion Programs. The study finds that parents frame the benefits of an educational investment differently by race. White parents take a pragmatic stance of greater future returns while Black parents hope immersion will help construct a stronger self-identity. These findings show the influence a burgeoning global society has on parental educational choices.

Welch, A. (2022). **A plague on higher education? COVID, Camus and Culture Wars in Australian universities**. *Higher Education Quarterly*, *76*(2), 213-229. https://doi.org/10.1111/hequ.12377
Worldwide, COVID-19 affected higher education, including finance, and international mobility. But some systems have been more affected than others; notably Anglophone systems that have been a preferred destination for a high proportion of international students. Australia presents a particularly interesting case. Particularly vulnerable to any significant downturn in international enrolments, given its high proportion of international students, and heavy dependence on their fees, the problem was exacerbated by growing US–China tensions, and resultant pressures on Australia and its universities. Culture Wars were also evident in the steadfast refusal of the national government to offer much financial support to the higher education sector, despite clear evidence of need arising from the COVID crisis. Using Culture War as analytic frame, the analysis explains and details these elements, as part of a case study of Australian higher education at a time of crisis. Beginning from an outline of international higher education before COVID, the article analyses key documents, data, and analysis regarding the pandemic, particularly the impact on universities in the face of declining international enrolments. Expected outcomes and impacts are summarised, and reflections are provided on the implications of the changes, for Australian higher education, and society, at least in the short-term future.

Welsh, R. O. (2022). **Overlooked Exclusionary Discipline: Examining Placement in Alternative Schools, Expulsions, and Referrals to Hearing in an Urban District**. *Educational Policy*, 36(3), 550-586. https://doi.org/10.1177/0895904820901481
School discipline is a salient challenge in K–12 districts nationwide. The majority of prior studies have focused on suspensions with relatively little attention paid to other forms of exclusionary discipline. This mixed-methods study provides a descriptive analysis of overlooked disciplinary consequences, namely, assignment to alternative schools, expulsions, and referrals to hearing. The findings from the quantitative analysis indicate that possession of drugs, student and staff assault, and weapons-related incidents account for the majority of infractions leading to the most severe forms of exclusionary discipline. Black male students account for the largest proportion of students receiving the harshest exclusionary disciplinary consequences. The findings from the qualitative analysis reveal several challenges that policymakers in urban districts navigate regarding alternative schools, including (a) staffing and the development of professional capacity, (b) the length of the school day, (c) transportation, and (d) the choice between in-district versus third-party operation of alternative schools.

Williams, J., & Usher, A. (2022). ***2022 World higher education: institutions, students and funding***. Consulté à l'adresse https://higheredstrategy.com/wp-content/uploads/2022/03/HESA_World-Higher-Education-2022_Main-Report-2.pdf
Le rapport présente un panorama complet de l'enseignement supérieur mondial, fournissant des données détaillées sur 56 systèmes nationaux d'enseignement supérieur (inscriptions, établissements, financements, mobilités). L'enseignement supérieur mondial a connu une croissance énorme depuis 2006, mais peu de tendances sont véritablement mondiales, avec des distinctions entre et au sein des régions. Alors que le nombre d'établissements d'enseignement supérieur a à peine changé dans le Nord, restant autour de 20 000 entre 2006 et 2018, dans le Sud, le nombre a presque doublé, passant d'un peu plus de 40 000 pour atteindre un total de 90 000 établissements, situés majoritairement en Inde. Il a y eu des augmentations de financement à travers le monde sur la majeure partie de la période couverte par la recherche (de 2005-06 à 2018). Cependant, lorsque les gouvernements du Nord augmentent les financements, c'est pour un nombre constant d'étudiants et les financements supplémentaires sont consacrés à la qualité, l'équité et la recherche. Dans le Sud, les financements sont principalement consacrés à l'augmentation de la capacité et de l'accès

Yang, L. (2022). **Student formation in higher education: a comparison and combination of Confucian xiushen (self-cultivation) and Bildung**. *Higher Education*, 83(5), 1163-1180. https://doi.org/10.1007/s10734-021-00735-2
Higher education has long established primary importance to the formation of students, manifest in ideas such as Confucian xiushen (self-cultivation) and Bildung. However, despite the shared focus on the idea of humans becoming humans, xiushen and Bildung are built on divergent philosophical traditions. The divergence has led to varied practice in individual formation. This paper conceptually explores, compares, and searches for potential combination of the ideas of xiushen and Bildung in higher education. As such, it provides new insights into student formation in higher education. Specifically, it is argued that the best situation for individual formation is when individual agency is harmonised with the external environment. This points to two essential considerations for student formation in higher education: students' agency and the necessary support from society and higher education institutions.

Zhang, L., Carter Jr., R. A., Qian, X., Yang, S., Rujimora, J., & Wen, S. (2022). **Academia's responses to crisis: A bibliometric analysis of literature on online learning in higher education during COVID-19**. *British Journal of Educational Technology*, *53*(3), 620-646. https://doi.org/10.1111/bjet.13191
This paper aimed to provide a holistic view of research that investigated online learning in higher education around the globe during COVID-19 utilizing a bibliometric analysis. The researchers used co-citation analysis and text mining afforded by VOSviewer to document and analyze research patterns and topics reported in peer-reviewed documents published between January 2020 and August 2021. Findings of this study indicated that scholars from 103 countries or regions from the Global North and Global South investigated a wide array of topics, such as use of various technologies and strategies, redesigned curriculum, student perceptions and psychological impacts of the pandemic-imposed online learning. Many researchers applied technology acceptance theories and structural equation modeling to investigate factors associated with adoption and impacts of the pandemic-imposed online learning. Of the large quantity of research, medical education and chemical education were the most investigated disciplines. Inquiry-based learning, discovery learning, hands-on learning and collaborative learning emerged as instructional approaches frequently discussed or utilized across the target studies. This paper discussed (a) ongoing and emerging challenges to online higher education, (b) placing innovative pedagogies at the forefront of online learning, and (c) rapid, but imbalanced distribution of evolving literature based on the findings. Practitioner notes What is already known about this topic Online learning had attracted growing traction as a flexible and affordable means to complement traditional higher education prior to COVID-19. Higher education institutions (HEIs), faculty and students around the globe have encountered various challenges and opportunities regarding online teaching and learning during COVID-19. What this paper adds A bird's-eye-view perspective of how HEIs around the globe responded to the pandemic-imposed online teaching and learning using the bibliometric methodology. Identifications of a large body of research (n = 1061 documents) conducted by scholars from 103 countries or regions that investigated the pandemic-imposed online higher education, indicating an unprecedented level of participation in this area. An analysis of distinct themes arising from research on the pandemic-imposed online learning, such as medical education and psychological impact, chemistry curriculum and laboratory-based instruction and technology acceptance model. Implications for practice and/or policy The large corpus of studies on online higher education from different aspects can provide cross-disciplinary information guiding future research and design of online learning. With technology often conceptualized as the solution to support online learning, it is imperative to put innovative pedagogy at the forefront of the design of online teaching and learning.

Zheng, A. (2022). **The Valuation of Local School Quality under School Choice**. *American Economic Journal: Economic Policy*, *14*(2), 509-537. https://doi.org/10.1257/pol.20200678
The Valuation of Local School Quality under School Choice by Angela Zheng. Published in volume 14, issue 2, pages 509-37 of American Economic Journal: Economic Policy, May 2022, Abstract: School choice programs break the link between residential location and school attendance, and should weaken the...

Zrudlo, I. (2022). **A Transitional Conception of Modernity for Education**. *Educational Theory*, *72*(1), 5-25. https://doi.org/10.1111/edth.12509

In this article, Ilya Zrudlo unpacks the educationally limiting effects of conflicting visions of the good embedded in Western modernity and offers a developmental vision of modernity for education that is more coherent and productive of student agency. Drawing on Charles Taylor's work, Zrudlo disarticulates four aspects of Western modernity — economic modernization, the struggle for justice, individualism, and naturalism — and highlights the internal contradictions to which they give rise that limit student agency. Harry Brighouse's On Education is then examined in order to illustrate how one influential account attempts to bring together the different educational goods of Western modernity. Despite its strengths, Brighouse's account struggles to comprehensively integrate the different goods of Western modernity and also implies a claim to historical finality, both of which hamper student agency. To overcome these obstacles, Zrudlo suggests that we distinguish between Western modernity and modernity tout court, and that the latter can be conceived of as a period of transition, akin by analogy to a period of adolescence moving toward maturity. The purpose of education from this developmental perspective would be to foster in students the kind of agency required to transition toward maturity as individuals, as well as to contribute to a movement toward maturity at the collective level, in their own communities. Drawing on the work of Lewis Mumford, Zrudlo suggests that individuals on their way to maturity strive to comprehensively and coherently develop their capacities to contribute the greater share of their powers to the development of diverse and unified communities that are organically integrated into a new, global civilization.

Pratiques enseignantes

Adjanohoun, J., & Agbanglanon, S. L. (2022). **Déterminants de l'acceptation des réseaux sociaux pour apprendre à l'université virtuelle du Sénégal**. *Revue internationale des technologies en pédagogie universitaire*, *19*(2), 7-24. https://doi.org/10.18162/ritpu-2022-v19n2-02

Aktaş, İ., & Özmen, H. (2022). **Assessing the performance of Turkish science pre-service teachers in a TPACK-practical course**. *Education and Information Technologies*, *27*(3), 3495-3528. https://doi.org/10.1007/s10639-021-10757-z

This study assesses the performance of Turkish science pre-service teachers (PSTs) in a TPACK-Practical Course that consists of the training course and lesson-plan-micro-teaching stages. The subjects of the study were 46 PSTs (19 males and 27 females). In this study, after PSTs took a TPACK training course, they created a TPACK-based lesson plan and presented it to their classmates through micro-teaching. Data sources included lesson plans and video recordings of lesson presentations. Researchers developed and used a rubric of TPACK-based learning environments to evaluate the data sources. The rubric consisted of 12 items, and each item contained five performance levels. Researchers analyzed the data by using descriptive statistics and the Wilcoxon signed-rank test. There was a significant increase in the total score of TPACK among the PSTs after the course. There was also a significant increase in the items guiding, providing active participations of students, making assessment and evaluation, appropriateness of chosen teaching methods, and accuracy of the given information/concepts when teaching science subjects with technology. Possible reasons for this positive effect

include using worksheets with technological tools such as simulation, the influence of the course lecturers as role models, the introduction of new technologies to the PSTs in the training course, and using class discussions to provide feedback.

Alanoglu, M., Aslan, S., & Karabatak, S. (2022). **Do teachers' educational philosophies affect their digital literacy? The mediating effect of resistance to change**. *Education and Information Technologies, 27*(3), 3447-3466. https://doi.org/10.1007/s10639-021-10753-3
This study aims to reveal the direct and indirect effects of primary school teachers' educational philosophies on their digital literacy through resistance to change. A cross-sectional research design was used in the current study. Data were collected from 298 primary school teachers working at primary schools located in a city centre in the Mediterranean region of Turkey. The relationships between the variables were tested through the use of the structural equation model. The study results indicated that the teachers' traditional and contemporary educational philosophies did not directly affect their digital literacy levels, but indirectly affected their resistance to change through the level of resistance to change. The results also suggested that teachers' traditional educational philosophies had a negative effect on their digital literacy levels through the mediating role of resistance to change, while the contemporary educational philosophies positively affected their digital literacy levels through resistance to change. Consequently, in recent conditions teachers are expected to develop both their own and students' digital skills. Due to the importance of digital literacy in this age where technology permeates every aspect of life, teachers should accept digital change and transformation without resistance.

Alkouatli, C. (2022). **Muslim Educators' Pedagogies: Tools for Self, Social, and Spiritual Transformation**. *Harvard Educational Review, 92*(1), 107-133. https://doi.org/10.17763/1943-5045-92.1.107
In this interpretive research study, Claire Alkouatli inquires into the pedagogical activities Sunni Muslim educators employ in sites of Islamic education that are often marginalized by stereotypes, misperceptions, and charges of anachronism and indoctrination. She invited thirty-five Muslim Canadian educators to share their perspectives on their pedagogies around teaching Islam to children and youth. Her thematic analysis of participants' variegated descriptions coalesced into a three-theme pedagogical typology. Distinct from mainstream secular pedagogies at the levels of ontology, epistemology, and developmental psychology, Islamic pedagogies are situated within a wider conceptual paradigm. Recognizing their qualities of holism and "double cultural relevance," they are functionally significant in teachers' repertoires for helping young Muslims think across paradigms and may contribute to both sociocultural continuity and more equal inter-epistemic interaction in heterogeneous societies.

Alletru, A., & Vinatier, I. (2022). **The role of the teacher's culture in classroom management: A case study of primary schools in French Polynesia**. *British Educational Research Journal*. https://doi.org/10.1002/berj.3773
Polynesian Languages and Culture (PLC) lessons in primary schools focus on, among other things, passing on Tahitian legends and linguistic content that is specific to the Polynesian languages (Reo māʼohi). A co-analysis of the PLC teachers' culture of origin conducted with the teachers to identify the dimensions of their actual activity revealed a strong connivance between the teaching object and the teacher/pupils relationship (notably through gestures, postures and proxemics). This relationship was representative

of the « rapports de place » (relationships of place) found in particular in the non-school sphere. Respect for the roles and statuses of « elders » and « magisters », the importance of a commitment to learning, the valorisation of speaking up and the benevolence of encouraging pupils to persevere in their learning were all fundamental values of belonging in the Tahitian community. Beyond the Polynesian context, this research contributes to a conceptual enlargement of the theoretical field of « didactique professionnelle » because it demonstrates that taking into account the influence of the context and its inherent values better identifies the resources that teachers implicitly draw on and that they refer or do not refer to in an interactive situation with learners.

Altintug, F. A., & Debreli, E. (2022). **A study of literacy teaching in state primary schools of Northern Cyprus: literally critical?** *International Journal of Inclusive Education*, 26(6), 592-608. https://doi.org/10.1080/13603116.2019.1708981
This study explores current literacy education in state primary schools of Northern Cyprus from the perspective of primary school teachers. The Northern Cyprus context is unique in that it has recently been receiving a considerable number of immigrants and state primary schools now include students from various backgrounds. This then raises the need for exploration of the issue of how literacy is taught to these culturally and socially diverse students. Data were collected from 20 classroom teachers teaching at 10 different schools in five districts. Semi-structured interviews were used to gather data. The findings of the study suggest that the recently developed curriculum for primary state schools is not successfully implemented in practice, and that teachers still tend to possess traditional teaching practices, which do not allow student voice or critical pedagogy, as well as integration of students' home lives into the lessons, but are exam focused. A possible reason for this seems to be teachers' lack of awareness of the philosophy of the new curriculum.

Anthony Jnr., B. (2022). **An exploratory study on academic staff perception towards blended learning in higher education**. *Education and Information Technologies*, *27*(3), 3107-3133. https://doi.org/10.1007/s10639-021-10705-x
As the years progresses, higher education has move towards implementing Blended Learning (BL) which is a combination of face-to-face and online mode of teaching and learning which have continued to advance in institutions all over the world. Accordingly, it is important to investigate the factors that may influence lecturers' perception towards BL approaches. Likewise, there are fewer studies that explored BL in lecturers' perspective. Therefore, this study proposed a framework based on Model of Personal Computer Utilization (MPCU) theory to examine the factors that influence lecturers' perception of BL to improve teaching quality in higher education. A total of 413 lecturers across universities, colleges, and polytechnics responded to an online survey questionnaire. Statistical Package for Social Science and Partial Least Square-Structural Equation Modelling was utilized for data analysis. The results suggest that social factors affect towards use, complexity, job fit, long term consequences, facilitating conditions, and Information Technology (IT) experience significantly influences lecturers' perception towards using BL initiatives to improve academic activities in higher education. Findings from this article support institutions in developing an understanding of the factors that can be considered to improve teaching design, as well as in improving IT for teaching and learning purposes.

Audet, G., Gosselin-Gagné, J., & Koubeissy, R. (2022). **Une compétence interculturelle et inclusive «en acte»: analyse de récits de pratique d'enseignant.e.s à propos de l'intervention en contexte de diversité ethnoculturelle**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.612

Awazi-Mbambi-Kungua, B. É. (2022). *Le système licence-master-doctorat en RD Congo: un levier des pratiques pédagogiques innovantes dans l'enseignement supérieur?* Consulté à l'adresse https://www.editions-harmattan.fr/livre-le_systeme_licence_master_doctorat_en_rd_congo_un_levier_des_pratiques_pedagogiques_innovantes_dans_l_enseignement_superieur_roger_binzaka_peter_okebukola_joseph_ndayisaba_juma_shabani-9782343243078-73143.html

Comment passer d'un système d'enseignement traditionnel (conservateur, colonial, autoritaire) centré sur des cours et séminaires magistraux d'un professeur savant face à un étudiant passif à un système moderne, réformateur, décolonial, participatif, centré sur l'auto-implication active de l'étudiant dans le processus de transmission des connaissances, le préparant à assumer avec compétence des fonctions bien circonscrites dans le chantier de la reconstruction d'un Congo viable ? L'enseignement supérieur congolais est arrimé au système LMD, créé par l'Union européenne pour s'ajuster aux universités conquérantes anglo-saxonnes en train de se mondialiser. Cela soulève en filigrane la question du suivisme africain et de l'incapacité totale des élites politiques et académiques africaines à repenser et promouvoir des systèmes éducatifs et universitaires en phase avec les défis protéiformes et pluridimensionnels de l'Afrique

Baillifard, A., & Corinna, M. (2022). **Oui à l'ennui**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.a254

Bakonga, J. B. (2021). *Usages pédagogiques des outils numériques en classe, compétences technologiques et motivation scolaire dans l'enseignement secondaire au Cameroun : Étude comparée des caractéristiques institutionnelles et individuelles.* (Phdthesis, CY Cergy Paris Université). Consulté à l'adresse https://tel.archives-ouvertes.fr/tel-03633583

L'étude du triplet, pratiques numériques, compétences et motivation, inhérente à une intégration efficace des TIC en classe, est centrale dans les programmes de discipline, via l'approche par compétence, mise en place au lycée au Cameroun depuis plus de 7 ans. Cette révolution pédagogique intervient plus de dix ans plus tard après des innovations technologiques, dans les établissements scolaires, et actuellement avec la mise en œuvre de plusieurs initiatives d'usage des outils numériques pour la formation continue et le développement professionnel des enseignants (Mian B. S., 2013), notamment la formation de nombreux enseignants fonctionnaires et auditeurs libres, formés en TIC ou en informatique fondamentale, dans les sept écoles normales supérieures , que compte le Cameroun. Cependant, des écarts demeurent entre les volontés des politiques numériques éducatives et la situation réelle d'utilisation des outils numériques en classe, observées sur le terrain. Cette étude, menée dans le contexte camerounais pluriculturel et bilingue, permet d'obtenir un éclairage plus parfait sur des facteurs qui stimulent le triplet pratiques pédagogiques, compétences et motivation des outils numériques. La question de recherche est donc de savoir quelles sont les usages éducatifs des outils numériques qui influenceraient la compétence en TIC et la motivation scolaire chez les élèves dans l'enseignement secondaire au Cameroun. L'objectif est d'identifier les usages pédagogiques des outils numériques des élèves

inspirés des modèles de (Mian B. A., 2010; Touré, Mbangwana, & Sène, 2009), les types de compétences technologiques selon Desjardins (2005), les types et les profils de motivation scolaire selon la théorie d'auto-détermination de Deci et Ryan (2002) ; et ensuite analyser et mieux comprendre les similitudes et les différences qui existeraient entre les dimensions institutionnelles des établissements scolaires, les dimensions sociologiques ainsi que ethnoculturelles des élèves. Cette analyse est effectuée à partir du regard des élèves eux-mêmes et devrait constituer en soi un moyen de corroborer (ou non) les constats faits auprès des enseignants (Coen, Rey, Monnard, & Jauquier, 2013), d'une part, et des directions d'écoles, d'autre part. C'est une recherche inductive à caractère exploratoire, qui porte sur trois échantillons non probabilistes constitués respectivement de 18 écoles secondaires, 71 enseignants et 1525 élèves au titre des deux années scolaires, 2017 – 2018 et 2018 – 2019. Le choix méthodologique porte sur une étude multi-cas inspirée de (Yin, 1994 ; in (Tchameni Ngamo S. , 2007, p. 78)). La collecte des données s'est effectuée par le canal de trois questionnaires, des entretiens informels, semi-dirigés et de groupes, des observations des situations de terrain, et des analyses de documents divers. Les principaux résultats de cette présente étude, semblent mettre en valeur trois familles de facteurs qui se recoupent : le milieu social, l'origine sociale des élèves, et les études suivies ou facteur pédagogique. Ce qui nous a permis d'élaborer des hypothèses conclusives. Primo, les élèves de milieu social plus aisé, ont plus de familiarité avec les TICE en classe, un plus fort sentiment de compétence en TIC, et ont également une plus forte motivation autodéterminée à l'égard du numérique éducatif à l'école. Secundo, les études suivies jouent un rôle discriminant entre les lycéens, dans le contexte des trois phénomènes mesurés (usages éducatifs des outils numériques, compétences technologiques et motivation). Tertio, l'origine sociale telle que les facteurs personnels de l'élève jouent un rôle discriminant entre les lycéens, dans le contexte des trois phénomènes mesurés.

Barry, A. (2021). **« Habiter le temps » de l'amphithéâtre à l'heure des pratiques numériques informelles**. *Les sciences de l'éducation - Pour l'Ère nouvelle*, *54*(1), 11-33. https://doi.org/10.3917/lsdle.541.0011
Cet article traite de la recomposition des temps de l'étude à l'université en lien avec le développement de l'usage (ici informel) des technologies de l'information et de la communication. Deux espaces d'analyse sont convoqués : celui d'un groupe Facebook, réunissant 199 étudiants de licence 3 ; celui de l'enseignement présentiel de cette même promotion (60 heures de cours magistral). L'article pose l'hypothèse que la reconfiguration numérique du temps des études gagne à être examinée en amont des dispositifs qui lui sont officiellement dédiés : ceux de la pédagogie universitaire. Les auteurs proposent d'examiner comment les modes de communication numériques spontanément mis en œuvre par les étudiants sur les réseaux sociaux exercent à eux seuls d'importants effets sur la diffusion des savoirs à l'université et participent de ce fait à l'apparition de nouvelles formes de l'étude où les logiques d'immédiateté et de différé interfèrent avec les conditions classiques de l'enseignement magistral.

Berthaud, J., & Duguet, A. (2022). **Interactions verbales enseignants-étudiants en cours magistral et compétences transversales des enseignants**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.17865
Au sein de l'enseignement supérieur français la pertinence du cours magistral fait régulièrement l'objet de débats, notamment en ce qui concerne les pratiques pédagogiques qui y sont mises en œuvre. Si la recherche s'est intéressée à plusieurs

reprises à ce type de cours, peu de travaux se sont attachés à décrire de façon empirique les pratiques interactionnelles des enseignants durant ce type d'enseignements ni à identifier les facteurs qui influent sur ces pratiques. A partir des propos déclaratifs collectés auprès de 276 enseignants d'une université française, cet article vise à décrire la nature de ces pratiques mais également les liens qu'elles entretiennent avec des facteurs individuels et contextuels parmi lesquels sont considérées les compétences transversales des enseignants. Nos résultats conduisent notamment à reconsidérer l'idée selon laquelle le cours magistral interdit toute forme d'interactions entre enseignant et étudiants.

Bluteau, J. (2022). **Didactique et pédagogie en aménagement flexible**. *Didactique*, *3*(1). Consulté à l'adresse https://revuedidactique.uqam.ca/index.php/revuedid/issue/view/4
Les gouvernements investissent d'importantes sommes dans la construction des écoles de demain, ouvertes, flexibles, modulables, laissant entrer la lumière. Des enseignants se tournent vers le modèle des « classes à aménagement flexible » pour faire face aux besoins hétérogènes des élèves et favoriser un climat propice aux apprentissages. Posant les jalons des connaissances croisées entre didactique, pédagogie, psychologie et aménagement de la classe, le numéro s'intéresse ainsi à l'aménagement flexible et à la coopération entre élèves, aux effets de la flexibilité sur les apprentissages et les pratiques d'enseignantes du primaire ou encore aux classes flexibles au Québec.

Boeck. (2022). **Trust Issues: The Role of Trusting Relationships on Students' Knowledge about and Transition to Community College**. *Community College Journal of Research and Practice*, *46*(5), 335-351. https://doi.org/10.1080/10668926.2020.1856217
Having accurate, sufficient information can help students prepare for and transition college. However, access to information about college is inequitable. Drawing from interviews with eight first-year community college students, this study explored how community college students decided whom they could trust to provide college knowledge, the role of existing relationships in their trust decisions, and how those decisions can influence students' transition to college. Findings indicate that not all students had high school environments that facilitated the development of trusting relationships with teachers or counselors. Therefore, students turned to family members and peers for guidance. Students did not question advice from people with whom they had a relationship but did question the validity of information from people with whom they did not have a relationship. For some students, inequitable access to sufficient information created challenges in their transition to college. This study highlights the importance of creating educational environments in which students can trust teachers and staff with expertise in the college preparation process. Implications for high school and community college practitioners and community college researchers are discussed.

Boz, T., & Allexsaht-Snider, M. (2022). **How do elementary school teachers learn coding and robotics? A case study of mediations and conflicts**. *Education and Information Technologies*, *27*(3), 3935-3963. https://doi.org/10.1007/s10639-021-10736-4
In this qualitative case study, we examined in-service elementary school teachers' learning of coding and robotics in a blended professional learning course developed and delivered through the collaboration between university faculty and a school district. We focused on activity theory to understand and reveal the mediations, conflicts, and effective practices that facilitated or hindered teachers' learning of coding and robotics.

The participants of the study were twelve teachers from five different elementary schools in a rural school district. Data collection and generation sources included interviews, videos of class meetings, course assignments, and artifacts. In analyzing the data, we employed analytical approaches under the guidance of activity theory. The findings showed that teacher collaboration, coding/robotics platforms employed during the professional learning course, instructional approaches, and resources in and outside the professional learning setting mediated or conflicted with the teachers' learning of coding and robotics depending on the way that each of these elements was employed in the course. Elaborating on these elements, we reported the implications for further research and practice.

Caprani, I., Duemmler, K., & Felder, A. (2022). **La perception de l'accompagnement en entreprise par les apprenti-e-s et son influence dans la transmission des savoirs pratiques de métier. Le contexte de la formation en alternance en maçonnerie en Suisse**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.17975
L'accompagnement en entreprise signifie de soutenir et encadrer les apprenant-e-s en situation de travail tout en les amenant à se familiariser avec les différentes techniques propres au métier. Il s'exprime particulièrement à travers les relations sociales entre apprenti-e-s et personnes encadrantes et en charge de leur formation. En nous appuyant sur les récits d'apprenti-e-s en maçonnerie, nous proposons d'analyser l'influence de l'accompagnement sur le développement professionnel des jeunes en formation. Cette démarche permet de relever quelles sont les pratiques d'accompagnement contribuant à un bon développement professionnel et quelles sont celles qui peuvent l'entraver. L'enjeu d'un bon accompagnement est l'attribution de responsabilités aux différents membres de l'équipe, en créant un accompagnement collectif adapté aux besoins de développement professionnel des apprenti-e-s.

Caron, G. (2021). **Influence des déclinaisons de la pédagogie Freinet dans un projet de classes coopératives au sein d'un collège REP+**. *Specificites*, *16*(2), 25-37. Consulté à l'adresse http://www.cairn.info/revue-specificites-2021-2-page-25.htm?ref=doi
Cet article cherche à mettre en évidence les influences des pédagogies Freinet, institutionnelles, coopératives dans un projet de classes coopératives au sein d'un collège d'éducation prioritaire renforcée. L'étude de documents produits par l'équipe sur huit ans ainsi que des observations de pratiques effectives ont permis de caractériser une hybridation construite progressivement à partir d'une connaissance initiale très partielle de ces pédagogies dans un dialogue entre valeurs, pratiques et concepts.

Caroti, D. (2022). *Effets des formations à l'esprit critique sur les croyances et dispositions épistémiques des enseignants* (Theses, Aix-Marseille Université). Consulté à l'adresse https://hal.archives-ouvertes.fr/tel-03637551
L'éducation à l'esprit critique des élèves fait aujourd'hui partie intégrante des prescriptions officielles de l'Éducation Nationale française. En parallèle, la formation des enseignants à l'esprit critique se développe dans de nombreuses académies, ce qui pose la question des effets de ces formations, mais également de la manière dont sont formés les enseignants à l'appropriation et à la maîtrise des compétences en lien avec l'esprit critique. Notre recherche s'est d'abord concentrée sur les prescriptions et textes officiels pour comprendre les attendus en matière d'éducation à l'esprit critique. Puis nous avons effectué un travail d'analyse de la littérature scientifique pour établir les

bases conceptuelles permettant de définir l'esprit critique, la pensée critique et le penseur critique (Ennis, 2015). Cette analyse nous a permis de dégager des caractéristiques de la pensée critique (connaissances, capacités et dispositions) et des critères d'évaluation pour le penseur critique (fiabilité, confiance). Pour former un penseur critique « efficace », l'intérêt d'utiliser des contenus de types pseudoscientifiques ou « paranormaux » a été évalué par plusieurs travaux (Dyer & Hall, 2018; Wilson, 2018). Nous avons alors testé et mis en évidence 1/ l'effet de la rationalité épistémique sur l'adhésion des enseignants à des croyances non fondées (Adam-Troian, Caroti, Arciszewski, & Ståhl, 2019) et 2/ l'effet de formations à l'esprit critique pour enseignants s'appuyant sur des contenus et exemples de type pseudoscientifiques ou « paranormaux » sur la réduction de croyances non fondées, et le renforcement de certaines dispositions critiques des enseignants, à savoir la rationalité épistémique et l'humilité épistémique.

Chaves, S. Q. (2021). ***Elaboration et conception de documents supports de travail des élèves par des professeurs des écoles : exemples d'élaborations et de conceptions de documents composites au cycle 3*** (Phdthesis, Université de Bretagne occidentale - Brest). Consulté à l'adresse https://tel.archives-ouvertes.fr/tel-03629625
Cette recherche s'intéresse au travail de professeurs des écoles exerçant en CM2 et inscrits dans un groupe de recherche coopératif durant trois années. Pendant cette période, ces enseignants ont élaboré, conçu et mis en oeuvre trois moutures d'une séquence d'enseignement-apprentissage en histoire proposant des documents composites en tant que supports de travail des élèves. Ces documents associent sur un même espace perceptuel des composants hétérogènes qui nécessitent d'être articuler entre eux afin d'accéder, au-delà de leur sens individuel, au sein commun qui les réunit. Ces supports s'avèrent complexes à lire et à comprendre mais ils sont également difficiles à élaborer et à concevoir. Pourtant, les enseignants, exerçant au cycle 3, produisent majoritairement ce type de document comme support de travail des élèves. A travers l'étude de leur travail de documentation (Gueudet et Trouche, 2008, 2012), nous chercherons à décrire, observer et analyser comment trois enseignants articulent des contraintes relatives aux savoirs en jeu, aux dimensions matérielle et cognitive des documents et aux cadres institutionnels pour produire de tels documents et à déterminer les enjeux relatifs à ce travail en termes de lecture-compréhension des élèves et de gestes professionnels des enseignants.

Chen Musgrove, M. M., Nied, S., Cooley, A., Schinske, J. N., & Corwin, L. A. (2022). **Engaging with CC Bio INSITES: Experiences of Barriers, Supports, and Belonging in Community College Faculty Participating in Biology Education Research**. *CBE—Life Sciences Education*, *21*(2), ar16. https://doi.org/10.1187/cbe.21-09-0246
Chen, V., Sandford, A., LaGrone, M., Charbonneau, K., Kong, J., & Ragavaloo, S. (2022). **An exploration of instructors' and students' perspectives on remote delivery of courses during the COVID-19 pandemic**. *British Journal of Educational Technology*, *53*(3), 512-533. https://doi.org/10.1111/bjet.13205
The world-wide pivot to remote learning due to the exogenous shocks of COVID-19 across educational institutions has presented unique challenges and opportunities. This study documents the lived experiences of instructors and students and recommends emerging pathways for teaching and learning strategies post-pandemic. Seventy-one instructors and 122 students completed online surveys containing closed and open-ended questions. Quantitative and qualitative analyses were conducted, including

frequencies, chi-square tests, Welch Two-Samples t-tests, and thematic analyses. The results demonstrated that with effective online tools, remote learning could replicate key components of content delivery, activities, assessments, and virtual proctored exams. However, instructors and students did not want in-person learning to disappear and recommended flexibility by combining learning opportunities in in-person, online, and asynchronous course deliveries according to personal preferences. The paper concludes with future directions and how the findings influenced our planning for Fall 2021 delivery. The video abstract for this article is available at https://www.youtube.com/watch?v=F48KBg_d8AE. Practitioner notes What is already known about this topic Emergency Remote Teaching (ERT) allowed institutions across the world to continue teaching and learning at all levels of education during the COVID-19 pandemic. However, this form of delivery, created under conditions of uncertainty, was developed out of an urgency to keep education going rather than maintaining it at the same level. What this paper adds This study comes after ERT, and is situated between ERT and the return to campus, with some social distancing restrictions still active, in a delivery method widely viewed as "remote delivery". This is a case study of an entire Canadian higher education institution that implemented remote learning for over one full academic year, documenting and examining instructors' and students' experiences and challenges of the remote learning course delivery format. Quantitative and qualitative data were collected to provide a holistic overview of instructors' and students' experiences of delivery method and assessments including the use of face-tracking proctoring software. Implications for practice and/or policy Compared to ERT, remote delivery was a thoughtful and deliberate way to transform in-person courses into virtual learning experiences. Instructors and students were able to successfully replicate many features of in-person learning and assessments experiences in remote delivery of courses by using effective online tools to teach and learn. As a result, instructors and students called for the use of elements of remote delivery to create more flexible learning opportunities by combining in-person, live streaming, and asynchronous learning options.

Clements, T. P., Friedman, K. L., Johnson, H. J., Meier, C. J., Watkins, J., Brockman, A. J., & Brame, C. J. (2022). **"It made me feel like a bigger part of the STEM community": Incorporation of Learning Assistants Enhances Students' Sense of Belonging in a Large Introductory Biology Course**. *CBE—Life Sciences Education*, *21*(2), ar26. https://doi.org/10.1187/cbe.21-09-0287
Large introductory science courses are a particularly important and challenging target for creating inclusive learning environments. In this study, we examined the impact of incorporating learning assistants (LAs) on the learning environment in an introductory biology course taught with two different structures: an in-person lecture with intermittent active-learning components and an online setting taught with a flipped instructional approach. Using a survey that measured sense of belonging in a single class, we found that students in sections with LAs reported greater sense of belonging than students in sections without LAs in both class structures. Further, student focus groups revealed that LAs promoted learning and engagement in the class by answering questions and providing clarity; allowing more use of active- and interactive-learning structures; and serving as accessible, approachable, and immediate sources of help. Student responses also indicated that LAs promoted a sense of belonging in science, technology, engineering, and mathematics (STEM) by decreasing feelings of isolation, serving as inspirational role models, clarifying progression through the STEM educational system, and helping students become more engaged and confident in their STEM-related knowledge

and skills. These findings indicate that LAs can support multiple elements of inclusive STEM learning environments.

Connac, S., Hueber, C., & Lanneau, L. (2022). **Aménagements flexibles et coopération entre élèves**. *Didactique*, *3*(1), 11-36. Consulté à l'adresse https://revuedidactique.uqam.ca/index.php/revuedid/issue/view/4/VOL%203%20NO%201
Les gouvernements investissent d'importantes sommes dans la construction des écoles de demain, ouvertes, flexibles, modulables, laissant entrer la lumière. Des enseignants se tournent vers le modèle des « classes à aménagement flexible » pour faire face aux besoins hétérogènes des élèves et favoriser un climat propice aux apprentissages. Posant les jalons des connaissances croisées entre didactique, pédagogie, psychologie et aménagement de la classe, le numéro s'intéresse ainsi à l'aménagement flexible et à la coopération entre élèves, aux effets de la flexibilité sur les apprentissages et les pratiques d'enseignantes du primaire ou encore aux classes flexibles au Québec.

Connac, S., Lascassies, C., & Lefort, J. (Éd.). (2022). **Former les élèves à la coopération (Dossier)**. *Les Cahiers pédagogiques*, (576). Consulté à l'adresse https://www.cahiers-pedagogiques.com/n-576-former-les-eleves-a-la-cooperation/
Il ne suffit pas que quatre élèves travaillent ensemble pour qu'ils en tirent un bénéfice. Sans précautions spécifiques, la coopération peut même décourager les plus fragiles. Un des leviers pour que la coopération soit profitable à tous est la formation des élèves à la coopération, pour leur expliciter les attendus.

Conrad, C., Deng, Q., Caron, I., Shkurska, O., Skerrett, P., & Sundararajan, B. (2022). **How student perceptions about online learning difficulty influenced their satisfaction during Canada's Covid-19 response**. *British Journal of Educational Technology*, *53*(3), 534-557. https://doi.org/10.1111/bjet.13206
The COVID-19 pandemic has posed a significant challenge to higher education and forced academic institutions across the globe to abruptly shift to remote teaching. Because of the emergent transition, higher education institutions continuously face difficulties in creating satisfactory online learning experiences that adhere to the new norms. This study investigates the transition to online learning during Covid-19 to identify factors that influenced students' satisfaction with the online learning environment. Adopting a mixed-method design, we find that students' experience with online learning can be negatively affected by information overload, and perceived technical skill requirements, and describe qualitative evidence that suggest a lack of social interactions, class format, and ambiguous communication also affected perceived learning. This study suggests that to digitalize higher education successfully, institutions need to redesign students' learning experience systematically and re-evaluate traditional pedagogical approaches in the online context. Practitioner notes What is already known about this topic University transitions to online learning during the Covid-19 pandemic were undertaken by faculty and students who had little online learning experience. The transition to online learning was often described as having a negative influence on students' learning experience and mental health. Varieties of cognitive load are known predictors of effective online learning experiences and satisfaction. What this paper adds Information overload and perceptions of technical abilities are demonstrated to predict students' difficulty and satisfaction with online learning. Students express negative attitudes towards factors that influence information overload,

technical factors, and asynchronous course formats. Communication quantity was not found to be a significant factor in predicting either perceived difficulty or negative attitudes. Implications for practice and/or policy We identify ways that educators in higher education can improve their online offerings and implementations during future disruptions. We offer insights into student experience concerning online learning environments during an abrupt transition. We identify design factors that contribute to effective online delivery, educators in higher education can improve students' learning experiences during difficult periods and abrupt transitions to online learning.

Deprit, A., & Van Nieuwenhoven, C. (2021). **Un impulseur au cœur de la planification des futurs enseignants**. *Revue française de pédagogie. Recherches en éducation*, (213), 75-88. https://doi.org/10.4000/rfp.11064
Au moment de planifier leur stage, les futurs enseignants sont encouragés à l'autonomie et à la responsabilisation. Dès lors, nous nous questionnons sur la manière dont ils se mobilisent pour concevoir leurs leçons et sur ce qui guide leurs choix. Vingt stagiaires inscrits en première année de formation ont été amenés à photographier tout ce qu'ils font quand ils planifient. L'analyse qualitative à visée compréhensive de la reconstitution chronologique de leur histoire planificatrice nous a permis de mettre au jour une dynamique interne – que nous appelons « impulseur » – insufflant leurs décisions et, en corollaire, d'en distinguer quatre types.

Dockrell, J. E., Papadopoulos, T. C., Mifsud, C. L., Bourke, L., Vilageliu, O., Bešić, E., … Gerdzhikova, N. (2022). **Teaching and learning in a multilingual Europe: findings from a cross-European study**. *European Journal of Psychology of Education*, *37*(2), 293-320. https://doi.org/10.1007/s10212-020-00523-z
School classrooms within the EU are multilingual learning environments. The diversity of pupils in classrooms raises significant challenges for teachers, but to date, there are no data from large-scale surveys that compare views within and across European countries. A bespoke questionnaire was designed to examine views of current classroom learning environments with respect to the multilingualism. The questionnaire was piloted and subsequently completed by 2792 teachers across different European countries. Eleven countries provided sufficient data for analyses. Results from structural equation modelling showed that teachers' attitudes could be reliably measured across Europe with the use of carefully devised questionnaire, whose loading and factor structure remained invariant across countries. Teachers' views about multilingualism were most challenged by the numbers of children in their classes, not the percentage of multilingual pupils in the class. Countries differed in how they perceived multilingualism, with their differences leading to distinctive country clusters. Gender and education level (elementary vs. secondary) differences were also observed irrespective of country. These findings enhance our understanding of the role that the characteristics of teachers and their classrooms play in a multilingual setting across diverse European settings. The practical relevance of the results and new opportunities for teacher training are discussed.

Doukhan, C. (2021). *Modèles praxéologiques dans la transition secondaire-supérieur : le cas des probabilités en filière biologie* (Phdthesis, Université de Bretagne occidentale - Brest). Consulté à l'adresse https://tel.archives-ouvertes.fr/tel-03632311
Le premier objectif de cette thèse est d'analyser les attendus institutionnels et les déroulements de classe en probabilités pour la première année de biologie à l'Université et de les comparer à ceux du secondaire en classe de terminale scientifique. Nous

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mettons en lumière les spécificités des étudiants non-spécialistes dans l'apprentissage des probabilités afin d'atteindre le second objectif de cette thèse qui est de faire l'état des lieux des difficultés rencontrées par les étudiants de biologie, pour ces enseignements de probabilités, dans le but d'y remédier. Nous nous référons principalement à la Théorie Anthropologique du Didactique, que nous articulons avec des éléments de la Théorie de l'Activité adaptés à la didactique des mathématiques. De cette façon nous construisons un outil théorique appelé Modèle Praxéologique de Référence Étendu par la théorie de l'activité et adapté pour la Transition secondaire-supérieur, noté MPR-ET, dans le cas ici des probabilités pour les non-spécialistes. Cet outil est adapté aux besoins des étudiants biologistes débutants à l'Université et permet à la fois d'expliciter les attentes institutionnelles envers les étudiants à l'Université en tenant compte de ce qui est fait au secondaire mais également de mieux appréhender la transition. En effet, ce MPR-ET fait figurer des propositions en vue de construire un enseignement innovant qui réduirait les difficultés des étudiants à la transition, notamment de repenser les mathématiques enseignées à ces étudiants en tant qu'outils de modélisation pour l'étude de problèmes issus de la biologie et d'imaginer un enseignement commun mathématiques/biologie.

El Kalai, I., Kirmi, B., & Ait Lhassan, I. (2022). **Investigating the effect of teacher commitment on student academic : The case of Moroccan high schools in Tangier**. *International Journal of Research in Business and Social Science*, *10*, 350-363. https://doi.org/10.20525/ijrbs.v10i8.1507
The present work is interested in the resonance of teacher commitment on students' academic commitment and consequently on their academic achievement. It aims to identify the determinants of the commitment of Moroccan teachers at the qualifying secondary level specifically in the Provincial Directorate of National Education of Tangier-Assilah (Morocco), in particular organizational commitment and professional commitment with repercussions on student commitment in its two dimensions: affective, cognitive and its extension on academic achievement. This article has discussed the conceptual and theoretical details as well as the problematic, the main hypotheses and the conceptual model of the research. Then, it has presented the results of the empirical study which is based on a quantitative methodological approach of a positivist hypothetical deductive nature. The data were collected by a questionnaire submitted by e-mail to our study population, which consists of 204 teachers and 380 students of the qualifying secondary level in 29 local public schools of the qualifying secondary cycle in the Provincial Directorate of National Education of Tangier-Assilah (Morocco). The result of our empirical study shows that the teacher commitment had a positive and statistically significant effect on student academic achievement through student engagement in local public schools of the qualifying secondary cycle in the Provincial Directorate of National Education of Tangier-Assilah (Morocco).

Endedijk, H. M., Breeman, L. D., van Lissa, C. J., Hendrickx, M. M. H. G., den Boer, L., & Mainhard, T. (2022). **The Teacher's Invisible Hand: A Meta-Analysis of the Relevance of Teacher–Student Relationship Quality for Peer Relationships and the Contribution of Student Behavior**. *Review of Educational Research*, *92*(3), 370-412. https://doi.org/10.3102/00346543211051428
The relationships that students have with teachers and peers are important for their academic, social, and behavioral development. How teachers relate to students may affect students' peer relationships and thereby foster or hamper students' development.

To shed more light on the teacher's role with respect to peer relationships, this meta-analysis assessed the association between the quality of teacher–student and peer relationships (n = 297 studies; n = 1,475 unique effect sizes). We took student behavior into account, as it is known to affect both types of relationship. In addition, design characteristics such as positive versus negative aspects of relationships, type of informants, and educational level were considered. Results showed that negative aspects of the teacher–student relationship in particular were predictive of peer relationships. Moreover, teacher–student relationship quality partially mediated the association between student behavior and peer relationships. For teachers, preventing or reducing negative aspects in their relationships with students who have behavioral problems can positively affect classroom peer relationships.

Fejzo, A., Whissell-Turner, K., & Saidane, R. (2022). **Rédiger à plusieurs mains : l'encadrement des futurs chercheurs dans la rédaction d'un article scientifique**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.a251

Filippou, D., Buchs, C., Quiamzade, A., & Pulfrey, C. (2022). **Understanding motivation for implementing cooperative learning methods: a value-based approach**. *Social Psychology of Education*, *25*(1), 169-208. https://doi.org/10.1007/s11218-021-09666-3
The implementation of cooperative learning methods remains disparate in primary schools despite their widely recognised benefits. To explain this paradox, we first examined whether teachers' inclination towards cooperative methods is motivated by their values. Second, we tested whether motivational connections between personal values and cooperative methods are undermined when conflictual values are activated in context. Study 1 demonstrated that pre-service teachers strongly endorsed self-transcendence (ST) values (expressing compatible motivations with cooperation) relative to self-enhancement (SE) values (expressing conflictual motivations with cooperation). Adherence to ST values was also positively associated with their beliefs and attitudes regarding cooperative methods. In Studies 2, 3 and 4, educational sciences students were experimentally exposed to different contexts, wherein ST, SE or neutral values were promoted. Our findings indicate that when SE values were emphasised in the context, the positive association between ST values and beliefs/attitudes regarding cooperative methods disappeared. Although the results of Study 4 regarding the intention to use cooperative methods were not statistically significant, the pattern was similar. Finally, Study 5 showed that primary school teachers' ST values positively predicted the self-reported use of cooperative methods when they perceived their school to weakly endorse SE values, but not when they perceived it to strongly endorse them.

Fjelkner-Pihl, A. (2022). **The Constructive Overlap: A Study of Multiplex Ties in Students' Study-Related Networks and Academic Performance**. *Innovative Higher Education*, *47*(2), 273-295. https://doi.org/10.1007/s10755-021-09576-4
This article adds to a growing body of literature on how various types of social relations can work synergistically to promote students' academic success. Students' study-related social networks affect academic outcome in higher education. The network literature in education generally explores students' various relations separately, rather than their multiplex relations or when individuals share several relations. This approach risks missing the full complexity of the student experience. The aim of the present study is to add to the discussion on student social networks and attainment in higher education by further exploring multiplex relations maintained in a specific study program, in which a large

share of students in the cohort commute. A survey was distributed to students in one cohort (n = 146). The findings revealed that, in this cohort, students' friendship, working and learning networks overlap substantially, and that centrality in the friendship and in the student multiplex networks was positively and significantly related to academic outcome, whereas centrality in the working and learning networks was not. Points for future research are suggested, and practical implications for those supporting student learning in higher education are discussed.

Florio, E., Caso, L., & Castelli, I. (2022). **Detrimental educational practices deemed as culturally acceptable: Adultcentrism and Black Pedagogy in Italian primary schools**. *Social Psychology of Education*, *25*(1), 313-347. https://doi.org/10.1007/s11218-021-09676-1

In a complex and systemic view of human development, the educational relationship is conceived as the keystone of development (Pianta, 1999; Pianta, 2001). However, harsh discipline practices may still be culturally rooted, thus affecting children's well-being. Two constructs that may provide useful insights on this topic are Adultcentrism (AD) and Black Pedagogy (BP). AD is conceived as a paradigm of thought entailing a bias in the interpretation of children's needs, hindering adults' capability to truly understand children's culture, and promoting a binary thinking based on the adult–child opposition. BP represents a label for those "old-fashioned" disciplinary methods (punishments or physical/mental violence) based on adults' power and control over children, that may be still deemed as acceptable to a certain degree in a specific cultural and social context. Adultcentrism and Black Pedagogy Scales were administered to a sample of 294 Italian primary school teachers (age M = 47 years, SD = 8.96). Measures of authoritarian educational styles and of the ability to recognize subtle maltreating situations were also included. Results indicated that the higher the agreement with AD and BP, the lower the capacity to correctly recognize subtle maltreating situations in classroom. Adultcentrism proved to be a significant predictor of Black Pedagogy: $F(1, 231) = 71.06$, $p = .000$, with $R2 = .24$. Results support the idea that it is worth reflecting on the risk that Adultcentrism brings about detrimental Black Pedagogy educational practices, in order to provide suggestions about possible application models for family and professional caregivers to use to foster children's well-being.

Foster-Hartnett, D., Mwakalundwa, G., Bofenkamp, L., Patton, L., Nguyen, R., & Goodman-Mamula, P. (2022). **Beyond the Traditional Classroom: Increased Course Structure and Cooperative Learning Remove Differences in Achievement between Students in an In-Person versus Hybrid Microbiology Course**. *CBE—Life Sciences Education*, *21*(2), ar33. https://doi.org/10.1187/cbe.21-01-0007

The increase in online learning brought on by the COVID-19 pandemic will likely result in a greater availability of online and hybrid course offerings. In this study, students enrolled in parallel sections of a microbiology lab course with in-person labs and either face-to-face (F2F) or all-online lectures (hybrid, H). Course material and method of assessment in the two sections were identical; student demographics were similar. In the first year, F2F students scored significantly higher on two out of four exams. In the second year, two interventions were introduced: team-building activities (in both sections) and online group discussions (H only). Students in both the F2F and H sections reported similar positive teamwork reviews based on Comprehensive Assessment of Team Member Effectiveness (catme.org) and survey data. Although the COVID-19 pandemic eventually forced all learning online, exam scores from the two sections in the first half of the semester were

similar, suggesting that the interventions were effective. In both sections, exam scores were positively correlated with entering grade point averages. This study adds to the body of literature supporting the effectiveness of hybrid learning.

Frei-Landau, R., Orland-Barak, L., & Muchnick-Rozonov, Y. (2022). **What's in it for the observer? Mimetic aspects of learning through observation in simulation-based learning in teacher education**. *Teaching and Teacher Education*, *113*, 103682. https://doi.org/10.1016/j.tate.2022.103682
The aim of this exploratory case study was to gain insight into the overlooked learning experience of simulation "observers," through the lens of the mimetic learning theory. Fifty-nine inservice teachers attended five, 4-h-long simulation workshops. Data were collected using semi-structured interviews (15), a focus group, and participants' reflections (59), and underwent content and linguistic analysis. Four themes denoting mimetic learning emerged: multimodal sensory observation; adopting multiple perspectives; balanced emotional involvement; and cognitive critical thinking. The study highlights the affordances of simulation-based observation experiences in teacher education. This is especially relevant considering the COVID-19 lockdown, when opportunities for peer observation are limited.

Frey, R. F., Brame, C. J., Fink, A., & Lemons, P. P. (2022). **Teaching Discipline-Based Problem Solving**. *CBE—Life Sciences Education*, *21*(2), fe1. https://doi.org/10.1187/cbe.22-02-0030
Problem solving plays an essential role in all scientific disciplines, and solving problems can reveal essential concepts that underlie those disciplines. Thus, problem solving serves both as a common tool and desired outcome in many science classes. Research on teaching problem solving offers principles for instruction that are guided by learning theories. This essay describes an online, evidence-based teaching guide (https://lse.ascb.org/evidence-based-teaching-guides/problem-solving) intended to guide instructors in the use of these principles. The guide describes the theoretical underpinnings of problem-solving research and instructional choices that can place instruction before problem solving (e.g., peer-led team learning and worked examples) or problem solving before instruction (e.g., process-oriented guided inquiry learning, contrasting cases, and productive failure). Finally, the guide describes assessment choices that help instructors consider alternative outcomes for problem-solving instruction. Each of these sections consists of key points that can be gleaned from the literature as well as summaries and links to articles that inform these points. The guide also includes an instructor checklist that offers a concise summary of key points with actionable steps to direct instructors as they develop and refine their problem-solving instruction.

Gasell, C., Lowenthal, P. R., Uribe-Flórez, L. J., & Ching, Y.-H. (2022). **Interaction in asynchronous discussion boards: a campus-wide analysis to better understand regular and substantive interaction**. *Education and Information Technologies*, *27*(3), 3421-3445. https://doi.org/10.1007/s10639-021-10745-3
Discussion boards can provide a glimpse into the regular and substantive interaction required in online courses. Advances in technology and an increased interest in learning analytics now provides researchers with billions of data points about instructor and student interaction within a learning management system (LMS). This study used LMS data to explore the frequency of interaction between instructors and students in discussion boards in online courses at one institution. Overall, 415 courses were analyzed spanning

two semesters. Results from the study found that the average number of posts by an instructor was 32.9. The average instructor interaction was 1.49 instructor posts per student. 23% of courses had no instructor posts. Student posts averaged 470 per course and the average posts per student was 19.9. Based on the discussion board activity, the most discussion interaction occurred during the first two weeks of the semester. Results also suggested that there is no relationship between student satisfaction and the number of total posts in a course. The paper concludes with implications for research and practice.

Gelinas, K. A., Ovid, D., Amaya-Mejia, W., Ayala, R., Baek, H. E., Gasmin, E., … Tanner, K. D. (2022). **Investigating Instructor Talk among Graduate Teaching Assistants in Undergraduate Biology Laboratory Classrooms**. *CBE—Life Sciences Education*, *21*(2), ar31. https://doi.org/10.1187/cbe.21-10-0302
Instructor Talk—noncontent and nonlogistical language that is focused on shaping the classroom learning environment—is a recently defined variable that may play an important role in how undergraduates experience courses. Previous research characterized Instructor Talk used by faculty teaching in biology lecture classrooms. However, graduate teaching assistants (GTAs) and laboratory classrooms represent critical factors in undergraduate education, and Instructor Talk in this context has yet to be explored. Here, we present findings analyzing Instructor Talk used by GTAs teaching in undergraduate biology laboratory classrooms. We characterized the Instructor Talk used by 22 GTA instructors across 24 undergraduate biology laboratory courses in the context of a single, urban, Hispanic-serving and Asian American and Pacific Islander–serving Institution. We found that Instructor Talk was present in every course studied, GTAs with pedagogical training and prior teaching experience used more Instructor Talk than those without, and GTAs teaching laboratory courses used more Instructor Talk than previous observations of faculty teaching lecture courses. Given the widespread use of Instructor Talk and its varying use across contexts, we predict that Instructor Talk may be a critical variable in teaching, specifically in promoting equity and inclusion, which merits continued study in undergraduate science education.

Golombek, P., Olszewska, A. I., & Coady, M. (2022). **Humanizing power of counter-stories: Teachers' understandings of emergent bilinguals in rural settings**. *Teaching and Teacher Education*, *113*, 103655. https://doi.org/10.1016/j.tate.2022.103655
This article explores how counter-narratives of undocumented students' journeys to and life in the United States can disrupt White, monolingual teachers' understandings of emergent bilinguals (EBs) in their rural classrooms. Online postings and plans of action of two teachers were analyzed through Vygotsky's theorizing on imagination, emotion, and catharsis, and Nussbaum's narrative imagination. Reading the counter-narratives triggered an emotional response, enabling teachers to develop an informed empathy and to re-story interactions with previous EBs and understandings of familiar rural spaces. With expanded understandings of undocumented students' lived experiences, teachers could more responsively address the needs of EBs and their families.

Gouvea, J., & Appleby, L. (2022). **Expanding Research on Responsive Teaching**. *CBE—Life Sciences Education*, *21*(2), fe2. https://doi.org/10.1187/cbe.22-03-0064
Over a decade of theoretical and empirical research, primarily in K–12 mathematics and science education, makes the case for the benefits of responsive teaching—an approach to instruction that centralizes student thinking. The new research described in

this Current Insights provides quantitative support for the benefits of responsiveness, interrogates how responsive teaching is conceptualized and practiced to support equity, and invites the biology education research community to consider how to make responsive teaching more common at the undergraduate level.

Hoang, L. P., Le, H. T., Van Tran, H., Phan, T. C., Vo, D. M., Le, P. A., … Pong-inwong, C. (2022). **Does evaluating peer assessment accuracy and taking it into account in calculating assessor's final score enhance online peer assessment quality?** *Education and Information Technologies*, *27*(3), 4007-4035. https://doi.org/10.1007/s10639-021-10763-1

Peer assessment has an important role in teaching and learning nowadays. However, the existing techniques tend to be limited due to a lack of a suitable means to evaluate the accuracy of peer assessment activities and supervise peer assessment performances in an online environment. Hence, it is very necessary to develop new solutions encourage students to take full effort when they join in online peer assessment activities. This study proposed a new approach to evaluate the accuracy of peer assessment results for enhancing the quality of peer assessment system. The proposed approach was applied to evaluate peer assessment activities of two groups of students. The experimental results analyzed and evaluated in terms of both the learning scores and opinion survey results, which revealed that when students realized both their own responses and their peer assessment activities were taken into account by the system in the calculation of the last score, they had positive attitudes towards peer assessment activities and the peer assessment results were improved significantly.

Holvio, A. (2022). *Impact of teacher content knowledge on student achievement in a low-income country* (WIDER Working Paper Series N° wp-2022-23). Consulté à l'adresse World Institute for Development Economic Research (UNU-WIDER) website: https://econpapers.repec.org/paper/unuwpaper/wp-2022-23.htm

This paper estimates the causal impact of teacher content knowledge on student achievement in Mozambique, a low-income country where a large share of fourth-graders fail to meet the minimum requirements of literacy and numeracy. I use nationally representative data from the Service Delivery Indicator survey, and exploit within-student across-subject variation in a sample of students taught by the same teacher in maths and Portuguese, thus circumventing bias caused by unobserved student and teacher heterogeneity.

Jarraud, F. (2022, avril 6). **Ce qui se joue dans la classe : Les collégiens, le cadre scolaire et ses règles**. Consulté 6 avril 2022, à l'adresse Le café pédagogique website: http://www.cafepedagogique.net/lexpresso/Pages/2022/04/06042022Article637848251550440752.aspx?actId=ebwp0YMB8s1_OGEGSsDRkNUcvuQDVN7aFZ1E4yS5hsZMczVe0oRbhmAPNiXrAmaf&actCampaignType=CAMPAIGN_MAIL&actSource=515712

« Les collégiens... décrivent des enseignants qui sont performants quand ils parviennent, par la maîtrise de l'interprétation des signes qu'ils produisent, à enrôler les élèves pour le bénéfice du collectif comme des individus ». Dans un article de la Revue française de pédagogie (n°213), Julien Netter (Escol) et Audrey Boulin (Cergy Paris Unversity) analysent les règles du jeu de la classe telles que les collégiens les voient. Une certitude : ces règles existent et les collégiens les partagent même s'ils perçoivent de façon différente les choses. L'enjeu est de taille : les apprentissages. Aux enseignants donc de bien les connaitre. Mais les enseigne t-on?

Jensen, M. T. (2022). **Are test-based policies in the schools associated with burnout and bullying? A study of direct and indirect associations with pupil-teacher ratio as a moderator**. *Teaching and Teacher Education*, *113*, 103670. https://doi.org/10.1016/j.tate.2022.103670
Research is lacking regarding how teachers' perceptions of a performance goal structure, relate to teacher and student outcomes. Thus, the present study examined associations among performance goal structure, teacher burnout, and bullying among students, and further whether pupil-teacher ratio moderated the relation between teacher burnout and bullying. 300 class teachers from 150 schools participated in the project, and structural equation modeling was applied. Results revealed significant associations among performance goal structure, teacher burnout, and bullying. However, having an additional teacher in the classroom did not moderate the association between burnout and bullying.

Jeong, S., Clyburn, J., Bhatia, N. S., McCourt, J., & Lemons, P. P. (2022). **Student Thinking in the Professional Development of College Biology Instructors: An Analysis through the Lens of Sociocultural Theory**. *CBE—Life Sciences Education*, *21*(2), ar30. https://doi.org/10.1187/cbe.21-01-0003
An important facet of inclusive, student-centered science teaching is for college instructors to reveal and respond to student thinking. Professional development (PD) provides formal settings for instructors to develop skills attending and responding to student ideas in their teaching. Using the lens of sociocultural theory, the purpose of this study was to explore the learning experiences of college instructors in long-term faculty learning communities (FLCs) that focused on student thinking. This study employed a qualitative design using semistructured interviews, analyzed through qualitative thematic analysis. We investigated the ways that social interactions focused on artifacts of student learning facilitated college instructors' internalization of knowledge about teaching and learning. We found that participants valued the social space of the FLC for the camaraderie and diverse perspectives it facilitated and that participants internalized the discussions from their FLCs in the form of new insights into student thinking and plans for improving teaching. Our data support the idea that PD for college science teaching that includes social space focused on artifacts of student learning will lead to instructor learning. Further, our data point to the fruitfulness of new research to expand our knowledge of the implications of sociocultural theory for college science PD.

Jung, J., Lu, Y.-H., & Ding, A.-C. E. (2022). **How Do Prompts Shape Preservice Teachers' Reflections? A Case Study in an Online Technology Integration Class**. *Journal of Teacher Education*, *73*(3), 301-313. https://doi.org/10.1177/00224871211056936
To investigate how prompts shape preservice teachers' reflections, we examined, in this exploratory case study, the written reflections responding to three types of prompts (standard-based, concept-based, and task-based) of 21 preservice teachers in an online technology integration class. We analyzed these reflections at the sentence level (total 1,503 comments), both quantitatively and qualitatively, using a framework comprising descriptive, rationalistic, and anticipatory dimensions to understand the compositions of reflections generated from each type of prompt and the kinds of teacher abilities demonstrated in each dimension. We found quantitative patterns between prompt types and the reflections generated and emergent themes in each dimension of reflection relating to teacher abilities. We conclude by discussing three prompt design

features that appeared to have played an important role in shaping the reflections and suggesting implications and future research directions.

Kager, K., Jurczok, A., Bolli, S., & Vock, M. (2022). **"We were thinking too much like adults": Examining the development of teachers' critical and collaborative reflection in lesson study discussions**. *Teaching and Teacher Education*, *113*, 103683. https://doi.org/10.1016/j.tate.2022.103683
This mixed-method study addresses the need for a clear conceptualization of the professional reflection element of Lesson Study (LS), a popular collaborative approach to the professional development of teachers. Grounding and re-framing LS's post-lesson discussion in a theoretical framework of critical and collaborative reflection, we analyze the transcripts of four LS groups at German primary schools, focusing on depth of reflection and teachers' trajectories through their reflective practice. The findings show that LS groups differed significantly in the depth and the trajectories of their reflection processes. We consider implications for post-lesson discussions and critical reflection as a LS core skill.

Kikas, E., Mädamürk, K., Hennok, L., Sigus, H., Talpsep, T., Luptova, O., & Kivi, V. (2022). **Evaluating the efficacy of a teacher-guided comprehension-oriented learning strategy intervention among students in Grade 4**. *European Journal of Psychology of Education*, *37*(2), 509-530. https://doi.org/10.1007/s10212-021-00538-0
This study examined the effects of a teacher-led learning-strategy intervention program on fourth-grade students' reported use and perceived effectiveness of rehearsal and comprehension-oriented learning strategies. During 18 program units, teachers taught about learning and various learning strategies, including visualisation, elaboration and categorisation. Strategies were practised in math, language and science classes. Participants were comprised of 82 fourth-grade students in the intervention group and 387 fourth-grade students in the control group. Students' reported use and perceived effectiveness of learning strategies were assessed before and at least 4 months after intervention using a web-based word-memorisation task and associated reflection questions. The intervention group tended to use more comprehension-oriented learning strategies in post-tests, and the intervention group also showed an increase in perceived effectiveness of comprehension-oriented learning strategies. Still, rehearsal was evaluated as the most effective strategy in both the control group and the intervention group. Explanations for these findings and possible future directions are discussed.

Kobayashi, K. (2022). **Learning by teaching face-to-face: the contributions of preparing-to-teach, initial-explanation, and interaction phases**. *European Journal of Psychology of Education*, *37*(2), 551-566. https://doi.org/10.1007/s10212-021-00547-z
Teaching other students in a face-to-face manner has been shown to effectively foster both one's own and their learning. This study experimentally investigated whether and how tutors and tutees academically benefit from three phases of face-to-face teaching: preparing-to-teach, initial-explanation, and interaction phases. Japanese undergraduates (n = 80) acted as tutors or tutees in peer tutoring. After studying with the expectation of teaching face-to-face or taking a test (the preparing-to-teach phase), tutor participants provided tutee participants with initial instructional explanations, without asking or answering questions (the initial-explanation phase), and then engaged in a question-and-answer period (the interaction phase). Tutor and tutee participants learned better by providing and receiving higher-quality explanations in the initial-

explanation and interaction phases. Face-to-face teaching vs. test expectancy had no effects on the quality of tutor participants' explanations or their learning outcomes. The results suggest that both the initial-explanation and interaction phases contribute to learning by teaching face-to-face, whereas the preparing-to-teach phase does not.

Koubeissy, R., & Audet, G. (2022). **Gérer les contraintes dans une classe multiethnique : l'angle de l'activité enseignante**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.613

Koubeissy, R., & Audet, G. (2022). **Introduction au dossier - Travailler en contexte scolaire marqué par la diversité ethnoculturelle : des prescriptions au savoir-agir**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.776
Kuhlmann, N. (2022). **On the Power of the Concept of Responsibility**. *Educational Theory*, *72*(1), 65-83. https://doi.org/10.1111/edth.12514
The concept of responsibility is both omnipresent and highly ambivalent in the field of education. On the one hand, the term is considered to be one of the key concepts of pedagogical ethics, intended to enable a reflection on pedagogical authority. On the other hand, it is inextricably linked to the concept of accountability, which, in fact, tends to obscure important ethical issues in education. In this paper, Nele Kuhlmann aims to illustrate that these two dimensions of the concept of responsibility are inseparably rooted in its conceptual history and that it is only through this interplay that the term could become such an influential and powerful concept. By pointing out the ambiguous character of "responsibility" in the German field of educational theory and politics, Kuhlmann attempts to open up an epistemological space for thinking beyond the notion of responsibility in terms of sovereignty and accountability.

Kuhn, C., Hagenauer, G., & Gröschner, A. (2022). **"Because you always learn something new yourself!" An expectancy-value-theory perspective on mentor teachers' initial motivations**. *Teaching and Teacher Education*, *113*, 103659. https://doi.org/10.1016/j.tate.2022.103659
A teacher's decision to become a mentor teacher affects mentoring quality and the practicum experience of student teachers respectively. However, little systematic knowledge about teachers' motivations to become mentors exists to date. Based on expectancy-value theory (EVT), this interview study among 23 secondary school mentor teachers explores which aspects motivate teachers to undertake the task of mentoring. In line with EVT, teachers choose to become mentors due to a combination of expectancy and value beliefs, and socialisation influences, which can be further categorised into competence beliefs, intrinsic values, social utility values, intrinsic and extrinsic personal utility values, and social influences.

Kumar, S., & Kishor, H. M. (2022). **A Brief Literature Review of Concept Mapping for Reflective Practices**. *British Journal of Education*, *10*(4), 43-57. https://doi.org/10.37745/bje.2013/vol10no4pp.43-57
Education has become society's demand for sustainable development, cooperation, and financial independence. Reflective teaching emerges as a philosophy that can increase professional skills and expertise. Concept Map is a visual tool that enhances understanding by structuring and expressing knowledge. Since knowledge representation is the core quality of both Concept Map and Reflective Practices, they

may be linked. This article gives a brief literature review of Reflective Practices and tries to find out the relation of Concept Map with Reflective Practices.

Lee, B. L., & Johnes, J. (2022). **Using network DEA to inform policy: The case of the teaching quality of higher education in England**. *Higher Education Quarterly, 76*(2), 399-421. https://doi.org/10.1111/hequ.12307
Current literature on higher education (HE) performance only considers the production of graduates and not graduate employment. The latter needs to be factored into the HE production model as it not only measures the true impact of HE institutions (HEIs), but also provides policy implications on how resources should be allocated. Furthermore, the current literature on HE does not incorporate student responses into outputs, which should be in order to evaluate the teaching quality of HEIs. This study contributes to the existing literature by employing a network data envelopment analysis model that truly reflects the production process of HEIs and incorporates qualitative and quantitative data drawn from the UK Teaching Excellence Framework (TEF) to capture the effects from teaching quality and the graduate employment outcomes. The study allows us to compare the actual TEF outcomes with the teaching efficiency scores and determine the sources of inefficiencies which lead to policy implications.

Lefebvre, M.-E. (2022). **Éduquer à l'autisme à travers la richesse créative des adultes autistes**. *Formation et profession, 30*(1), 1. https://doi.org/10.18162/fp.2022.a250

Lenhart, C., & Bouwma-Gearhart, J. (2022). **Engaging Students around the Complex Socioscientific Issue of Sustainability: Affordances and Tensions of Faculty Working across Disciplines to Develop Transdisciplinary Curricula**. *CBE—Life Sciences Education, 21*(2), ar21. https://doi.org/10.1187/cbe.21-03-0075
There is growing recognition of the importance of engaging postsecondary students in experiences that challenge them to solve complex socioscientific problems, transdisciplinary in nature, requiring students to integrate and synthesize knowledge, skills, and ways of thinking across disciplinary boundaries. Yet these student experiences are atypical. One possible reason is that the cross-disciplinary collaborations of faculty needed to create meaningful transdisciplinary student experiences are likely to be challenging. Lacking insight into these novel collaborations, we conducted a phenomenological study that describes faculty experiences across multiple disciplines and institutions to develop a transdisciplinary curriculum. Faculty were motivated by their professional development needs and a desire to improve their teaching practices and to develop curricula that would enhance student learning, all around a topic of personal interest. Yet faculty experienced tensions related to navigating norms, practices, and language across disciplines, the suitability of transdisciplinary curricula to their courses, and confidence in teaching across disciplines. Project leaders were essential facilitators and codevelopers, helping to alleviate some tensions. We discuss implications for faculty, academic leaders, administrators, and other stakeholders interested in involving faculty working across disciplines to develop transdisciplinary curricula, notably around a timely and important topic in the biological sciences.

Leonard, N. M., & Smyth, S. (2022). **Does training matter? Exploring teachers' attitudes towards the inclusion of children with autism spectrum disorder in mainstream education in Ireland**. *International Journal of Inclusive Education, 26*(7), 737-751. https://doi.org/10.1080/13603116.2020.1718221

Seventy-eight primary school teachers completed an online questionnaire comprised of demographic questions and a standardised measure of attitudes towards inclusion. It was found that the teachers who completed the questionnaire had predominantly negative or neutral attitudes towards the inclusion of children with Autism Spectrum Disorder (ASD) in mainstream education. Gender, number of years teaching experience, training in Special Educational Needs (SEN) and/or inclusion or type of training in SEN and inclusion did not influence attitudes. However, teachers who believed they had the adequate resources to facilitate inclusion had significantly more positive attitudes than teachers who did not believe they had the adequate resources to facilitate inclusion. Although future research is needed to further explore the impact of student profile on teacher attitudes towards the inclusion of students with ASD, thought needs to be given to the type and content of teacher training in SEN and inclusion.

Linder, A., Nordin, M., Gerdtham, U.-G., & Heckley, G. (2022). *Grading Bias and Young Adult Mental Health* (Working Paper N° 2022:7). Consulté à l'adresse Lund University, Department of Economics website: https://econpapers.repec.org/paper/hhslunewp/2022_5f007.htm
Various grading reforms and trends of more lenient grading have contributed to grade inflation in Sweden and other countries. Previous research shows that over-grading increases higher education enrolment, achievements and earnings, but no study has yet addressed the potential impact of grading bias on health. In this paper, we hypothesize that over-grading has a protective impact on mental health, either through a direct effect of performance feedback, or through mechanisms such as self-efficacy and university admission distortions. We test this hypothesis using Swedish individual-level register data for individuals graduating from upper secondary school in the years 2001-2004. Grading bias, which we interpret as over-grading, is constructed as the residual of final upper secondary school grades having controlled for results in a standardised test, itself not subject to grading leniency. Over-grading is further isolated by considering only within-school variation in over-grading and controlling for prior grades and school production. We show that over-grading has substantial significant protective impacts on the mental health of young adults, but only among female students. That grades themselves, independent of knowledge, substantially impact the production of health highlights an important health production mechanism, and also implies that any changes to the design of grading systems must consider these wider health implications.

Long, H., Kerr, B. A., Emler, T. E., & Birdnow, M. (2022). **A Critical Review of Assessments of Creativity in Education**. *Review of Research in Education*, 46(1), 288-323. https://doi.org/10.3102/0091732X221084326
This chapter provides a systematic, synthesizing, and critical review of the literature related to assessments of creativity in education from historical, theoretical, empirical, and practical standpoints. We examined the assessments used in the articles focusing on education that are published from January 2010 to May 2021 in eight creativity, psychological, and educational journals. We found that the assessments of creativity in education are split between psychological and education research and have increased international participation. Additionally, these assessments are more general than specific and focus more on cognitive than noncognitive aspects. Like previous reviews of assessments of creativity in general, this review showed that creativity in education is still mainly assessed by divergent thinking or creativity tests, self-report questionnaires, and product-based subjective techniques. We analyzed the benefits and drawbacks of each

approach and highlighted many innovations in the assessment. We further discussed how the major assessment approaches address race, ethnicity, class, and gender issues in education. We concluded the review with recommendations for how to better assess creativity in education and how assessments of creativity in education contribute to our understanding of the creative educational experience and democratizing education.

Longa, R. (2022). **Reading as Askēsis**. *Educational Theory*, *72*(1), 31-46. https://doi.org/10.1111/edth.12511
Drawing on the work of Simone Weil, this article argues that the human purpose of reading is the creation of meaning through interpretive activity. In the context of institutionalized schooling, however, the activity of reading has been alienated from this purpose. As a result, some contemporary pedagogies of reading might keep us from learning how to undertake the work necessary to hone and sharpen our interpretations, and thereby render our world increasingly lucid and coherent. Here, Rachel Longa proposes that the paradigm of spiritual practice might provide the theoretical resources for a corrective to this alienation. It could help us to reconfigure the dominant form of the activity of reading such that its human purpose is foregrounded and championed, rather than obscured. The concept of askēsis could thereby serve as a lifeline that tethers us to the forms of life from which we derive purpose and that orients us toward the ends of ethical self-formation.

Longobardi, C., Ferrigno, S., Gullotta, G., Jungert, T., Thornberg, R., & Marengo, D. (2022). **The links between students' relationships with teachers, likeability among peers, and bullying victimization: the intervening role of teacher responsiveness**. *European Journal of Psychology of Education*, *37*(2), 489-506. https://doi.org/10.1007/s10212-021-00535-3
Highly responsive teachers tend to foster behaviors that are low in conflict and high in prosociality, among their students, leading to a positive classroom climate and to a decrease in bullying victimization. However, little is known about the interaction between teacher responsiveness and both student–teacher, and student–student relationship characteristics, in influencing students' bullying victimization at school. Here, we examined student–teacher relationship quality and students' likeability among peers as predictors of in-school victimization. Additionally, we investigated the moderating role of teacher responsiveness over this link. Study sample consisted of 386 early-adolescent students (55.2% female, mean age [SD] = 12.17 [0.73]) and 19 main teachers (females, n = 14). Findings indicated that students' exposure to victimization was positively associated with student–teacher conflict and negatively associated with likeability among classroom peers. Teacher responsiveness did not show a significant direct association with bullying victimization. However, when teachers showed high responsiveness, the strength of the association between student–teacher conflict and students' likelihood of bullying victimization was slightly increased. The present study highlights the importance of considering the role of teacher responsiveness when modeling the link between student and teacher relationship quality and in school bullying victimization.

Marrot, G., & Silvy, C. (2021). **Le site local : mobilisation de points d'ancrage du professeur en mathématiques et en EPS**. *Revue française de pédagogie. Recherches en éducation*, (213), 89-103. https://doi.org/10.4000/rfp.11084
Cet article vise à présenter et inscrire dans une approche comparatiste en didactique la notion de site local, introduite pour désigner un réseau d'objets mobilisés dans la

réalisation d'une tâche d'apprentissage. Positionné au carrefour d'une double dimension anthropologique et culturelle, le site local va révéler sa fécondité fonctionnelle pour les professionnels de l'intervention éducative, s'affirmant comme outil d'analyse de l'activité de l'élève engagé dans des tâches scolaires. En tant qu'outil, il va alors questionner la perspective contextualisée et située des interactions didactiques. Pour en illustrer la pertinence, un site local en mathématiques et un en EPS seront construits et proposés.

Maxwell, B., Booth, J., Bevins, S., Halliday, J., Hotham, E., Nelson, J., … Andrade, J. (2022). ***Supporting science teachers to engage with and carry out research: research report***. Consulté à l'adresse https://www.nfer.ac.uk/media/4897/supporting_science_teachers_to_engage_with_and_carry_out_research_report.pdf
Ce rapport rend compte d'une recherche sur les effets d'un soutien supplémentaire visant à aider les enseignants à s'engager ou à mener des recherches pédagogiques sur l'enseignement des sciences et sur les types de soutien les plus utiles au Royaume-Uni. Il montre que ces programmes de développement professionnel (DPC) peuvent contribuer à un meilleur enseignement des sciences. L'utilisation de la recherche est plus efficace dans les écoles qui encouragent les enseignants à discuter, expérimenter et planifier de manière collaborative. L'impact est aussi plus marqué quand la direction permet aux enseignants de disposer du temps approprié. Différents types de DPC sont nécessaires pour soutenir l'utilisation de la recherche, en fonction des étapes de carrière, du rôle, des intérêts et des enseignants.

McNaughtan, J., Thacker, R., Eicke, D., & Freeman, S. (2022). **Committed to their craft: Understanding the relationship between job crafting and work commitment among faculty in the United States**. *Higher Education Quarterly*, *76*(2), 367-384. https://doi.org/10.1111/hequ.12293
Faculty engage in several institutional activities typically categorised as teaching, research and service. Within those activities there are numerous potential tasks, and research denotes that faculty often bemoan this work which can lead to turnover and lack of commitment. We present the job crafting framework as one way to allow faculty to be active participants in increasing their work commitment. The focus of this analysis was understanding which of the three concepts of job crafting (e.g., task, cognitive and relational) is most associated with work commitment among academic staff, or faculty. Employing a polychoric correlation matrix and confirmatory factor analysis to develop a structural equation model accounting for the relationships between job crafting and work commitment, we utilised a unique data set to answer three research questions. Our sample includes associate and full professors (N = 771) from 20 states in the continental United States. Findings highlight the importance of dissecting the construct of job crafting to better understand work commitment as evidenced by the strong positive relationships between work commitment and the relational and cognitive tenets of the job crafting framework. Implications include the potential for positive work commitment when administrators allow faculty more autonomy to define their work.

Mercier, C., & Lefer Sauvage, G. (2022). **L'école à l'heure de la COVID-19 : des constats de pratiques vers une nouvelle forme scolaire ?** *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.623

Meyliana, Sablan, B., Surjandy, & Hidayanto, A. N. (2022). **Flipped learning effect on classroom engagement and outcomes in university information systems class**. *Education and Information Technologies*, *27*(3), 3341-3359. https://doi.org/10.1007/s10639-021-10723-9

How to improve student engagement and educational learning outcomes in the classroom have always been high on a teacher's priority list. Unfortunately, it seems these challenges have become more pronounced in teaching Generation Z. To address these challenges educators are exploring new teaching methodologies such as flipped learning. The authors examined the effect of flipped learning on student motivation and educational outcomes on sophomore students from a private university in Indonesia majoring in Information Systems. The survey was taken from two groups, a control group which was not taught using flipped learning (60 respondents), and an experimental group which was taught using flipped learning (60 respondents). Results showed that flipped learning increased student motivation and improved educational outcomes compared to a group that was not exposed to flipped learning. The results can help guide teachers and administrators on potential implementation of flipped learning at their universities.

Momsen, J., Speth, E. B., Wyse, S., & Long, T. (2022). **Using Systems and Systems Thinking to Unify Biology Education**. *CBE—Life Sciences Education*, *21*(2), es3. https://doi.org/10.1187/cbe.21-05-0118

As biological science rapidly generates new knowledge and novel approaches to address increasingly complex and integrative questions, biology educators face the challenge of teaching the next generation of biologists and citizens the skills and knowledge to enable them to keep pace with a dynamic field. Fundamentally, biology is the science of living systems. Not surprisingly, systems is a theme that pervades national reports on biology education reform. In this essay, we present systems as a unifying paradigm that provides a conceptual framework for all of biology and a way of thinking that connects and integrates concepts with practices. To translate the systems paradigm into concrete outcomes to support instruction and assessment in the classroom, we introduce the biology systems-thinking (BST) framework, which describes four levels of systems-thinking skills: 1) describing a system's structure and organization, 2) reasoning about relationships within the system, 3) reasoning about the system as a whole, and 4) analyzing how a system interacts with other systems. We conclude with a series of questions aimed at furthering conversations among biologists, biology education researchers, and biology instructors in the hopes of building support for the systems paradigm.

Musgrove, M. M. C., Cooley, A., Feiten, O., Petrie, K., & Schussler, E. E. (2022). **To Cope or Not to Cope? Characterizing Biology Graduate Teaching Assistant (GTA) Coping with Teaching and Research Anxieties**. *CBE—Life Sciences Education*, *21*(2), cor1. https://doi.org/10.1187/cbe.20-08-0175-corr

Nishen, A. K., & Kessels, U. (2022). **Non-communicated judgements of, versus feedback on, students' essays: Is feedback inflation larger for students with a migration background?** *Social Psychology of Education*, *25*(1), 1-31. https://doi.org/10.1007/s11218-021-09674-3

When providing feedback, teachers are concerned not only with the simple transmission of information, but also with motivational and interpersonal dynamics. To mitigate these

concerns, teachers may inflate feedback by reducing negative or increasing positive content. The resulting difference between initial judgments and feedback may be even more drastic for ethnic minority students: In non-communicated judgments, negative stereotypes may result in more negative judgments, whereas in feedback, concerns about being or appearing prejudiced may inflate feedback towards ethnic minority students. These hypotheses were tested in a sample of 132 German teacher students in a 2 (between subjects: feedback vs. non-communicated judgment) × 2 (within subjects: target student's migration background: Turkish vs. none) design in which participants read supposed student essays and provided their written impressions to the research team or the supposed student. Findings revealed that teacher students' feedback was more positive than their non-communicated judgments on a multitude of dimensions. Contrary to expectations, these effects were not stronger when the student had a Turkish migration background. Instead, teacher students rated the essay of the student with a Turkish migration background more favorably both in the judgment and feedback conditions. Our results suggest that teachers adapt their initial judgments when giving feedback to account for interpersonal or motivational dynamics. Moreover, ethnic minority students may be especially likely to receive overly positive feedback. While the motivational/interpersonal dynamics may warrant some inflation in feedback, negative consequences of overly positive feedback, for which ethnic minority students may be especially vulnerable, are discussed.

Nyborg, G., Mjelve, L. H., Edwards, A., & Crozier, W. R. (2022, juin 7). **Teachers' strategies for enhancing shy children's engagement in oral activities: necessary, but insufficient?** [Text]. Consulté 18 janvier 2023, à l'adresse https://www.ingentaconnect.com/content/routledg/tied/2022/00000026/00000007/art 00001

Okoye, K., Arrona-Palacios, A., Camacho-Zuñiga, C., Achem, J. A. G., Escamilla, J., & Hosseini, S. (2022). **Towards teaching analytics: a contextual model for analysis of students' evaluation of teaching through text mining and machine learning classification**. *Education and Information Technologies*, *27*(3), 3891-3933. https://doi.org/10.1007/s10639-021-10751-5
Recent trends in educational technology have led to emergence of methods such as teaching analytics (TA) in understanding and management of the teaching–learning processes. Didactically, teaching analytics is one of the promising and emerging methods within the Education domain that have proved to be useful, towards scholastic ways to make use of substantial pieces of evidence drawn from educational data to improve the teaching–learning processes and quality of performance. For this purpose, this study proposed an educational process and data mining plus machine learning (EPDM + ML) model applied to contextually analyze the teachers' performances and recommendations based on data derived from students' evaluation of teaching (SET). The EPDM + ML model was designed and implemented based on amalgamation of the Text mining and Machine learning technologies that builds on the descriptive decision theory, which studies the rationality behind decisions the learners are disposed to make based on the textual data quantification and statistical analysis. To this effect, the study determines pedagogical factors that influences the students' recommendations for their teachers, what role the sentiment and emotions expressed by the students in the SET play in the way they evaluate the teachers by taking into account the gender of the teachers. This includes how to automatically predict what a student's recommendation for the

teachers may be based on information about the students' gender, average sentiment, and emotional valence they have shown in the SET. Practically, we applied the Text mining technique to extract the different sentiments and emotions (intensities of the comments) expressed by the students in the SET, and then utilized the quantified data (average sentiment and emotional valence) to conduct an analysis of covariance and Kruskal Wallis Test to determine the influential factors, as well as, how the students' recommendation for the teachers differ by considering the gender constructs, respectively. While a large proportion of the comments that we analyzed (n = 85,378) was classified to be neutral and predominantly interpreted to be positive in nature considering the sentiments (76.4%), and emotional valence (88.2%) expressed by the students. The results of our analysis shows that for the students' comments which contain some kind of positive or negative sentiment (23.6%) and emotional valence (11.8%); that females students recommended the teachers taking into account the sentiments (p = .000). While the males appear to be slightly borderline in terms of emotions (p = .056) and sentiment (p = .077). Also, the EPDM + ML model showed to be a good predictor and efficient method in determining what the students' recommendation scores for the teachers would be, going by the high and acceptable values of the precision (1.00), recall (1.00), specificity (1.00), accuracy (1.00), F1-score (1.00) and zero error-rate (0.00) which we validated using the k-fold cross-validation method, with 63.6% of optimal k-values observed. In theory, we note that not only does the proposed method (EPDM + ML) proves to be useful towards effective analysis of SET and its implications within the educational domain. But can be utilized to determine prominent factors that influences the students' evaluation and recommendation of the teachers, as well as helps provide solutions to the ever-increasingly need to advance and support the teaching–learning processes and/or students' learning experiences in a rapidly changing educational environment or ecosystem.

Orndorf, H. C., Waterman, M., Lange, D., Kavin, D., Johnston, S. C., & Jenkins, K. P. (2022). **Opening the Pathway: An Example of Universal Design for Learning as a Guide to Inclusive Teaching Practices**. *CBE—Life Sciences Education*, *21*(2), ar28. https://doi.org/10.1187/cbe.21-09-0239
Universal Design for Learning (UDL) provides a flexible framework for supporting a wide variety of learners. We report here on a conference that presented the UDL framework as a way to increase success of deaf and hard-of-hearing (deaf/hh) students in introductory biology courses. The Opening the Pathway conference was an NSF Advanced Technological Education project focusing on raising awareness about careers in biotechnology and student success in introductory biology, a key gateway course for careers in biotechnology. The participants were professionals who work with deaf/hh students at pivotal points in students' educational pathways for raising awareness of biotechnology career options, including community college faculty, high school faculty at schools for the deaf, and American Sign Language (ASL) interpreters. The conference goal was to provide an effective, meaningful professional development experience in biology instruction. The conference explicitly addressed the role of a UDL approach in building accessible, inclusive, productive learning environments, particularly for deaf/hh students, and demonstrated how to make effective pedagogical practices, specifically case-based learning, inclusive and UDL-aligned in an introductory biology context. We describe the conference, conference outcomes for participants, and in particular the application of the UDL framework to create an inclusive experience.

Pascau, J. (2021). ***Digital representations in the context of media and information literacy (MIL) among teachers*** (Phdthesis, Université Michel de Montaigne - Bordeaux III). Consulté à l'adresse https://theses.hal.science/tel-03629392

L'Éducation nationale en 2015 prend le virage du numérique en instaurant des programmes qui ancrent les compétences numériques et la culture de l'information dans le dispositif de l'éducation aux médias et à l'information (EMI). Cette recherche propose une analyse du cadre normatif de l'EMI et de sa perception par les enseignants du premier degré, saisie à travers leurs représentations, leurs usages, leurs pratiques et leur positionnement déclarés. Dans quelle mesure la conception et la définition de l'information dans l'éducation aux médias et à l'information changent-elles avec l'inclusion du numérique ? Comment les enseignants conçoivent-ils leur rôle dans la transmission d'une culture numérique aux élèves ? L'analyse de l'ensemble des discours aboutit à une définition précise de ce qu'est la culture numérique dans le cadre de l'EMI à l'école primaire.

Pedersen, R. M., Ferguson, C. F., Estrada, M., Schultz, P. W., Woodcock, A., & Hernandez, P. R. (2022). **Similarity and Contact Frequency Promote Mentorship Quality among Hispanic Undergraduates in STEM**. *CBE—Life Sciences Education*, *21*(2), ar27. https://doi.org/10.1187/cbe.21-10-0305

Mentoring relationships can be important for promoting the success and persistence of undergraduates, particularly for students from historically underrepresented groups in science, technology, engineering, and mathematics (STEM) disciplines. While mentoring is often cited as important for attracting and retaining students from underrepresented groups in STEM, little is known about the differential mentoring processes that can result from similar and dissimilar mentor–protégé pairs. The present study tests the process-oriented mentorship model (POMM) regarding how mentor–protégé similarities and the moderating role of contact frequency influence mentorship quality and STEM research career persistence intentions among faculty-mentored Hispanic STEM majors in their senior year of college. The results indicate that mentor–protégé similarity matters. Specifically, higher levels of mentor–protégé psychological similarity were related to higher levels of psychosocial support and relationship satisfaction. Hispanic students with a Hispanic faculty mentor reported engaging in more coauthoring opportunities than peers with non-Hispanic mentors. Among those with higher contact frequency, students with same-gender mentors had higher levels of relationship satisfaction than peers with different-gender mentors; however, there were no differences among those with low contact frequency. Additionally, protégés who reported coauthoring support were more likely to also report commitment to pursuing a STEM research career.

Peercy, M. M., Tigert, J., Fredricks, D., Kidwell, T., Feagin, K., Hall, W., … DeStefano Lawyer, M. (2022). **From humanizing principles to humanizing practices: Exploring core practices as a bridge to enacting humanizing pedagogy with multilingual students**. *Teaching and Teacher Education*, *113*, 103653. https://doi.org/10.1016/j.tate.2022.103653

Humanizing approaches to the education of multilingual students have been limited by scholarship that lacks an empirical basis or clear implications for teacher education, making it challenging for teacher education programs to support teachers' enactment of equitable practice with multilingual students. We argue that although core practices have been criticized for marginalizing issues of justice, they may provide a bridge from humanizing principles to humanizing practices. Drawing on novice teachers' enactment of some of the core practices we have identified, we suggest that with further

development these core practices have potential to humanize the teaching and learning of multilingual students.

Peltier, C. (2021). *L'objet pédagogique territorialisé pour enseigner les transitions et l'agroécologie : l'exemple de l'enseignement agricole français engagé dans le plan stratégique « Enseigner à produire autrement »* (Phdthesis, Université Bourgogne Franche-Comté). Consulté à l'adresse https://theses.hal.science/tel-03633992
Cette thèse s'inscrit dans les recherches sur l'éducation au développement durable et la formation des professionnels de l'agriculture vers une transition agroécologique. Elle emprunte à une approche pluridisciplinaire, en éducation, géographie, agronomie, économie et philosophie, organisée autour d'un corpus théorique qui combine la didactique professionnelle et les pédagogies constructivistes problématisées. Son objectif est d'étudier le travail de préparation et d'enseignement de séquences de formation auprès d'élèves ou apprentis, réalisées par des professeurs de l'enseignement agricole, cherchant à répondre aux prescriptions de transition de l'enseignement agricole vers un enseignement de l'agroécologie. Nous examinons aussi le rôle de l'accompagnement sur les apprentissages, prises de conscience, orientation de l'activité de ces enseignants.Pour cela nous avons mis en place un dispositif d'observation qui saisit les enseignants dans la conception d'une nouvelle séquence d'enseignement, et leur accompagnement ; préparation, mise en œuvre, séquences de rencontre avec l'accompagnateur, réajustements, mise en œuvre, bilan. Quatre cas sont examinés : le blaireau, le poulet d'élevage, le verger maraîcher, la luzerne en collectif. Tous sont conçus à partir d'une proposition qu'est l'objet pédagogique territorialisé proposé comme hypothèse favorisant des apprentissages de la durabilité et de la transition pour les élèves.Les résultats montrent que les activités des enseignants, de problématisation et de conceptualisation des savoirs permettant aux apprenants de s'y connaître en termes de transition, sont capitales pour que ces derniers puissent à leur tour identifier et nommer les voies possibles de ces dites transitions. Ils montrent également que notre démarche de recherche constitue une aide pour que les enseignants considèrent la durabilité, l'agroécologie, la transition comme des concepts donnant aux apprenants de la puissance d'agir sur les situations pédagogiques, professionnelles, auxquels ils peuvent être confrontés. Nous dégageons ainsi les conditions pour enseigner et apprendre autrement les transitions et l'agroécologie qui se retrouvent dans les dimensions de l'objet pédagogique territorialisé. Nous dégageons également des profils et trajectoires d'enseignants engagés dans l'enseignement des transitions et de l'agroécologie.

Poumay, M., & Georges, F. (2022). *Comment mettre en oeuvre une approche par compétences dans le supérieur ?* Consulté à l'adresse https://www.deboecksuperieur.com/ouvrage/9782807333239-comment-mettre-en-oeuvre-une-approche-par-competences-dans-le-superieur

Prévost-Zuddas, J. (2021). *Obstacles et facilitateurs à l'inclusion scolaire des élèves allophones dans l'enseignement secondaire en France et incidences didactiques* (Phdthesis, Universié de Lorraine). Consulté à l'adresse https://hal.univ-lorraine.fr/tel-03635166
Notre recherche porte sur l'inclusion scolaire d'élèves dits « allophones » en cours ordinaires dans le secondaire public en France. Ces élèves – migrants et ne parlant pas encore la langue de scolarisation – sont ainsi nommés par l'institution scolaire.De type

qualitatif, l'étude repose sur l'analyse d'un corpus quinquangulaire (travaux, questionnaires, entretiens d'élèves, écrits autobiographiques, bulletins scolaires) recueilli auprès de 33 apprenants et de 6 enseignants (Académie de Nancy-Metz). Cette étude éclaire la situation métropolitaine. La problématique allophone relève d'une agrégation de multiples facteurs. Nous étudions des facilitateurs et des obstacles à l'inclusion scolaire des élèves allophones par l'étude des discours des élèves et des démarches didactiques des enseignants participant à notre recherche.Nos questions de chercheure se sont imposées en lien avec notre expériencie professionnel et nos lectures. Trois hypothèses de recherche y sont subordonnées. D'abord, le contexte socio-économique familial n'est pas le seul obstacle à la réussite scolaire des élèves allophones suivis. Ensuite, l'affiliation en cours disciplinaire de français des élèves allophones suivis permet un apprentissage mieux maitrisé du FLSco. Enfin, l'inclusion en cours disciplinaire de français permet aux élèves allophones suivis d'investir davantage l'école.Il ressort de cette étude que les apprenants suivis partagent un contexte socio-économique fragile et que la composition familiale et la taille de la fratrie distinguent les élèves suivis. Toutefois, ces éléments n'apparaissent pas comme des facteurs freinants en soi la réussite scolaire. Si la majorité est en difficulté, certains apprenants suivis réussissent à l'école. Cependant, les disparités langagières perdurent sur l'année, voire se creusent. L'expression d'un projet scolaire n'est pas interdépendante de leur affiliation en classe régulière, elle est plutôt liée à leurs origines culturelles.Les démarches didactiques des enseignants participant à notre recherche sont hétérogènes. Elles dépendent de ressources intellectuelles et contextualisées. Les enseignants ne sont pas toujours sensibles aux particularismes culturels de leurs élèves – ce qui peut desservir les élèves suivis – parce qu'ils n'y sont pas assez formés. Cette étude montre que le modèle de la formation initiale et continue des enseignants devrait évoluer, en lien plus étroit avec la recherche.En dépit d'un cadrage national, les aménagements spécifiques pour la scolarisation des élèves allophones varient sur le plan académique, voire départemental. Cela se traduit, sur le terrain, par des inégalités scolaires. Dans notre corpus, il apparait que les ressources mobilisées par les élèves et leurs enseignants sont hétérogènes. Ainsi, l'environnement scolaire est l'un des facilitateurs à l'inclusion et à la réussite scolaire.Apparait également une distorsion entre les prescriptions institutionnelles et la réalité des terrains qui s'explique par le dilemme auquel fait face l'institution scolaire. Cette dernière doit donner toute sa place à la langue française mais également offrir un espace à l'identité des apprenants issus de la diversité. La gestion verticale de la problématique allophone, sa mise en œuvre – complexifiée par le grand nombre de partenaires – et un état de la recherche-formation insuffisant déséquilibrent les conditions de scolarisation des allophones. La question allophone nécessiterait d'être considérée de manière holistique.

Radhouane, M., & Akkari, A. (2022). **Ajoutée, intégrée ou empêchée : quelle place pour la prise en compte de la diversité culturelle en classe ?** *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.614

Régnier, J.-C. (2022). **Usage de méthodes et techniques statistiques dans la formation doctorale.Réflexion sur les apports méthodologiques et épistémologiques du raisonnement statistique dans les recherches du domaine de l'éducation et sur les précautions à prendre**. *Démarches de recherche quantitatives en sciences de l'éducation : raisonnement statistique, initiation, apports*, 58. Consulté à l'adresse https://hal.archives-ouvertes.fr/hal-03607138

L'objectif de cette communication est de partager, dans un esprit de coopération, notre réflexion centrée sur le raisonnement statistique et la formation de l'esprit statistique. Nous considérons que l'esprit statistique naît lorsqu'on prend conscience de l'existence de fluctuation d'échantillonnage et que sa formation qui passe par une formation en statistique minimale, requiert un certain renoncement à l'usage systématique de l'idée de vérité pour chercher à maîtriser celle de vraisemblance et de plausibilité (Régnier, 1998). Cette formation tire bénéfice d'être organisée, en particulier, autour d'activités fondamentales que sont la modélisation statistique, l'analyse statistique et l'interprétation statistique. Dans des articles déjà anciens (Régnier, 2002, 2005a, 2005b), nous avons tenté d'aborder cette question et d'apporter quelques éléments d'éclaircissement. En tenant d'adopter une posture de praticien-chercheur [en formation] réflexif, nous pouvons nous interroger sur la place de la statistique dans la formation en sciences humaines et sociales. En relation à notre pratique, nous nous intéressons davantage à la place de la statistique dans la formation en sciences de l'éducation. Nous avons entrevu pour la discipline statistique, au moins cinq positions : •Discipline de base, •Discipline de service, discipline-outil, •Discipline d'ouverture, •Discipline-objet de la didactique de la statistique, •Discipline-objet de la recherche en statistique dans son application à la recherche en sciences de l'éducation, Nous pouvons tenter d'identifier ce qu'induit la prise en considération de chacune de ces positions dans une formation doctorale non spécialisée en statistique. Toutefois il ressort que la place la plus habituelle à considérer ici est celle de Discipline de service, discipline-outil. Notre communication tentera de rester guidée par la prise de conscience et l'identification des apports méthodologiques et épistémologiques de la mise en œuvre de méthodes statistiques basées sur le raisonnement statistique dans les recherches du domaine de l'éducation.

Reimers, F., & Opertti, R. (2021). ***Apprendre à reconstruire un meilleur avenir pour l'éducation : leçons d'innovations pédagogiques durant la pandémie de COVID-19***. Consulté à l'adresse http://www.ibe.unesco.org/sites/default/files/resources/apprendre_a_reconstruire_un_meilleur_avenir_pour_leducation.pdf
Cet ouvrage vise à contribuer à l'élaboration de stratégies opérationnelles de changement en éducation afin de préparer les élèves pour l'avenir, tout en abordant l'impact de la pandémie de COVID-19 et à rendre les systèmes éducatifs plus résilients. Il examine 31 innovations éducatives dans le monde ayant ont vu le jour pendant la pandémie et qui sont alignées sur la vision sur les futurs de l'éducation. Ces innovations peuvent être regroupées dans les cinq catégories suivantes : soutenir l'apprentissage centré sur l'élève, soutenir un apprentissage plus approfondi, soutenir le développement socio-émotionnel et le bien-être des élèves, perfectionner le développement professionnel des enseignants et des directeurs d'école, engager la famille.

Roche Allred, Z. D., Santiago Caobi, L., Pardinas, B., Echarri-Gonzalez, A., Kohn, K. P., Kararo, A. T., … Underwood, S. M. (2022). **"Big Ideas" of Introductory Chemistry and Biology Courses and the Connections between Them**. *CBE—Life Sciences Education*, *21*(2), ar35. https://doi.org/10.1187/cbe.21-10-0301
Introductory courses are often designed to cover a range of topics with the intent to offer students exposure to the given discipline as preparation to further their study in the same or related disciplines. Unfortunately, students in these courses are often presented with an overwhelming amount of information that may not support their formation of a usable

coherent network of knowledge. In this study we conducted a mixed-method sequential exploratory study with students co-enrolled in General Chemistry II and Introductory Biology I to better understand what students perceived to be the "take-home" messages of these courses (i.e., core ideas) and the connections between these courses. We found that students identified a range of ideas from both courses; further analysis of students' explanations and reasoning revealed that, when students talked about their chemistry ideas, they were more likely to talk about them as having predictive and explanatory power in comparison with reasons provided for their biology big ideas. Furthermore, students identified a number of overlapping ideas between their chemistry and biology courses, such as interactions, reactions, and structures, which have the potential to be used as a starting place to support students building a more coherent network of knowledge.

Román, D., Arias, J. M., Sedlacek, Q. C., & Pérez, G. (2022). **Exploring Conceptions of Creativity and Latinidad in Environmental Education Through the Lens of Culturally Sustaining Pedagogy**. *Review of Research in Education*, 46(1), 32-63. https://doi.org/10.3102/0091732X221084332
Environmental education seeks to foster meaningful connections to local and global environments through creative nature experiences. Responding to critiques of historical inequities, practitioners are prioritizing equitable access for historically marginalized youth, particularly from Black, Indigenous, and Latinx communities; this identity-centered prioritization, while essential, generates questions of normativity, diversity, relevance, and engagement within identity groups. Drawing on creativity as meaningful person-world encounters characterized by pluriperspective, future-oriented, nonlinear, and open-ended qualities, this chapter uses culturally sustaining pedagogy to explore how environmental education studies (a) operationalize Latinidad and associated constructs, (b) enact creative experiences in environmental education, and (c) qualify the roles of Latinx communities in shaping these creative experiences. We review studies of environmental education with Latinx youth in the United States that explicitly employ culturally sustaining approaches to engage these communities. We bring together these frameworks as a strategy to move beyond discrete notions of Latinidad in environmental education and toward nuanced conceptions of what it means to acknowledge and cultivate environmental literacies in these diverse comunidades.

Seckel, M. J., Vásquez, C., Samuel, M., & Breda, A. (2022). **Errors of programming and ownership of the robot concept made by trainee kindergarten teachers during an induction training**. *Education and Information Technologies*, 27(3), 2955-2975. https://doi.org/10.1007/s10639-021-10708-8
Computational thinking in the educational environment has awaken a rising interest, having been included as part of the curricula from the very beginnings of education. Programmable robots have become a valuable positive resource in order to succeed in the development of computational thinking, demanding proper training from kindergarten teachers and trainees in order to be able to teach robotic programming. This article has the purpose to 1) identify the frequent errors made by trainee kindergarten teachers when solving a series of robotic problems in a computational thinking module, which develops in the course of Didactics of Mathematics and 2) determine the level of comprehension of the robot concept acquired by the trainees when solving robotics problems. The research developed in a qualitative methodology manner; the data used for this article were collected through the solving of five robotic problems and an open-

ended question that had to be answered by each of the 25 participants individually. The results showed that, in general, the most frequent error appeared in problems in which movements were set in a Euclidean space of two dimensions. That is to say, the problems' solving required a selection of different commands: turn, moving forward and/or backwards. Moreover, more than half of the participants who answered the open-ended question succeeded in owning the robot concept once they had solved the problems.

Silver, D. (2022). **A Theoretical Framework for Studying Teachers' Curriculum Supplementation**. *Review of Educational Research*, *92*(3), 455-489. https://doi.org/10.3102/00346543211063930
The vast majority of U.S. teachers supplement their officially adopted curriculum materials with unofficial materials. Despite this, the body of supplementation-relevant literature tends not to focus on supplementation specifically, so lacks cohesion, and sometimes fails to capture all aspects the phenomenon. I systematically review supplementation-relevant literature from 2015 to 2020 and report seven areas of consensus in the literature around (1) who is involved in teacher-level curriculum supplementation, (2) important dimensions of supplementation, and (3) the educational value of supplementation. To provide future researchers a common starting point for studying teacher curriculum supplementation, I propose the Teacher Curriculum Supplementation Framework, a flexible yet testable analytical tool for systematizing scholarly inquiry around teacher curriculum supplementation and its effects on teachers and students.

Simard, C., & Deneault, J. (2022). **Introduire un animal en classe primaire : état de la situation au Québec**. *Formation et profession*, *30*(1), 1. https://doi.org/10.18162/fp.2022.593

St-Pierre, M. (2021). *Les facteurs d'influence et savoirs professionnels dans la création de la relation maître-élève de l'enseignant en formation professionnelle : facilitateurs, obstacles et défis* (Masters, Université du Québec à Chicoutimi). Consulté à l'adresse https://constellation.uqac.ca/id/eprint/8108/
La relation que développe professionnellement un enseignant envers ses élèves est un aspect important dans sa tâche. Les effets de cette relation, qu'elle soit positive ou négative, ne sont plus à démontrer (Hamre & Pianta, 2005; Rousseau, Deslandes & Fournier, 2009; Fortin, Plante & Bradley, 2011; Desrosiers, Japel, Singh & Tétreault, 2012; Doucet, Maltais & Pouliot, 2017). Elle peut surtout s'avérer aussi un levier important menant à la réussite scolaire des élèves (Fortin et al., 2011). Mais qu'en est-il de cette relation entre enseignant et élève en formation professionnelle? Plusieurs facteurs d'influence peuvent jouer un rôle important dans le développement de la relation maître-élève en formation professionnelle. En effet, la professionnalisation vers la carrière d'enseignant est complexe et il s'avère que beaucoup de questions demeurent en suspens (Gaudreault, 2011, Gagné, 2015). Peut-on alors analyser les facteurs d'influence en matière de relation entre l'enseignant en formation professionnelle et ses élèves? La problématique fait état de la réalité de l'enseignant en formation professionnelle ainsi que celle des élèves (Deschenaux & Roussel, 2010a; Beaucher, Coulombe, Murphy, Gagnon, Doucet & Maltais, 2020). Les enseignants aussi bien que les élèves arrivent dans un milieu scolaire avec une expérience importante. Dans le cas de l'enseignant, il s'agit de son expérience personnelle et professionnelle liée à son métier antérieur. Sachant que la relation maître-élève est importante (Fortin et al., 2011), quels sont alors ses

éléments facilitateurs, ses obstacles et ses défis? C'est grâce à une recherche qualitative avec entretiens semi-dirigés que la lumière sur ce questionnement a pu être faite (L'Écuyer, 1987, 1990; Savoie-Zajc, 2011). Il en ressort que l'expérience antérieure est un élément facilitateur important au même titre que la formation universitaire. Les obstacles sont multiples, souvent causés par un manque d'expérience du métier d'enseignant et une formation universitaire non achevée. Finalement, les défis demeurent présents en raison, entre autres, des réalités étudiantes de plus en plus complexes.

Symeonidou, S. (2022). **Teacher education for inclusion and anti-oppressive curriculum development: innovative approaches informed by disability arts and narratives**. *International Journal of Inclusive Education*, 26(7), 659-673. https://doi.org/10.1080/13603116.2020.1711819
This paper engages with the issue of teacher education for inclusion and particularly with the approach of employing disability arts and narratives of people with disabilities in university based courses for inclusion. It draws on three examples of anti-oppressive curricula that were developed as part of a graduate university module in Cyprus that encouraged student teachers to engage with disability arts and narratives in order to understand key ideas developed in disability studies and inclusive education. The three examples presented in this paper are representative of the three approaches all the participating student teachers followed, and indicate the strategies they used and the nature of the materials they chose. The discussion considers how these approaches can further inform teacher education for inclusion and how using disability arts and narratives can inform the discussion on other issues concerning teacher education of inclusion.

Tanase, M. F. (2022). **Culturally Responsive Teaching in Urban Secondary Schools**. *Education and Urban Society*, *54*(4), 363-388. https://doi.org/10.1177/00131245211026689
Demographic data show an increasingly diverse student population in all urban settings. On the other hand, there continues to be a discrepancy about the student population and the teacher force, as the majority of the US teachers are predominately middle class, female, monolingual, and of European ancestry. This discrepancy adds complexity to an already complex profession. To bridge this cultural gap, researchers advocate for a change in the teaching paradigm, in which teachers understand the relationship between students' culture and learning. This paradigm is called Culturally Responsive Teaching. This study followed 22 secondary mathematics and science teachers. The goal was to analyze some of the strategies used in urban schools, while at the same time determining whether these strategies were culturally responsive. Results show that teachers incorporated their students' interests into the curriculum, making connections with real-life and allowing students to make many choices.

Tarchi, C., Brante, E. W., Jokar, M., & Manzari, E. (2022). **Pre-service teachers' conceptions of online learning in emergency distance education: How is it defined and what self-regulated learning skills are associated with it?** *Teaching and Teacher Education*, *113*, 103669. https://doi.org/10.1016/j.tate.2022.103669
We investigated pre-service teachers' conceptions of online learning during the transition from face-to-face to emergency distance education in Italy, Sweden and Iran. Conceptions of online learning were conceptualised based on how pre-service teachers defined online learning, the self-regulated learning (SRL) skills associated with it and how they compared it to face-to-face education. The participants were asked about the characteristics of their online courses, yielding information about the online learning

conditions and experiences. Conceptions of online learning were found to be underdeveloped. Pre-service teachers should develop a flexible approach to SRL that takes into consideration the demands of the specific educational setting.

Thouroude, L. (2022). ***Prévenir les handicaps et les violences. La posture de l'entre-deux en éducation***. Consulté à l'adresse http://champsocial.com/book-prevenir_les_handicaps_et_les_violences_la_posture_de_l_entre-deux_en_education,1242.html#couv
En prenant appui sur le concept d'entre-deux, théorisé par Daniel Sibony, l'ouvrage s'attache à dégager des voies de prévention des situations problématiques que sont le handicap et la violence. L'entre-deux est partout en éducation. L'entre-deux sert à la fois à désigner des publics en difficulté au regard des normes, à identifier des obstacles et des risques au cours des différents passages, enfin et surtout à orienter la rencontre avec le différent (différend) « singulier » vers les points communs qui font lien, en contexte scolaire et ailleurs… Les limites et les liens, la lutte contre l'angoisse, le sentiment d'appartenance, sont des besoins éducatifs incontournables, que l'école ne peut à ce titre ignorer. Trouver l'entre-deux en contexte scolaire, c'est miser sur trois types de lien nécessaires : le lien élève-savoirs, le lien élève-enseignant, le lien élève-groupe. Découvrir l'entre-deux lorsqu'il se cache derrière une altérité redoutée, c'est ce à quoi nous invite le présent ouvrage, dans une triple posture, alliant l'engagement, la scientificité, la transmission.

Viesca, K. M., Teemant, A., Alisaari, J., Ennser-Kananen, J., Flynn, N., Hammer, S., … Routarinne, S. (2022). **Quality content teaching for multilingual students: An international examination of excellence in instructional practices in four countries**. *Teaching and Teacher Education*, *113*, 103649. https://doi.org/10.1016/j.tate.2022.103649
Observations of Pedagogical Excellence of Teaching Across Nations (OPETAN) is a mixed methods observation study of 31 content teachers, most nominated for their excellence in teaching multilingual students in Germany, Finland, the US, and England. The study relied on an observation rubric that operationalizes seven Enduring Principles of Learning grounded in critical sociocultural theory and pedagogy. Findings revealed excellent teachers emphasize complex thinking, language use, and modeling. Teacher use of small groups, contextualization, and equity-focused practices were areas of potential growth. International research holds promise for understanding and improving K-12 content teaching and teacher education for teachers of multilingual learners.

Wagner, I., Loesche, P., & Bißantz, S. (2022). **Low-stakes performance testing in Germany by the VERA assessment: analysis of the mode effects between computer-based testing and paper-pencil testing**. *European Journal of Psychology of Education*, *37*(2), 531-549. https://doi.org/10.1007/s10212-021-00532-6
The German school system employs centrally organized performance assessments (some of which are called "VERA") as a way of promoting lesson development. In recent years, several German federal states introduced a computer-based performance testing system which will replace the paper-pencil testing system in the future. Scores from computer-based testing are required to be equivalent to paper-pencil testing scores so that the new testing medium does not lead to disadvantages for students. Therefore, the current study aimed at investigating the size of the mode effect and the moderating impact of students' gender, academic achievement and mainly spoken language in everyday life. In addition, the variance of the mode effect across tasks was investigated.

The study was conducted in four German federal states in 2019 using a field experimental design. The test scores of 5140 eighth-graders from 165 schools in the subject German were analysed. The results of multi-level modelling revealed that students' test scores in the computerized version of the VERA test were significantly lower than in the paper-pencil version. Students with a lower academic achievement were more disadvantaged by the VERA computerized test. The results were inconsistent regarding the interactions between testing mode and students' gender and mainly spoken language in everyday life. The variance of the mode effect across tasks was high. Research into different subjects and in other federal states and countries under different testing conditions might yield further evidence about the generalizability of these results.

Wagnon, S. (2022, avril 3). **En ville, les écoles « nature » sont-elles possibles ?** Consulté 6 avril 2022, à l'adresse The Conversation website: http://theconversation.com/en-ville-les-ecoles-nature-sont-elles-possibles-180141
Plus de 80 % de la population française est urbaine et, avec elle, l'extrême majorité des établissements scolaires. Dans ces conditions, comment développer des classes en plein air ?

Wise, S. B., Archie, T., & Laursen, S. (2022). **Exploring Two-Year College Biology Instructors' Preferences around Teaching Strategies and Professional Development**. *CBE—Life Sciences Education*, 21(2), ar39. https://doi.org/10.1187/cbe.21-09-0250
Nearly half of all college students and the majority of college students of color begin their studies at 2-year colleges. The educational quality that these students experience will affect future success, but little research to date has focused on the professional development (PD) of their instructors. We offer an exploratory study on PD needs and preferences of ten 2-year college biology instructors who have experience with evidence-based instructional practices. Using a literature review and interview data, we address four research questions. We contextualize the interview results by describing interviewee teaching styles and their teaching and inclusion strategies, drawing on categorizations from education research literatures in and beyond biology. We then summarize interviewee experiences, preferences, and recommendations for PD. Most interviewees preferred PD that could be readily applied to their courses and included follow-up community support. While our purposive sample is limited, we note high levels of interest in PD supporting inclusive pedagogy and non-biology learning goals, such as study skills, metacognition, and quantitative skills. We describe implications for inclusive design of biology instructor PD.

Yao, C. (2022). **Is a One-Way English Immersion Teaching Approach Equitable to Those Chinese Non-English Major Students from Rural Areas?** *Education and Urban Society*, 54(4), 470-486. https://doi.org/10.1177/00131245211027514
English is a compulsory course for students in China from primary education to postgraduate education. Recently more and more policymakers at Chinese universities have been forcing English education to be performed using a one-way English immersion approach. In their views, the more English practices in English classes, the better the learners' learning performance will be. This study adopts a hermeneutics research method, a questionnaire survey and some interviews to investigate the question whether a one-way English immersion teaching approach is equitable to those from rural areas. It finds that this teaching approach is inequitable to those from rural areas in at least three aspects, including increasing their economic burdens, decreasing their English

acquisition confidences, and mismatching with their career requirements. The study calls for Chinese policymakers to alter their urban-centered viewpoints toward English education, and English teachers to enrich the English teaching approaches in the future and pay more attention to the future career requirements of those from rural areas.

Yeo, W. T., Tan, A. L., & Jamaludin, A. (2022). **'I feel like I'm fighting fire': Teaching the young and educationally disadvantaged**. *Teaching and Teacher Education*, *113*, 103665. https://doi.org/10.1016/j.tate.2022.103665
This paper explores the emotional realities of teaching educationally disadvantaged students between the ages of 7 and 8 in Singapore. Data was collected via semi-structured face-to-face interviews with 9 primary school Mathematics teachers and analysed using inductive, grounded theory approach and thematic analysis. From a Conservation of Resources theory lens, findings show that educationally disadvantaged students are far from a homogeneous group as there is great diversity in the sources of disadvantage and obstacles to learning, contributing to the emotional weight borne by teachers of educationally disadvantaged students. Possible recommendations are also discussed.

Zembylas, M. (2022). **Affective Pedagogies in Civic Education: Contesting the Emotional Governance of Responses to Terrorist Attacks**. *British Journal of Educational Studies*, *70*(1), 21-38. https://doi.org/10.1080/00071005.2020.1870929
This paper analyses the emotional governance of responses to terrorist attacks and examines the extent to which affective pedagogies in civic education may contest the emotional norms that are institutionalised in society. This analysis is important, not only because it makes visible how forms of violence (especially terrorism) have an emotional impact on school life, but also in that it adds a crucial dimension to the struggle against sentimental education as a form of political education that governs youth's affects and emotions. The analysis explores these tensions and theorises how affective pedagogies can elicit creative and productive rather than normative becomings within youth practices in the classroom. In particular, the paper discusses how affective pedagogies in civic education may be reframed to cultivate critical affective skills that resist sentimental responses and challenge superficial interpretations of terrorist events. Re-articulating and re-imagining affective responses to terrorist attacks in the civics classroom will open pedagogical spaces that pay more attention to the kind of emotional governance that takes place in schools, politics and the society.

Relation formation-emploi

Agüero, J., Galarza, F., & Yamada, G. (2022). *Do Inclusive Education Policies Improve Employment Opportunities? Evidence from a Field Experiment* (Working Paper N° 2022-07). Consulté à l'adresse University of Connecticut, Department of Economics website: https://econpapers.repec.org/paper/uctuconnp/2022-07.htm
We study the employment opportunity of a college scholarship for high-achieving, low-income students in a labor market where disadvantaged groups are discriminated against. Using a correspondence audit-study we find that including information of being a scholarship recipient in a resume increases the likelihood of getting a callback for a job interview by 20%. However, the effects are much smaller in jobs and careers where the poor are under-represented. We show that this is consistent with the scholarship also

sending a negative signal to employers and helps explain why actual beneficiaries almost never mention the scholarship in their resumes.

Chartier, M., & Avarguez, S. (2022). **Quand l'intermédiation est formative : trouver sa place en tant qu'apprenti dans l'éducation spécialisée**. *Formation emploi*, (157), 77-95. https://doi.org/10.4000/formationemploi.10463
Cet article étudie le dispositif de formation par apprentissage de deux métiers de l'éducation spécialisée (éducateur spécialisé et moniteur éducateur) en tant que dispositif d'intermédiation. Sont distinguées dans l'analyse l'intermédiation par l'apprentissage et l'intermédiation dans l'apprentissage : les logiques productive (d'insertion professionnelle) et formative (d'acquisition de compétences professionnelles) entrent en tension. L'enquête par entretien semi-directif et par observation d'une diversité de scènes du dispositif de formation a permis de saisir comment se construit l'entrée dans le dispositif et d'analyser une intermédiation formative en train de se faire. Dans la temporalité de l'expérience des apprentis, deux configurations sont identifiées, dans lesquelles le « trouver sa place » est facilité ou empêché.

Cultrera, L., Mahy, B., Rycx, F., & Vermeylen, G. (2022). *Educational and Skills Mismatches: Unravelling Their Effects on Wages Across Europe* (GLO Discussion Paper Series N° 1059). Consulté à l'adresse Global Labor Organization (GLO) website: https://econpapers.repec.org/paper/zbwglodps/1059.htm
This paper is among the firsts to investigate the impact of overeducation and overskilling on workers' wages using a unique pan-European database covering twenty-eight countries for the year 2014, namely the CEDEFOP's European Skills and Jobs (ESJ) survey. Overall, the results suggest a wage penalty associated with overeducation. When interacting educational mismatch with skills mismatch into apparent overeducation and genuine overeducation, the results suggest that the highest wage penalty is reached for workers that are both overeducated and overskilled.

d'Agostino, G., Raitano, M., & Scarlato, M. (2022). **Job mobility and heterogeneous returns to apprenticeship training in Italy**. *British Journal of Industrial Relations*, 60(2), 391-423. https://doi.org/10.1111/bjir.12633
This paper provides empirical evidence on the effect on wages of the mobility across firms and sectors of apprentices after graduation in Italy over the period 1997–2013. We use administrative data and employ an instrumental variable approach to account for endogenous mobility due to observed and unobserved worker characteristics. Our main finding is that job switchers not in the economic sector of the training firm faced a significant gap in wages in comparison to stayers, indicating a loss of firm- and sector-specific human capital. In addition, under the new apprenticeship rules introduced in 2003 by the Biagi reform, which lessened the stringency of the norms on the training content delivered by firms, both within- and across-sector job switches had large negative effect on wages, suggesting a reduction in the transferability of skills for trainees relatively to the previous regime.

Demoustier, D., & Itçaina, X. (2022). **L'économie sociale et solidaire comme écosystème territorial d'intermédiation : le cas du PTCE Sud Aquitaine**. *Formation emploi*, (157), 27-52. https://doi.org/10.4000/formationemploi.10388

En France, les Pôles territoriaux de coopération économique (PTCE) constituent des formes émergentes de coopération entre des structures d'économie sociale et solidaire (ESS), des acteurs publics et privés marchands partageant un même ancrage territorial. Le PTCE Sud Aquitaine entend ainsi intégrer l'intermédiation sur le marché du travail dans un projet global visant à donner une empreinte ESS au développement territorial. L'article aborde le processus sociohistorique de constitution de ce système d'acteurs qui conjugue des processus politiques et économiques, avant d'interroger les formes et effets de cette intermédiation sur le marché du travail territorial et sa dimension écosystémique.

Deshayes, J.-L. (2022). **L'intermédiation de l'emploi, entre local conquis et local octroyé. Retour sur le cas du bassin de Longwy**. *Formation emploi*, (157), 53-75. https://doi.org/10.4000/formationemploi.10408
Des conquêtes ouvrières aux fermetures d'usines sidérurgiques, des politiques de reconversion et de l'installation de firmes nomades au développement du travail frontalier vers le Luxembourg, le bassin de Longwy est un lieu privilégié pour analyser les évolutions de l'intermédiation de l'emploi. Les recherches ancrées menées depuis plus de quarante ans confirment le poids décisif des employeurs, qui s'est cependant déplacé de l'entreprise vers le marché du travail. Plus ou moins homogène, complémentaire ou coordonné, composé des entreprises, des intermédiaires de l'emploi et des organismes de formation, « un employeur territorial » attribue les droits à ressources en fonction de jugements de proximité de plus en plus individualisés. Ses configurations contribuent au passage d'un local « conquis », lié à une solidarité salariale, à un local « octroyé », où sont en jeu la définition et la reconnaissance des qualifications, des carrières et de l'action syndicale locales.

Dif-Pradalier, M., & Roux, N. (2022). **Introduction. Le tiers employeur ou l'emploi quoi qu'il en coûte ?** *Formation emploi*, (157), 7-26. https://doi.org/10.4000/formationemploi.10378

Eberle, M., & Oberrauch, L. (2022). ***What a difference three years of economics education make: Evidence from lower-track schools in Germany*** [EconStor Preprints]. Consulté à l'adresse ZBW - Leibniz Information Centre for Economics website: https://econpapers.repec.org/paper/zbwesprep/250909.htm
A large body of literature documents that school-based financial education generally improves financial knowledge, yet little is known about the effect of instruction in the broader economic domain. This paper evaluates the effect of a curriculum reform introducing mandatory economic education on economic competence and knowledge in German lower-track schools, in which students have lower socio-economic status and end up having lower incomes when entering the workforce. While we find small but positive effects on basic economic knowledge and interest in economic matters, we observe no effects on competences, i.e., factual and procedural knowledge in the economic domain. Quantile regressions reveal that the effect on students' knowledge is widely consistent across the entire distribution. With regard to socio-demographic characteristics, we observe strong gender differences already before adulthood.

Elmoukhtar, M., Touhami, F., & Taouabit, O. (2022). **La promotion de l'entrepreneuriat vert : Quel rôle pour l'université marocaine ? Cas de l'Université Sultan Moulay Slimane.**

International Journal of Accounting, Finance, Auditing, Management and Economics, 3(1-2), 471-485. https://doi.org/10.5281/zenodo.5919199

Healy, M., Brown, J. L., & Ho, C. (2022). **Graduate employability as a professional proto-jurisdiction in higher education**. *Higher Education*, *83*(5), 1125-1142. https://doi.org/10.1007/s10734-021-00733-4
Much research into how universities seek to support their students' graduate employability has focused on academic strategies such as graduate attributes and work-integrated learning, or the employability benefits of part-time work, volunteering, and extracurricular activities. However, the work of the professional staff who support these strategies is seldom addressed. In this article, we report findings from our documentary analysis of 376 Australian university job advertisements for professional roles directly responsible for graduate employability programs and services. We characterise employability as a proto-jurisdiction: an ecology of distinct forms of professional expertise and responsibility with ambiguous, elastic, and porous boundaries. We argue that despite the importance of graduate employability to institutions' strategic and students' individual goals, it is as yet an inchoate field of professional practice, consisting of a diverse range of work tasks, functions, and projects. We discuss implications in relation to quality, coherence, and the strategic resourcing of employability support in higher education.

Louvion, A. (2022). **Quand les entreprises de portage salarial forment au métier d'indépendant. Le tiers employeur comme individualisation des rapports de travail**. *Formation emploi*, (157), 97-116. https://doi.org/10.4000/formationemploi.10475
À travers l'analyse du dispositif d'intermédiation qu'est le portage salarial, l'article interroge la manière dont un tiers employeur, les entreprises de portage salarial, peuvent se saisir d'un rôle de formation par le biais d'un travail d'incitation et de conseil qui diffuse une certaine perception des relations économiques et de travail. En mêlant entretiens et observations participantes, l'article propose une ethnographie de ces espaces où les compétences professionnelles s'effacent au profit de compétences comportementales participant d'une déconflictualisation des rapports de travail.

Ohagwu, O., Nwanesi, P. K., & Bala, P. (2022). **Skill acquisition (TVET) and employment in Sarawak**. *International Social Science Journal*, *72*(243), 145-157. https://doi.org/10.1111/issj.12314
This paper examines the role of technical and vocational education and training (TVET) as a booster of employment opportunities in Sarawak, highlighting the importance of TVET as a catalyst that promotes individuals' chances to gain employment, with the ultimate goal of improving their socioeconomic living conditions and overall development. As a case study focusing on Tabung Ekonomi Gagasan Sarawak (TEGAS) TVET programmes and applying the qualitative research methodological approach, this paper gathered and analysed raw data from research participants and concluded that (1) TVET plays significant roles in facilitating individuals' or groups' employment chances, especially within tech-based industries, and (2) employments are rewarded with remunerations and thus facilitate individuals' socio-economic developments.

Sarfati, F. (2022). **Postface. Les intermédiaires : des acteurs agis par le gouvernement par l'emploi**. *Formation emploi*, (157), 117-121. https://doi.org/10.4000/formationemploi.10518

Yamashita & Cummins. (2022). **Jobs at Risk of Automation in the USA: Implications for Community Colleges**. *Community College Journal of Research and Practice*, 46(5), 374-377. https://doi.org/10.1080/10668926.2021.1876782

Advancing technologies such as artificial intelligence and robots are steadily replacing jobs in the USA. Continuous skill-upgrading and re-skilling are critical for workers to remain employable throughout their careers. In these social and economic contexts, community colleges play significant roles to provide workforce education and training because of their open admission, lower tuition, and shorter and more specific occupational programs compared to four-year universities. However, the detailed data of jobs at risk of automation are currently unavailable to inform future community college programs. This study used the national occupation and risk-of-automation data to estimate specific numbers of jobs at risk by industries and age groups. Results showed that approximately 48% of the jobs could be replaced within two decades. Four industries (1) service; (2) sales and office; (3) natural resources, construction, and maintenance; and (4) production, transportation, and material moving were at a particularly higher risk (up to 75%). At the same time, computer, engineering, and health-care occupations had a lower risk (up to 12%). The estimated numbers of jobs at risk inform community colleges' strategic planning.

Réussite scolaire

Barbetta, G. P., Chuard-Keller, P., Sorrenti, G., & Turati, G. (2022). *Good or Bad? Short- versus Long-Term Effects of Multigrading on Child Achievement* (Tinbergen Institute Discussion Paper N° 22-025/V). Consulté à l'adresse Tinbergen Institute website: https://econpapers.repec.org/paper/tinwpaper/20220025.htm

This paper studies the effect of multigrading—mixing children of different ages in the same classroom—on students' short- versus long-term academic achievement in Italy. We cope with the endogeneity of multigrading (and class size) through an instrumental variable identification strategy based on a law that disciplines class composition. By relying on longitudinal data that follow a cohort of Italian students over their compulsory school career, we show that multigrading has a positive short-term effect on achievements. This effect fades away over time to become negative in the long run if students spend several years in a multigrade class. The analysis of mechanisms points to the fundamental role of teachers and suggests that no negative long-term effect arises when multigrade classes are taught by more experienced and motivated teachers. These results reconcile contrasting findings in the literature based on cross-sectional data and a short-term focus.

Barnhardt, C. L., Halilaj, F., Bytyqi, H., & Stroup, N. R. (2022). **Educational success in a new democracy: modeling university student persistence and completion in Kosovo**. *Higher Education*, 83(5), 1039-1061. https://doi.org/10.1007/s10734-021-00727-2

In the context of a new democracy, the success of Kosovo university students is crucial to improving the material conditions and long-term stability of the youth in the country. Using the burgeoning data infrastructure from the public higher education sector, this analysis utilizes a sample of 67,618 to examine college student persistence and degree completion from 32 faculties. Findings demonstrate that persistence and completion are highly gendered phenomena, and that completion is largely dependent on a student's major field of study.

Beg, S., Halim, W., Lucas, A. M., & Saif, U. (2022). **Engaging Teachers with Technology Increased Achievement, Bypassing Teachers Did Not**. *American Economic Journal: Economic Policy*, *14*(2), 61-90. https://doi.org/10.1257/pol.20200713
Using two RCTs in middle schools in Pakistan, we show that brief, expert-led, curriculum-based videos integrated into the classroom experience improved teaching effectiveness: student test scores in math and science increased by 0.3 standard deviations, 60 percent more than the control group, after 4 months of exposure. Students and teachers increased their attendance, and students were more likely to pass the high-stakes government exams. By contrast, providing similar content to students on personal tablets decreased student scores by 0.4 SD. The contrast between the two effects shows the importance of engaging teachers and the potential for technology to do so.

Bizopoulou, A., Megalokonomou, R., & Simion, S. (2022). *Do Second Chances Pay Off? Evidence from a Natural Experiment with Low-Achieving Students* (IZA Discussion Paper N° 15139). Consulté à l'adresse Institute of Labor Economics (IZA) website: https://econpapers.repec.org/paper/izaizadps/dp15139.htm
In several countries, students who fail end-of-high-school high-stakes exams are faced with the choice of retaking them or forgoing postsecondary education. We explore exogenous variation generated by a 2006 policy that imposed a performance threshold for admission into postsecondary education in Greece to estimate the effect of retaking exams on a range of outcomes. Using a fuzzy regression discontinuity design and novel administrative data, we find that low-achieving students who retake national exams improve their performance by half a standard deviation, but do not receive offers from higher quality postsecondary placements. The driving mechanism for these results stems from increased competition.

Boatman, A., Claro, S., Fresard, M., & Kramer, J. W. (2022). **Do Corequisite Math Courses Improve Academic Outcomes in Technical Colleges?: Evidence from Chile**. *Research in Higher Education*, *63*(3), 453-480. https://doi.org/10.1007/s11162-021-09649-5
For countries concerned about equity and access to higher education, providing support services for academically underprepared students is critical to increasing their probabilities of success. Corequisite math courses provide opportunities for underprepared students to develop their basic math skills through simultaneous enrollment in college-level and developmental courses. However, adding the additional developmental course also increases students' academic workload, potentially impeding their progress early in their college journey. Our study explores the effects of being assigned to this additional developmental math class at one of the largest technical colleges in Chile. Few remedial studies have examined the effects of corequisite courses in the technical college context, either in the United States or abroad. Using a regression discontinuity design, we find that for students attending a technical college and scoring close to the cutoff on a standardized mathematics placement exam, being assigned to a corequisite math course increases the grades in their college-level math course and marginally decreases their likelihood of withdrawing during the first semester, compared to students assigned to a single college-level math course. The effects on credits earned and first semester grades are driven by those pursuing less advanced technical degrees.

Brouwer, J., & Engels, M. C. (2022). **The role of prosocial attitudes and academic achievement in peer networks in higher education**. *European Journal of Psychology of Education*, *37*(2), 567-584. https://doi.org/10.1007/s10212-020-00526-w

After the transition to university, students need to build a new peer network, which helps them to adapt to university life. This study investigated to what extent students' prosocial attitudes and academic achievement facilitate the embeddedness in friendship and help-seeking networks, while taking structural network characteristics into account. Participants were 95 first-year bachelor's degree students and were part of learning communities consisting of 12 students at a university in the Netherlands. Measures included student-reports of prosocial attitudes, peer nominations of friendship and help-seeking networks, and officially registered grades (GPA). Longitudinal social network analysis, stochastic actor-based modeling with the package RSiena, revealed that both students' own prosocial attitudes and achievement played a role in their friendship formation, whereas only students' own achievement made the formation of their help-seeking relationships more likely. When students were friends, it was more likely that they approached each other for help and vice versa. Similarity in achievement level contributed to relationship formation in friendship and help-seeking networks. Overall, the results underscore the importance of both student' prosocial attitudes and achievement for their social adjustment (i.e., making friends) and only achievement for their academic adjustment (i.e., seeking help) during the first year of university within the context of small-scale teaching.

Cho, H. J., Wang, C., Bonem, E. M., & Levesque-Bristol, C. (2022). **How Can We Support Students' Learning Experiences in Higher Education? Campus Wide Course Transformation Program Systematic Review and Meta-Analysis**. *Innovative Higher Education*, *47*(2), 223-252. https://doi.org/10.1007/s10755-021-09571-9

The aims of this paper are to examine the breadth of scholarship that emerged from a large-scale university-wide course transformation program between 2011 and 2021, to investigate how the course transformation program influenced students' perceptions of their learning environment and learning achievement, and to discuss future directions for improving autonomy-supportive learning in higher education. We gathered all quantitative and qualitative publications related to the IMPACT course transformation program, and 35 articles were included in the study. Since the scope of the study topics in the course transformation program varied and program implementation was applied to various study contexts and disciplines, the findings were first summarized in a narrative manner. Additionally, a meta-analysis was conducted to examine the effectiveness of the course transformation based on 10 journal articles that adopted quasi-experimental designs. The findings revealed that the courses redesigned through the program supported students' positive learning experiences, including motivation, satisfaction regarding basic psychological needs, knowledge transferability, and academic performance. This paper discusses implications and future directions to enhance undergraduate students' academic success through course redesign. Further exploration is needed to determine the additional effect of course redesign in higher education.

Crisp, G., Potter, C., & Taggart, A. (2022). **Characteristics and Predictors of Transfer and Withdrawal Among Students Who Begin College at Bachelor's Granting Institutions**. *Research in Higher Education*, *63*(3), 481-513. https://doi.org/10.1007/s11162-021-09657-5

This study models reverse transfer, lateral transfer, and college withdrawal behavior for a national sample of students who began college at bachelor's granting institutions. Descriptive data illustrate statistical differences in the characteristics, habitus, early college experiences and supports, and institutional characteristics of students who do not transfer when compared to students who reverse transfer, laterally transfer, or drop out before the third year of college. Additionally, multi-level regression findings advance theoretical understanding of the ways in which predictors of reverse transfer, lateral transfer, and withdrawal from bachelor's granting institutions are both similar and different. Implications for research, theory, and practice are offered.

Demir, F. (2022). **The effect of different usage of the educational programming language in programming education on the programming anxiety and achievement**. *Education and Information Technologies*, *27*(3), 4171-4194. https://doi.org/10.1007/s10639-021-10750-6

The abstract structure, logic, negative perceptions, and anxiety of programming are seen as obstacles to novice programmers. The importance of educational programming languages is increasing day by day in overcoming these obstacles. In this study, it was aimed to investigate the effect of educational programming language integration on academic achievement and programming anxiety level. The pretest–posttest test design without control group, which is one of the experimental methods, was used in the study, which was carried out on three groups consisting of the theory, practice and integration of the course into both theory and practice part. The groups determined by random sampling method consist of 87 people, 61 boys and 26 girls. Pretest–posttest method was used to determine academic success. During the application process, five performance tests were used to determined the change in success. The scale developed by Cheung (1990) in determining computer programming anxiety was adapted to Turkish by the validity and reliability study by the researcher and was used as pre-test and post-test. Variance and covariance analyzes were used to determine anxiety about academic success and programming, and the results of Kruskal–Wallis test analyzes were used for analysis of performance tests. It is concluded that educational programming languages can be used by integrating both the theory and practice of the course in order to increase academic success and in-class performance and reduce anxiety about computer programming.

El Kalai, I., Kirmi, B., & Ait Lhassan, I. (2022). **Investigating the effect of teacher commitment on student academic : The case of Moroccan high schools in Tangier**. *International Journal of Research in Business and Social Science*, *10*, 350-363. https://doi.org/10.20525/ijrbs.v10i8.1507

The present work is interested in the resonance of teacher commitment on students' academic commitment and consequently on their academic achievement. It aims to identify the determinants of the commitment of Moroccan teachers at the qualifying secondary level specifically in the Provincial Directorate of National Education of Tangier-Assilah (Morocco), in particular organizational commitment and professional commitment with repercussions on student commitment in its two dimensions: affective, cognitive and its extension on academic achievement. This article has discussed the conceptual and theoretical details as well as the problematic, the main hypotheses and the conceptual model of the research. Then, it has presented the results of the empirical study which is based on a quantitative methodological approach of a positivist hypothetical deductive nature. The data were collected by a questionnaire submitted

by e-mail to our study population, which consists of 204 teachers and 380 students of the qualifying secondary level in 29 local public schools of the qualifying secondary cycle in the Provincial Directorate of National Education of Tangier-Assilah (Morocco). The result of our empirical study shows that the teacher commitment had a positive and statistically significant effect on student academic achievement through student engagement in local public schools of the qualifying secondary cycle in the Provincial Directorate of National Education of Tangier-Assilah (Morocco).

Fjelkner-Pihl, A. (2022). **The Constructive Overlap: A Study of Multiplex Ties in Students' Study-Related Networks and Academic Performance**. *Innovative Higher Education*, *47*(2), 273-295. https://doi.org/10.1007/s10755-021-09576-4
This article adds to a growing body of literature on how various types of social relations can work synergistically to promote students' academic success. Students' study-related social networks affect academic outcome in higher education. The network literature in education generally explores students' various relations separately, rather than their multiplex relations or when individuals share several relations. This approach risks missing the full complexity of the student experience. The aim of the present study is to add to the discussion on student social networks and attainment in higher education by further exploring multiplex relations maintained in a specific study program, in which a large share of students in the cohort commute. A survey was distributed to students in one cohort (n = 146). The findings revealed that, in this cohort, students' friendship, working and learning networks overlap substantially, and that centrality in the friendship and in the student multiplex networks was positively and significantly related to academic outcome, whereas centrality in the working and learning networks was not. Points for future research are suggested, and practical implications for those supporting student learning in higher education are discussed.

Foster-Hartnett, D., Mwakalundwa, G., Bofenkamp, L., Patton, L., Nguyen, R., & Goodman-Mamula, P. (2022). **Beyond the Traditional Classroom: Increased Course Structure and Cooperative Learning Remove Differences in Achievement between Students in an In-Person versus Hybrid Microbiology Course**. *CBE—Life Sciences Education*, *21*(2), ar33. https://doi.org/10.1187/cbe.21-01-0007
The increase in online learning brought on by the COVID-19 pandemic will likely result in a greater availability of online and hybrid course offerings. In this study, students enrolled in parallel sections of a microbiology lab course with in-person labs and either face-to-face (F2F) or all-online lectures (hybrid, H). Course material and method of assessment in the two sections were identical; student demographics were similar. In the first year, F2F students scored significantly higher on two out of four exams. In the second year, two interventions were introduced: team-building activities (in both sections) and online group discussions (H only). Students in both the F2F and H sections reported similar positive teamwork reviews based on Comprehensive Assessment of Team Member Effectiveness (catme.org) and survey data. Although the COVID-19 pandemic eventually forced all learning online, exam scores from the two sections in the first half of the semester were similar, suggesting that the interventions were effective. In both sections, exam scores were positively correlated with entering grade point averages. This study adds to the body of literature supporting the effectiveness of hybrid learning.

Greenland, S. J., & Moore, C. (2022). **Large qualitative sample and thematic analysis to redefine student dropout and retention strategy in open online education**. *British Journal of Educational Technology*, *53*(3), 647-667. https://doi.org/10.1111/bjet.13173
Open online education experiences persistently high dropout rates, and the efficacy of dropout interventions has been questioned. Despite considerable research, dropout reasons are not fully understood, and further in-depth investigation has been called for. Prior qualitative retention studies have frequently relied on smaller samples that are unable to generate deeper appreciation of dropout reasons. Over 200 in-depth interviews were therefore conducted with students that had dropped out of open online education. The probability-based qualitative sample facilitated capture of subthemes down to a 5% incidence level or frequency of occurrence. Thematic analysis revealed 41 subthemes within 10 broad dropout reasons. While the broad dropout themes have been identified previously, the subthemes are new and provide richer understanding. This study also captured students' suggestions for what might have prevented their dropout. Thematic analysis identified 19 subthemes within 5 broad intervention themes that respond to the root dropout causes. Many intervention subthemes address personal and learner context dropout factors that have often been considered uncontrollable and unavoidable. This paper therefore redefines dropout in open online education and offers new insights for improving retention. It also provides a strategic framework for evaluating dropouts and prioritising student-informed interventions that respond to the main dropout causes. Practitioner notes What is already known about this topic Persistently high open online education dropout suggests existing interventions are ineffective. Prior qualitative retention studies identified the main dropout reasons, but small sample sizes failed to generate deeper insights and more in-depth investigation has been called for. What this paper adds A probability-based qualitative sample of 226 participants captured dropout subthemes down to a 5% level of incidence or frequency of occurrence. Thematic analysis identified 41 subthemes, within 10 broad dropout reasons. These subthemes are new and offer richer understanding. Thematic analysis also identified 19 subthemes within 5 broad dropout intervention areas that students suggested could have prevented their dropout. These include new insights for addressing dropout causes that have often previously been considered unavoidable. Implications for practice and/or policy The strategic framework provides a retention management approach that prioritises responding to the main dropout causes with student-informed interventions. This approach and the deeper understanding afforded by robust qualitative investigation should help reduce persistently high dropout rates.

Hernandez, M., Pellerano, J. A., & Sanchez, G. (2022). *Conditional cash transfers and high school attainment: Evidence from a large-scale program in the Dominican Republic* (IFPRI Discussion Paper N° 2109). Consulté à l'adresse International Food Policy Research Institute (IFPRI) website: https://econpapers.repec.org/paper/fprifprid/2109.htm
Conditional cash transfer (CCT) programs are widely implemented in developing countries but evidence of their medium- and long-term effects on educational achievements is still relatively scarce. This paper examines the impact of a large-scale CCT program on high school attainment in the Dominican Republic. We implement a quasi-experimental approach combining extensive educational, administrative, and household records from program participants across the country and exploiting variations in the scheme (amount) of school transfers received among program participants. We find that receiving additional transfers specific for high school education is, on average, associated with an 11.7-13.2 percentage points higher probability of

completing high school relative to not receiving these transfers. We do not find major differences across urban and rural areas nor between female and male students. The transfers seem to play an important role during the last high school year of targeted students. The estimated impacts point to non-negligible effects on employment, salaries, and delayed parenthood. Several robustness checks support our findings.

Holvio, A. (2022). ***Impact of teacher content knowledge on student achievement in a low-income country*** (WIDER Working Paper Series N° wp-2022-23). Consulté à l'adresse World Institute for Development Economic Research (UNU-WIDER) website: https://econpapers.repec.org/paper/unuwpaper/wp-2022-23.htm
This paper estimates the causal impact of teacher content knowledge on student achievement in Mozambique, a low-income country where a large share of fourth-graders fail to meet the minimum requirements of literacy and numeracy. I use nationally representative data from the Service Delivery Indicator survey, and exploit within-student across-subject variation in a sample of students taught by the same teacher in maths and Portuguese, thus circumventing bias caused by unobserved student and teacher heterogeneity.

Jarraud, F. (2022, avril 20). **L'Unesco alerte sur le décrochage des garçons**. Consulté 20 septembre 2022, à l'adresse Le café pédagogique website: http://www.cafepedagogique.net/lexpresso/Pages/2022/04/20042022Article637860334466546988.aspx?actId=ebwp0YMB8s1_OGEGSsDRkNUcvuQDVN7aFZ1E4yS5hsZMczVe0oRbhmAPNiXrAmaf&actCampaignType=CAMPAIGN_MAIL&actSource=515998
Phénomène jusque là réservé aux pays les plus développés, le décrochage scolaire des garçons gagne aujourd'hui les pays les plus pauvres. C'est ce que montre un nouveau rapport de l'Unesco. La pauvreté reste le facteur principal de décrochage. Mais l'Unesco pointe aussi la culture viriliste et les stéréotypes de genre.

Kanetaki, Z., Stergiou, C., Bekas, G., Jacques, S., Troussas, C., Sgouropoulou, C., & Ouahabi, A. (2022). **Grade Prediction Modeling in Hybrid Learning Environments for Sustainable Engineering Education**. *Sustainability*, *14*(9), 5205. https://doi.org/10.3390/su14095205
Since mid-March 2020, due to the COVID-19 pandemic, higher education has been facing a very uncertain situation, despite the hasty implementation of information and communication technologies for distance and online learning. Hybrid learning, i.e., the mixing of distance and face-to-face learning, seems to be the rule in most universities today. In order to build a post-COVID-19 university education, i.e., one that is increasingly digital and sustainable, it is essential to learn from these years of health crisis. In this context, this paper aims to identify and quantify the main factors affecting mechanical engineering student performance in order to build a generalized linear autoregressive (GLAR) model. This model, which is distinguished by its simplicity and ease of implementation, is responsible for predicting student grades in online learning situations in hybrid environments. The thirty or so variables identified by a previously tested model in 2020–2021, in which distance learning was the exclusive mode of learning, were evaluated in blended learning spaces. Given the low predictive power of the original model, about ten new factors, specific to blended learning, were then identified and tested. The refined version of the GLAR model predicts student grades to within ±1 with a success rate of 63.70%, making it 28.08% more accurate than the model originally created in 2020–2021. Special attention was also given to students whose grade

predictions were underestimated and who failed. The methodology presented is applicable to all aspects of the academic process, including students, instructors, and decisionmakers.

Khattab, N., Madeeha, M., Samara, M., Modood, T., & Barham, A. (2022). **Do educational aspirations and expectations matter in improving school achievement?** *Social Psychology of Education*, *25*(1), 33-53. https://doi.org/10.1007/s11218-021-09670-7
The main objective of this paper is to examine the role of students' aspirations and expectations in affecting school achievement among 7th and 8th grade students in Qatar's schools. The study draws on data collected in Qatari schools from a randomly selected sample of 841 students and their parents. The findings indicate that students' educational aspirations have a stronger effect on students' school performance when compared to students' educational expectations, even when controlling for demographic factors, school attitude, and parental expectations. This finding directly contributes to the debate in the literature about the relative importance of aspirations and expectations, while also confirming what other studies have suggested- that the meaning and the way in which both aspirations and expectations operate is contextually relative. Context plays a significant role here, and consequently, leaves the debate over what matters more, aspirations or expectations, widely open.

Lee, J.-H., & Fuller, B. (2022). **Does Progressive Finance Alter School Organizations and Raise Achievement? The Case of Los Angeles**. *Educational Policy*, *36*(3), 587-623. https://doi.org/10.1177/0895904820901472
State finance reforms have raised per-pupil spending and elevated the achievement of disadvantaged students over the past half-century. But we know little about how fresh funding may alter teacher staffing or the social and curricular organization of schools, mediating gains in learning. We find that US$1.1 billion in new yearly funding—arriving to Los Angeles high schools after California enacted a progressive weighted-pupil formula in 2013—led schools to rely more on novice and probationary teachers. Schools that enjoyed greater funding modestly reduced average class size and the count of teaching periods assigned to staff in five subsequent years. Yet, high-poverty schools receiving higher budget augmentations more often assigned novice teachers to English learners (ELs) and hosted declining shares of courses that qualified graduates for college admission. Mean achievement climbed overall, but EL and poor students fell further behind in schools receiving greater funding.

Lu, B., Deng, Y., Yao, X., & Li, Z. (2022). **Learning Goal Orientation and Academic Performance: A Dynamic model**. *Journal of Career Assessment*, *30*(2), 329-344. https://doi.org/10.1177/10690727211043437
Drawing on the reciprocal determinism of self-regulation system, a process-based model is used to examine the relationship of learning goal orientation (LGO) among university students with their academic performance, via reciprocal relationships between initial status and change trajectories in academic self-efficacy and feedback-seeking behaviors. A longitudinal study of 316 Chinese university students throughout their first year in college reveals that students who have high LGO in their first month after entering the university generally have higher academic self-efficacy and seek more feedback. Moreover, initial levels of feedback seeking are positively related to academic performance via linear change in academic self-efficacy over time. Limitations of the study and practical implications are discussed.

MD, S., & Krishnamoorthy, S. (2022). **Student performance prediction, risk analysis, and feedback based on context-bound cognitive skill scores**. *Education and Information Technologies, 27*(3), 3981-4005. https://doi.org/10.1007/s10639-021-10738-2
In recent times, Educational Data Mining and Learning Analytics have been abundantly used to model decision-making to improve teaching/learning ecosystems. However, the adaptation of student models in different domains/courses needs a balance between the generalization and context specificity to reduce the redundancy in creating domain-specific models. This paper explores the predictive power and generalization of a feature - context-bound cognitive skill score- in estimating the likelihood of success or failure of a student in a traditional higher education course so that the appropriate intervention is provided to help the students. To identify the students at risk in different courses, we applied classification algorithms on context-bound cognitive skill scores of a student to estimate the chances of success or failure, especially failure. The context-bound cognitive skill scores were aggregated based on the learning objective of a course to generate meaningful visual feedback to teachers and students so that they can understand why some students are predicted to be at risk. Evaluation of the generated model shows that this feature is applicable in a range of courses, and it mitigates the effort in engineering features/models for each domain. We submit that overall, context-bound cognitive skill scores prove to be effective in flagging the student performance when the accurate metrics related to learning activities and social behaviors of the students are unavailable.

Mendoza-Sanchez, I., deGruyter, J. N., Savage, N. T., & Polymenis, M. (2022). **Undergraduate GPA Predicts Biochemistry PhD Completion and Is Associated with Time to Degree**. *CBE—Life Sciences Education, 21*(2), ar19. https://doi.org/10.1187/cbe.21-07-0189
There is interest in admission criteria that predict future success in biomedical graduate school programs, but identifying predictors of PhD attainment is inherently complex. In particular, high noncompletion rates of PhD programs have long been recognized as a major crisis. Here, we present a quantitative analysis of the PhD students enrolled in the Department of Biochemistry and Biophysics at Texas A&M University between 1980 and 2010. The input variables included sex, country of citizenship, undergraduate grade point average (GPA), and Graduate Record Examination (GRE) scores (Verbal and Quantitative Reasoning). Only GPA was a significant predictor of PhD completion based on logistic regression. We also examined associations involving nonbinary measures of success (PhD duration, first author, and total number of publications) among students who completed a PhD. GPA was again associated with the PhD duration. No enrollment variable was strongly associated with publication output. Despite potential limitations, this analysis is the first to suggest an undergraduate GPA association with PhD completion in life sciences. These results from a large state university in a predominantly rural area expand the range of programs from which such analyses have been reported.

Monaghan, D. B., & Sommers, O. K. (2022). **And Now for Some Good News: Trends in Student Retention at Community Colleges, 2004–2017**. *Research in Higher Education, 63*(3), 425-452. https://doi.org/10.1007/s11162-021-09656-6
Community colleges have been under pressure for years to improve retention rates. Considering well-publicized reductions in state funding during and after the Great Recession, progress in this area is unexpected. And yet this is precisely what we find. Using

the Integrated Postsecondary Education Data System (IPEDS), we find an average increase in retention of nearly 5 percentage points, or 9 percent, across the sector from 2004 to 2017. Over 70% of institutions posted retention gains, and average improvement occurred yearly over the period excepting a reversal at the height of the Great Recession. Gains were smaller on average at schools with higher tuition and that serve more disadvantaged populations, and larger at institutions with lower student-faculty ratios and higher per-student instructional spending. Fixed-effects regression and Oaxaca decomposition analyses demonstrate that these gains were not caused by observable changes in student body composition or in institutional characteristics such as increased per-student instructional spending.

Pickenpaugh, E. N., Yoast, S. R., Baker, A., & Vaughan, A. L. (2022). **The role of first-year seminars and first-year college achievement for undeclared students**. *Higher Education*, *83*(5), 1063-1077. https://doi.org/10.1007/s10734-021-00729-0
It is commonly stated in both literature and news outlets that undergraduate college students, who are undeclared (i.e., have not declared a major), are at a higher risk of dropping out or underperforming compared to students with declared majors. However, research supporting this belief or literature citing possible supportive interventions is scant and outdated. The small amount of research conducted thus far mostly examines the role of advising in supporting these potentially at-risk students. The present study investigated whether undeclared students at a mid-sized public research university in the USA represent a higher risk than their declared peers, as well as whether participation in a first-year seminar (FYS) minimizes these risks. Findings indicate undeclared students may be at higher risk than their declared counterparts and participation in a research-based academic FYS improved academic outcomes for these students. Results included average first-term GPAs 0.4 points higher and approximately 10% greater retention to the second year as compared to undeclared non-participants.

Powell, S., & Arora-Jonsson, S. (2022). **The conundrums of formal and informal meritocracy: dealing with gender segregation in the academy**. *Higher Education*, *83*(5), 969-985. https://doi.org/10.1007/s10734-021-00719-2
Despite the academy's commitment to the idea of meritocratic and fair principles in recruitments, promotions, student admissions and progress, gender segregation and gender inequalities continue to trouble universities worldwide. Through case-studies of two education programs at a Swedish university, we investigate how processes of formal merit, both formal (required for admission such as high grades) and what we identify as informal merit (needing to act in particular ways once admitted) work to obviate or reproduce gender-segregation. We analyze how everyday gendering processes in the classroom play a central role in what gets constructed as merit. Changing notions of merit during the period of study can hamper possibilities for ending gender segregation in HE or open up for ways to circumvent it. We show that a complex and ongoing construction of informal merit can restrain students from minority groups (in relation to gender, but also ethnic background, socioeconomic position, or sexuality) to enter, and importantly, remain in the program. At the same time, new ways of addressing the subject itself provides potential openings. We argue that in order to achieve gender balance at universities, it is urgent to understand how informal and formal merit interplay once students have joined the university and importantly also when they have made the leap and broken with gender segregated education choices.

Ruthig, J. C., Kroke, A. M., & Holfeld, B. (2022). **Anticipating academic performance and feedback: unrealistically optimistic temporal shifts in performance estimates and primary and secondary control strategies**. *Social Psychology of Education*, *25*(1), 55-73. https://doi.org/10.1007/s11218-021-09675-2

Students typically overestimate how well they will perform on future academic events, then lower those expectations as the event and performance feedback approach. According to control theories, individuals also shift from primary control strategies to secondary control strategies when the opportunity to exert direct influence over a performance event passes. However, temporal patterns of control strategies have not been examined to determine whether they correspond with shifts in performance estimates during a performance opportunity cycle. To obtain a thorough view of congruence in patterns of performance estimates and control strategy use, the current study spanned multiple performance cycles. Participants were 50 college students, who estimated their performance on three course exams, both prior to and after completing each exam. In addition, they completed measures of primary and secondary control strategies prior to the exam and after feedback, when they also reported their level of motivation and general sense of control in the course. Initial performance estimates were unrealistically optimistic (compared to actual scores), then declined prior to receiving performance feedback. Performance estimates reverted to unrealistically optimistic levels in anticipation of the next performance event. Likewise, the primary control strategy of goal persistence and secondary control strategy of positive reappraisal declined from pre-exam performance to post-exam feedback then rebounded by pre-exam performance. Conversely, the secondary control strategy of lowering aspirations increased from pre-exam to post-exam feedback, then declined prior to the next exam. The current findings show temporal shifts in control strategy use that accompany similar patterns in performance estimates.

Senkbeil, M. (2022). **ICT-related variables as predictors of ICT literacy beyond intelligence and prior achievement**. *Education and Information Technologies*, *27*(3), 3595-3622. https://doi.org/10.1007/s10639-021-10759-x

This study examined the incremental validity of different information and communication technologies (ICT)-related person characteristics over and above intelligence and and prior achievement when predicting ICT literacy across a period of three years. Relative weights analyses were performed to determine the relative contribution of each predictor towards explaining variance in ICT literacy. We used data from German NEPS that tracks representative samples of German students across their school careers. The sample consisted of 14,436 fifteen-year-old German students who provided self-reports on several ICT-related variables: self-confidence, usage motives, breadth of usage, access, experience, usage at home and at school. Data were analyzed cross-sectionally and longitudinally with structural equation models and path analyses, respectively. Cross-sectionally, all ICT-related variables incrementally predicted ICT literacy after controlling for intelligenc (explained variance: 0.4%–14.1%). Longitudinally, ICT self-confidence, ICT-related usage motives, breadth of ICT usage, ICT usage at school, and ICT experience incrementally predict ICT literacy after controlling for intelligence and prior achievement.three years later (explained variance: 0.3%–8.1%). Relative weights providing estimates of relative importance of each predictor showed that intelligence (cross-sectional) and prior achievement and intelligence, respectively (longitudinal) explained the largest portion of variance in ICT literacy, followed by ICT self-confidence, and ICT usage motives as the strongest ICT-related variables. These results emphasize that

ICT-related motivational constructs play an important role in the development of ICT literacy.

Shim, S. W., & Pelaez, N. (2022). **Getting by with a Little Help from Friends: A Qualitative Case Study of Students' Strategies for Coping with Failure in an Undergraduate Biology Laboratory Course**. *CBE—Life Sciences Education*, *21*(2), ar17. https://doi.org/10.1187/cbe.20-07-0155
Recent emphasis on research competencies in undergraduate biology education means that more students are doing course-based research. Professional research scientists learn from failed research, but undergraduate students who encounter failure in their biology lab research may not always respond in ways that advance their learning. There is a need to examine individual students' responses to failed research as they conduct investigations in an undergraduate lab course. Here, we report a qualitative research case study based on data from interviews and course work to examine five undergraduate students' emotional responses, coping strategies, and perceptions of learning as they confronted failure in a semester-long intro lab course investigation. All five students displayed negative emotions when they encountered a research obstacle, but their coping strategies varied. However, by the end of their research process, all had responded with competent actions, relationship actions, and autonomous actions as adaptive coping strategies. Support seeking played a critical role to promote autonomy as a foundation for research self-efficacy. After completing their research, the students reported valuable learning from the experience. Implications for instruction are based on examples of coping strategies for managing negative emotions from failed research.

Shukla, S. Y., Theobald, E. J., Abraham, J. K., & Price, R. M. (2022). **Reframing Educational Outcomes: Moving beyond Achievement Gaps**. *CBE—Life Sciences Education*, *21*(2), es2. https://doi.org/10.1187/cbe.21-05-0130
The term "achievement gap" has a negative and racialized history, and using the term reinforces a deficit mindset that is ingrained in U.S. educational systems. In this essay, we review the literature that demonstrates why "achievement gap" reflects deficit thinking. We explain why biology education researchers should avoid using the phrase and also caution that changing vocabulary alone will not suffice. Instead, we suggest that researchers explicitly apply frameworks that are supportive, name racially systemic inequities and embrace student identity. We review four such frameworks—opportunity gaps, educational debt, community cultural wealth, and ethics of care—and reinterpret salient examples from biology education research as an example of each framework. Although not exhaustive, these descriptions form a starting place for biology education researchers to explicitly name systems-level and asset-based frameworks as they work to end educational inequities.

Song, M., Garet, M. S., Yang, R., & Atchison, D. (2022). **Did States' Adoption of More Rigorous Standards Lead to Improved Student Achievement? Evidence From a Comparative Interrupted Time Series Study of Standards-Based Reform**. *American Educational Research Journal*, *59*(3), 610-647. https://doi.org/10.3102/00028312211058460
This study was designed to assess the effects of states' adoption of more rigorous standards as part of the current wave of standards-based reform on student achievement using comparative interrupted time series analyses based on state-level NAEP data from 1990 to 2017. Results show that the effects of adopting more rigorous

standards on students' mathematics achievement were generally small and not significant. The effects on students' reading achievement were also generally small, but negative and statistically significant for Grade 4. The study also revealed that the effects of states' adoption of more rigorous standards varied across NAEP subscales and student subgroups.

Tardif, S. (2021). *La résilience scolaire de bacheliers vivant avec un trouble développemental du langage* (Phd, Université du Québec à Chicoutimi). Consulté à l'adresse https://constellation.uqac.ca/id/eprint/8066/
Les jeunes vivant avec un trouble développemental du langage (TDL) rencontrent des défis avec l'acquisition, le développement et la maitrise de leur langage. Qui plus est, leur scolarisation au primaire et au secondaire est empreinte d'expériences négatives. Les études actuelles permettent de comprendre pourquoi plusieurs d'entre eux peuvent abandonner leurs études avant d'avoir obtenu un premier diplôme qualifiant ou exercent un métier qui ne convient pas à leurs capacités et à leurs aspirations professionnelles. Toutefois, les écrits scientifiques sont silencieux en ce qui a trait au processus de résilience scolaire de ceux qui déjouent les pronostics en obtenant un diplôme universitaire. Dans cette recherche, le modèle social du handicap et le concept de résilience scolaire étudiée de manière écosystémique ont servi d'ancrage pour comprendre comment s'est développée la résilience scolaire de bacheliers québécois vivant avec un TDL. Plus précisément, trois objectifs ont été établis : 1) Identifier les facteurs de risque individuels et environnementaux qui ont accru la possibilité que les bacheliers vivant avec un TDL ne poursuivent pas leurs études jusqu'à l'obtention de leur diplôme universitaire; 2) Identifier les facteurs de protection individuels et environnementaux qui ont limité les risques que les bacheliers vivant avec un TDL ne poursuivent pas leurs études jusqu'à l'obtention de leur diplôme universitaire et 3) Dégager l'influence de ces facteurs de protection sur les facteurs de risque. Une étude multicas auprès de quatre bacheliers québécois vivant avec un TDL a ainsi été réalisée. En plus d'un journal de bord, trois méthodes de collecte de données inspirées de l'approche biographique ont été privilégiées, soit un questionnaire ouvert portant sur leur historique médical et leur parcours scolaire, la sélection de 16 artéfacts (images ou photos liées à l'objet d'études) et un entretien individuel sous forme de récit de vie. Des analyses descriptives et thématiques verticales et horizontales ont permis d'interpréter les données recueillies. Les résultats amènent à comprendre comment s'est développée la résilience scolaire de quatre bacheliers vivant avec un TDL en s'intéressant aux interactions qu'ils ont eues avec leur environnement tout au long de leur parcours scolaire. Ces derniers ont surtout précisé avoir rencontré des difficultés langagières et d'apprentissage, en plus de vivre de l'isolement et de l'intimidation. Ils ont également côtoyé des intervenants scolaires qui auraient pu faire en sorte d'accroitre le risque qu'ils abandonnent leurs études avant l'obtention de leur diplôme universitaire en ne croyant pas en leur potentiel. Ces difficultés langagières, scolaires ou sociales les ont amenés à cheminer avec le sentiment d'être différent de leurs pairs. En revanche, les résultats indiquent que tous les bacheliers considèrent que leur engagement dans leurs études, leur persévérance ou l'établissement d'objectifs sont les principales raisons de leur réussite. Des membres de leur famille, des intervenants et des amis ont également adopté des comportements empathiques, rassurants et aidants tout au long de leur parcours scolaire pour les soutenir. Ils ont aidé les bacheliers à reconnaitre leurs capacités, de même qu'à mettre en place différentes stratégies pour qu'ils puissent les démontrer. Les mesures adaptées et les sessions allégées au postsecondaire ont

également permis aux bacheliers de vivre plusieurs réussites scolaires dans la mesure où elles se conjuguaient efficacement avec leur rythme d'apprentissage. Ces résultats amènent à présenter trois repères d'action pour favoriser le développement de la résilience scolaire des jeunes vivant avec un TDL: amener les intervenants scolaires à adopter le modèle social du TDL, recourir à des approches inclusives tout au long de leur parcours scolaire et les soutenir dans leur processus d'orientation scolaire. Bien que les bacheliers consultés puissent avoir évité d'aborder certains évènements difficiles ou en avoir oublié d'autres, elle permet tout de même d'apporter un éclairage critique sur l'influence négative de leur environnement sur leur vécu scolaire et confirme que des efforts doivent continuer d'être mis en place pour valoriser l'idée que la réussite se traduit différemment d'un apprenant à l'autre. Young people living with a developmental language disorder (DLD) face difficulties with the acquisition, development and proficiency of their language. Furthermore, their schooling is marked by negative experiences. Existing studies make it possible to understand why many of them abandon school before obtaining a first qualifying diploma or choose to work in a profession that does not suit their abilities and professional aspirations. However, the scientific literature remains silent on the process of academic resilience of those who defy the odds by obtaining a university degree. In this research, the social model of disability and the concept of school resilience studied in an ecosystemic fashion served as a reference to understand how the academic resilience of university degree graduates living with a DLD developed. Three precise objectives have been established: 1) Identify the individual and environmental risk factors that have increased the possibilities that university graduate living with DLD abandon their studies before obtaining their diploma; 2) Identify the individual and environmental protection factors that have limited the risks of abandon of the university graduate living with DLD before obtaining their university degree and 3) Expose the influence of the protection factors on risk factors. Therefore, a multicase study with four Quebec bachelor's degree graduate living with a DLD was carried out. In addition to a logbook, three methods of data collection inspired by the biographical approach were favored, namely an open questionnaire relating to their medical history and their school career, the selection of 16 artifacts (images or photos related to the subject of study) and an individual interview in the form of a life story. Vertical and horizontal descriptive and thematic analyzes were used to interpret the data collected. The results showed how the academic resilience of four university graduates living with a DLD was developed by looking at the interactions they had with their environment throughout their school career. The four subjects especially said that they encountered language and learning difficulties, in addition to experiencing isolation and bullying. They also encountered school personnel who could have increased the risk of them dropping out before graduating from university by not believing in their potential. These language, academic or social difficulties have led them to live with the feeling of being different from their peers. However, the results indicate that all four of the university graduates consider their commitment to their studies, their perseverance or the setting of goals to be the main reasons for their success. Family members, school personnel and friends have also adopted empathetic, reassuring and helpful behaviors throughout their school career to support them. They helped the graduates to recognize their abilities, as well as to put in place different strategies so that they could demonstrate them. The adapted measures and the reduced sessions at the post high school level have also enabled baccalaureate holders to experience several academic successes as long as they were combined effectively with their pace of learning. These results lead to the presentation of three benchmark actions to promote the development of the

educational resilience of young people living with DLD: encourage school personnel to adopt the social model of DLD, use inclusive approaches throughout their school career and support them in their school orientation process. Although the graduates consulted may have avoided revealing certain difficult events or have forgotten others, it nonetheless allows us to shed a critical light on the negative influence of their environment on their school experience and confirms that efforts must continue to be put in place to promote the idea that success is reflected differently from one learner to another.

Thomsen, J.-P. (2022). **The social class gap in bachelor's and master's completion: university dropout in times of educational expansion**. *Higher Education*, 83(5), 1021-1038. https://doi.org/10.1007/s10734-021-00726-3
While many papers have focused on socially unequal admissions in higher education, this paper looks at the persistence of class differentials after enrolment. I examine the social class gap in bachelor's programme dropout and in the transition from bachelor's to master's in Denmark from the formal introduction of the bachelor's degree in 1993 up to recent cohorts. Using administrative data, I find that the class gap in bachelor's departures has remained constant from 1993 to 2006, with disadvantaged students being around 15 percentage points more likely to leave a bachelor's programme than advantaged students, even after adjusting for other factors such as grades from upper secondary school. Importantly, the class gap reappears at the master's level, with privileged students being more likely to pursue a master's degree than less privileged students. The size of the class gap is remarkable, given that this gap is found among a selected group of university enrolees. As other studies have found that educational expansion in higher education is not necessarily a remedy for narrowing the class gap in educational attainment, scholars need to pay more attention to keeping disadvantaged students from leaving higher education.

Varty, A. K. (2022). **Promoting Achievement for Community College STEM Students through Equity-Minded Practices**. *CBE—Life Sciences Education*, 21(2), ar25. https://doi.org/10.1187/cbe.21-09-0237
Community colleges have an opportunity to promote achievement of more science, technology, engineering, and mathematics (STEM) students and meet larger goals of scientific advancement and educational equity. Understanding community college students' needs and backgrounds is key to increasing students' success in STEM fields and realizing this potential. The objective of this paper is to use data from the U.S. Department of Education's National Center for Education Statistics and other sources to characterize community college students and their academic achievement and to offer equity-based approaches to increase success, particularly in STEM. Here, I document that community college students, who constitute approximately one-third of U.S. undergraduates, are a unique population with greater proportions of underrepresented STEM minorities, parents, and students requiring developmental education. They are also more likely to be older, working, part-time, low-income, and first-generation students and more likely to differ demographically from faculty. I also found lower rates of academic achievement among community college students, including lower rates of retention and STEM degree attainment with evidence of even lower achievement for STEM underrepresented groups. The data point to the need for equity-based strategies to address achievement disparities for STEM community college students, including increasing community college faculty diversity and sensitivity to diverse students' needs

and experiences; adopting inclusive, active-learning pedagogies; and reforming developmental education.

Vemu, S., Denaro, K., Sato, B. K., Fisher, M. R., & Williams, A. E. (2022). **Moving the Needle: Evidence of an Effective Study Strategy Intervention in a Community College Biology Course**. *CBE—Life Sciences Education*, *21*(2), ar24. https://doi.org/10.1187/cbe.21-08-0216
Many science, technology, engineering, and math (STEM) community college students do not complete their degree, and these students are more likely to be women or in historically excluded racial or ethnic groups. In introductory courses, low grades can trigger this exodus. Implementation of high-impact study strategies could lead to increased academic performance and retention. The examination of study strategies rarely occurs at the community college level, even though community colleges educate approximately half of all STEM students in the United States who earn a bachelor's degree. To fill this research gap, we studied students in two biology courses at a Hispanic-serving community college. Students were asked their most commonly used study strategies at the start and end of the semester. They were given a presentation on study skills toward the beginning of the semester and asked to self-assess their study strategies for each exam. We observed a significantly higher course grade for students who reported spacing their studying and creating drawings when controlling for demographic factors, and usage of these strategies increased by the end of the semester. We conclude that high-impact study strategies can be taught to students in community college biology courses and result in higher course performance.

Vettori, G., Vezzani, C., Bigozzi, L., & Pinto, G. (2022). **Multidimensional profiles of learning orientations and school achievement: a person-oriented approach in middle-school students**. *European Journal of Psychology of Education*, *37*(2), 439-458. https://doi.org/10.1007/s10212-021-00536-2
A person-oriented approach was applied to the study of early adolescents' learning orientations to identify different profiles and their association with school achievement. A total of 244 middle-school students (male: 128; female: 116; M-age ± SD = 12.51 ± .93) completed a self-report questionnaire to explore cognitive, metacognitive, and affective dimensions of learning orientations. School achievements were collected in a range of school subjects. Cluster analyses and one-way MANOVA were carried out to verify the existence of profiles. Chi-square tests were used to test the association between profiles of learning orientations and school achievement. The results showed two profiles differently associated with school achievement: students "Dragged by the current" (Profile 1) showed low school achievement across school subjects, meanwhile students "At the helm" (Profile 2) reached excellent school achievement. In promoting middle-school students' achievement, it is important for teachers to consider students' profiles of learning orientations.

Weatherton, M., & Schussler, E. E. (2022). **Exploring Student Perspectives: How Graduate Students in a Life Science Department Define Success**. *CBE—Life Sciences Education*, *21*(2), ar34. https://doi.org/10.1187/cbe.21-11-0319
Research in science education often has the goal of enhancing student success, yet there is a dearth of literature related to how students define success for themselves. In this study, we explored how 10 life science graduate students defined the term "success," as well as their experiences related to success. Using interpretive phenomenological

analysis, we discovered that students had definitions of success that included multiple components and that students' definitions varied widely and were influenced by a number of factors. Students described challenges to their success—including lack of departmental support—as well as supports to their success—like caring relationships with others. Students felt guilty about having definitions that were not wholly academic, and their perceived misalignments between these definitions and those of their advisors or department generated negative feelings and a low sense of belonging. Finally, students described how their definitions of success had changed since entering graduate school. Our results suggest that student definitions of success are complex and that, as researchers and programs seek to enhance student success, they should attend to the diverse perspectives that students have about this concept; this may be an integral strategy to address students' well-being within academia.

Weißmüller, K. S., & De Waele, L. (2021). *Would you Bribe your Lecturer? A Quasi-experimental Study on Burnout and Bribery in Higher Education* (OSF Preprints N° csvkd). Consulté à l'adresse Center for Open Science website: https://econpapers.repec.org/paper/osfosfxxx/csvkd.htm
Bribery is a complex and critical issue in higher education (HE), causing severe economic and societal harm. Traditionally, most scholarship on HE corruption has focused on institutional factors in developing countries and insights into the psychological and motivational factors that drive HE bribery on the micro-level mechanisms are virtually non-existent. To close this research gap, this study investigates the connection between study-related burnout and university students' willingness to offer bribes to their lecturers to pass important exams. Conducting a vignette-based quasi-experimental replication study with 624 university students in Germany, Belgium, and the Netherlands we find that university students in three countries differentiate sharply between different shades of bribery and that a majority accept using emotional influence tactics to pass (failed) exams. In contrast, offering a helping hand or money (i.e., darker shades of bribery) to their lecturer was less acceptable. Study-related burnout is associated with a higher likelihood of engaging in these darker shades of bribery and students' commitment to the public interest is but a weak factor in preventing unethical behavior. In summary, this study provides solid empirical evidence that university students are likely to use emotional influence tactics violating both the ethical codes of conduct and the formalized bureaucratic procedures of HE examination, particularly if they suffer from study-related burnout. However, the accelerating effect of burnout on bribery is conditional in that it only holds for darker shades of bribery. HE institutions may benefit from implementing the four-eye principle and from launching awareness campaigns that enable lecturers to better recognize these tactics and engage students in creating a transparent environment for testing, grading, and collaboration that is resistant to bribery.

Valeurs

Agundez-Rodriguez, A., & Sauvé, L. (2022). **L'éducation relative au changement climatique : une lecture à la lumière du Pacte de Glasgow**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions, 17*(1). Consulté à l'adresse http://journals.openedition.org/ere/8421
Depuis quarante ans, le changement climatique (CC) s'est accéléré de façon alarmante en raison des émissions de gaz à effet de serre d'origine anthropique dans le contexte des sociétés de surconsommation (Groupe d'experts intergouvernemental sur

l'évolution du climat - GIEC, 2021). Le CC appauvrit les écosystèmes des cinq continents et ceux des océans, mettant en danger la vie sur Terre. Ce phénomène constitue non seulement le plus grand défi écologique que l'humanité doit affronter actuellem...

Barnes, L. P. (2022). **The Commission on Religious Education, Worldviews and the Future of Religious Education**. *British Journal of Educational Studies*, *70*(1), 87-102. https://doi.org/10.1080/00071005.2021.1871590
This article considers the proposals of the final report of the Commission on Religious Education (CoRE 2018) and its controversial conclusion that the law should require religious education to include teaching about non-religious worldviews alongside religions, presumably in equal measure. Attention is given both to Trevor Cooling's recent defence of CoRE's proposals against already expressed criticisms and to additional criticisms, that of the abstract nature of a worldview as a highly ramified, philosophical concept, which is educationally ill-suited to the interests and intellectual capabilities of many pupils, and that of the failure of the proposals to indicate in what ways they overcome current systemic weaknesses. It is concluded that religious education should not be reconceptualised as the study of religious and non-religious worldviews nor should it adopt a framework that construes religions primarily as worldviews.

Barthes, A. (2022). **Quels curricula d'éducation au politique dans les questions environnementales et de développement ?** *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18744
Nous clarifions ce que nous entendons par éduquer au politique, puis ce qu'implique concrètement de construire des curricula intentionnels d'une telle éducation. Clarifier les épistémologies de savoirs politiquement situés, multiréférentialiser des rapports sociaux, problématiser et reconnaitre des rapports de pouvoir et d'injustice en sont quelques facettes. Nous proposons une lecture d'une histoire de l'éducation aux questions d'environnement et de développement et des ? courants successifs d'éducation relative à l'environnement, au développement durable et au temps de l'anthropocène dans une perspective de présence ou d'absence d'éducation au politique. Nous mettons également en évidence un changement de paradigme récent, faisant suite à deux décennies d'éducations au développement durable fortement inscrites dans le comportementalisme, vers des éducations au temps de l'anthropocène qui offrent davantage de potentialité de socialisation politique.

Barthes, A., Sauvé, L., & Torterat, F. (2022). **Quelle éducation au politique pour les questions environnementales et de développement ?** *Éducation et socialisation. Les Cahiers du CERFEE*, (63). Consulté à l'adresse https://journals.openedition.org/edso/18788
Présentation du dossier Les préoccupations environnementales et de développement ont généré de nouveaux types de mobilisations sociales depuis les années 1960 (Zaccai et Orban, 2017). Ces mouvements constituent un tournant dans la vie politique à l'ère de l'Anthropocène : ils engagent les populations concernées et un large public vers des apprentissages d'ordre politique, principalement en contextes non-formels et informels. Par ailleurs, l'éducation formelle est de plus en plus sollicitée po...

Briole, S., Gurgand, M., Maurin, E., McNally, S., Ruiz-Valenzuela, J., & Santín, D. (2022). *The Making of Civic Virtues: A School-Based Experiment in Three Countries* (IZA Discussion

Paper N° 15141). Consulté à l'adresse Institute of Labor Economics (IZA) website: https://econpapers.repec.org/paper/izaizadps/dp15141.htm
With the rise of polarization and extremism, the question of how best to transmit civic virtues across generations is more acute than ever. In this paper, we test the hypothesis that schools can be the place for this transmission by empowering students and gathering them around concrete and democratically chosen objectives. We draw on an RCT implemented in a large sample of middle schools in three European countries. The evaluated program leads students to carry out collective citizenship projects in their immediate communities under the supervision of teachers trained in student-centered teaching methods. The program significantly increases student altruism, their political self-efficacy as well as the quality of their relationship with their classmates and their respect for the rules of school life (less sanctions and absenteeism). In all three countries, the benefits are greater for students with the highest level of altruism and interest in politics at baseline. Investments made at an early age appear to be complement to those made during adolescence for the production of civic virtues.

Cahn, P. S., Gona, C. M., Naidoo, K., & Truong, K. A. (2022). **Disrupting Bias Without Trainings: The Effect of Equity Advocates on Faculty Search Committees**. *Innovative Higher Education*, *47*(2), 253-272. https://doi.org/10.1007/s10755-021-09575-5
Many institutions of higher education have implemented workshops for hiring committee members to familiarize them with the pernicious effects of implicit bias and how to counteract them. Unfortunately, the enthusiasm for implicit bias trainings is not matched by the evidence for their effectiveness. Recognizing the difficulty of removing entrenched biases and the potential for trainings to backfire, we introduced the role of equity advocate (EA) at one institution. EAs are trained volunteer faculty and staff members who serve on search committees outside their home departments to identify behaviors and judgments that might have a disparate racial effect in hiring. We conducted focus groups to document the perspectives of both EAs and non-EA search committee members who completed a cycle of academic hiring. Search committee members credited EAs with helping to mitigate bias by questioning their assumptions and introducing standardized tools for evaluating candidates. By contrast, EAs reported a more contentious relationship with the rest of the search committee and expressed less confidence that the process was free from bias. Both groups agreed that the EAs added valuable race-conscious equitable practices, and untrained committee members identified ways they could apply the lessons of bias reduction in other parts of their professional roles. Our study provides evidence for how to engage all faculty and staff members in sustainable, equity-minded efforts.

Caroti, D. (2022). *Effets des formations à l'esprit critique sur les croyances et dispositions épistémiques des enseignants* (Theses, Aix-Marseille Université). Consulté à l'adresse https://hal.archives-ouvertes.fr/tel-03637551
L'éducation à l'esprit critique des élèves fait aujourd'hui partie intégrante des prescriptions officielles de l'Éducation Nationale française. En parallèle, la formation des enseignants à l'esprit critique se développe dans de nombreuses académies, ce qui pose la question des effets de ces formations, mais également de la manière dont sont formés les enseignants à l'appropriation et à la maîtrise des compétences en lien avec l'esprit critique. Notre recherche s'est d'abord concentrée sur les prescriptions et textes officiels pour comprendre les attendus en matière d'éducation à l'esprit critique. Puis nous avons effectué un travail d'analyse de la littérature scientifique pour établir les

bases conceptuelles permettant de définir l'esprit critique, la pensée critique et le penseur critique (Ennis, 2015). Cette analyse nous a permis de dégager des caractéristiques de la pensée critique (connaissances, capacités et dispositions) et des critères d'évaluation pour le penseur critique (fiabilité, confiance). Pour former un penseur critique « efficace », l'intérêt d'utiliser des contenus de types pseudoscientifiques ou « paranormaux » a été évalué par plusieurs travaux (Dyer & Hall, 2018; Wilson, 2018). Nous avons alors testé et mis en évidence 1/ l'effet de la rationalité épistémique sur l'adhésion des enseignants à des croyances non fondées (Adam-Troian, Caroti, Arciszewski, & Ståhl, 2019) et 2/ l'effet de formations à l'esprit critique pour enseignants s'appuyant sur des contenus et exemples de type pseudoscientifiques ou « paranormaux » sur la réduction de croyances non fondées, et le renforcement de certaines dispositions critiques des enseignants, à savoir la rationalité épistémique et l'humilité épistémique.

Champagne St-Arnaud, V., & Samson, G. (2022). **Évaluer l'efficacité de l'éducation relative au changement climatique en milieu non formel : une étude de cas**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, *17*(1). https://doi.org/10.4000/ere.8097
Les outils permettant d'évaluer l'efficacité de l'éducation relative au changement climatique en milieu non formel sont peu nombreux et souffrent souvent de l'absence d'assises théoriques solides. Dans le contexte de la campagne Sors de ta bulle menée par la Fondation Monique-Fitz-Back, un cadre d'évaluation novateur reposant sur douze indicateurs a été élaboré. Ces indicateurs ont servi à évaluer les effets de la participation de jeunes de 12 à 17 ans au Sommet jeunesse sur le changement climatique, l'une des activités de la campagne. Un devis mixte combinant la réalisation d'une enquête en ligne auprès des participant.e.s et un entretien de groupe avec douze d'entre eux a permis de constater que la campagne Sors de ta bulle a contribué à stimuler efficacement le processus d'adoption de comportements écoresponsables selon trois axes : augmentation de la motivation, renforcement du sentiment d'efficacité personnelle et intensification de l'engagement dans la lutte climatique.

Champoux, M., & Agundez-Rodriguez, A. (2022). **Des épistémologies des Suds pour penser une éducation relative aux changements climatiques à portée transformatoire**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.8520
Pour réussir à relever les nombreux défis posés par les changements climatiques, l'humanité a besoin d'élargir le champ des possibles et d'entreprendre une profonde transformation sociale et politique en vue de l'atteinte d'une plus grande justice sociale et environnementale. Pour le sociologue et épistémologue Boaventura de Sousa Santos (2016), la justice mondiale ne pourra pas être atteinte sans la poursuite d'une justice cognitive mondiale. Cette dernière doit reconnaitre l'incomplétude de la rationalité moderne occidentale. Cet article effectue un retour sur l'œuvre Épistémologies du Sud (Boaventura De Sousa Santos, 2016) en tentant de mettre en exergue les principaux concepts développés par l'auteur et qui semblent porteurs pour penser une éducation relative aux changements climatiques (ERCC) transformatoire, axée sur la justice écosociale et ouverte à des subjectivités et des expérimentations alternatives.

Cooling, T. (2022). **The Commission on religious education – a response to l. Philip Barnes**. *British Journal of Educational Studies, 70*(1), 103-118. https://doi.org/10.1080/00071005.2021.1954142
In a recent article, L. Philip Barnes critiques the Commission on Religious Education (CoRE) Final Report by scrutinising its text and by responding to my interpretation of that text. His particular, but not exclusive, focus is CoRE's proposal that the idea of worldview should be central to RE. His conclusion is that: 'The collective force of these criticisms counsels against implementing the proposals of CoRE. Religious education needs to look elsewhere than to a worldview curriculum to overcome its current travails'. This article responds by arguing that Barnes fails to justify his conclusion because his critique does not meet the standards of a fair and responsible treatment of his chosen focal texts. In particular, it misrepresents and misinterprets the CoRE Report and overlooks the alternative interpretation that I and others offered.

Deslauriers, A. (2022). **Lorsque la création rencontre les grands défis socioécologiques en enseignement des arts plastiques au secondaire**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.7674
Cet article présente certains résultats préliminaires d'une recherche doctorale visant à développer un modèle éducationnel en enseignement des arts plastiques au secondaire. Ce modèle conjugue éducation artistique et éducation relative à l'environnement, rejoignant des éléments clés du Programme de formation de l'école québécoise. Au sein de ce modèle, l'éducation artistique s'intéresse aux horizons extradisciplinaires du domaine des arts, comme la prise en compte de questions socioécologiques, en particulier celle du changement climatique, conséquence d'une dégradation environnementale sans précédent.

Desmarais, M.-É., Rocque, R., & Sims, L. (2022). **Comment faire face à l'éco-anxiété : 11 stratégies d'adaptation en contexte éducatif**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.8267
Les défis soulevés par les changements climatiques sont de plus en plus importants et préoccupent un nombre grandissant d'individus. Certains ressentent une urgence d'agir, comme une responsabilité sociale : il faut mener dès maintenant des actions concrètes dans l'espoir de gérer la crise. En raison du fait que les actions individuelles, bien que pertinentes et nécessaires, n'ont pas les effets espérés par la personne qui les mènent, plusieurs vivent de l'éco-anxiété. Afin de canaliser cette écoanxiété, cet article présente onze stratégies d'adaptation, en fonction de trois axes prioritaires : les émotions, le problème et la signification.

Dionne, L., & Lefebvre, I. (2022). **L'éducation relative à l'environnement et au changement climatique : l'appui d'ententes internationales pour son institutionnalisation**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.8543
Les changements climatiques constituent la plus grande menace pour l'Humanité à ce jour. En plus de compromettre la paix mondiale par les risques de mouvements forcés de populations, les changements climatiques affectent l'équilibre des écosystèmes terrestres et font disparaître de nombreuses espèces vivantes. Nous devons prendre des mesures plus strictes pour réduire les émissions de gaz à effet de serre de manière à ne pas dépasser 1,5 °C de réchauffement. Une des clés pour changer les comportements consiste à éduquer à l'environnement et au changement climatique. La Convention des

droits de l'enfant de l'ONU précise que l'enfant doit, durant sa scolarisation, acquérir des notions de respect du milieu naturel, tout en lui garantissant un environnement sain. Notre propos, appuyé par des textes légaux, propose des éléments qui supportent un changement de paradigme au sein de nos systèmes éducatifs pour institutionnaliser sans tarder l'éducation relative à l'environnement et au changement climatique.

Dupuis, C. (2022). **Québec ZéN : une initiative de la société civile pour coconstruire le Québec carboneutre de demain**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.8393
L'histoire environnementale du Québec met en évidence le rôle majeur des acteurs de la société civile pour repérer, exiger et opérer les changements majeurs qui s'imposent. En particulier, l'examen des mobilisations au fil des dernières décennies montre l'importance de la coconstruction des savoirs, du dialogue social et de l'expérience de l'action concertée pour favoriser le développement d'un pouvoir citoyen permettant de contribuer à la transformation des réalités socio-écologiques. S'inscrivant dans une telle dynamique, cet article présente les fondements et le cheminement d'un mouvement social d'envergure qui depuis quelques années, s'est saisi de la question climatique.

European Centre for the Development of Vocational Training. (2022). **Un allié dans la transition écologique**. *Note d'information CEDEFOP*, (9166), 1-5. https://doi.org/1831-2438
L'EFP, et en particulier l'apprentissage professionnel, peuvent fournir les compétences nécessaires à l'écologisation des emplois et contribuer à les définir.

Furman, C. E., & Wahl, R. (2022). **Rethinking Key Concepts in Education**. *Educational Theory*, *72*(1), 27-30. https://doi.org/10.1111/edth.12510

Gladu, S., & Curadeau, M. (2022). **Implantation d'une nouvelle approche éducative visant l'engagement environnemental des citoyens. Biodôme, Espace pour la vie**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.7543
Depuis 1992, le Biodôme de Montréal s'emploie à exposer le vivant dans toute sa complexité et ses interconnexions à travers la représentation de cinq écosystèmes. Une de ses missions : « S'engager à protéger l'environnement en favorisant une prise de conscience individuelle et collective ». Sa division Programmes publics et éducation se penche sur une façon de concrétiser davantage cette mission à travers ses activités. Le présent article fait état de la démarche qui accompagne cette réflexion. Pour l'essentiel, il s'agit de la proposition d'une nouvelle approche éducative s'appuyant sur un modèle développé au cœur même du Biodôme : « La pyramide d'interventions ». Une approche qui appelle les visiteur.euse.s à passer à l'action. Y sont également présentés les principaux défis qui accompagnent l'implantation d'une telle approche, ainsi que les dispositions mises en place pour faciliter cette dernière.

Gousse-Lessard, A.-S., & Lebrun-Paré, F. (2022). **Regards croisés sur le phénomène « d'écoanxiété » : perspectives psychologique, sociale et éducationnelle**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.8159
Le vocable « écoanxiété » a récemment fait son entrée dans le discours médiatique, celui des mouvements sociaux et au sein des milieux éducatifs. Si le milieu de la

recherche n'est pas en reste, trop peu d'écrits, particulièrement en français, se sont penchés sur le phénomène que le terme « écoanxiété » tente de saisir et sa prise en compte en éducation. En vue de contribuer à combler cet écart, cet article mobilise des perspectives ancrées en psychologie et en sociologie critique, fondées sur une recension d'écrits et les résultats d'une recherche empirique exploratoire. Il a pour objectifs 1) de clarifier les contours de cette notion, 2) d'exposer certaines stratégies de régulation de l'écoanxiété et les enjeux qui y sont associés, et 3) de fournir des pistes de réflexion pour l'intervention en éducation relative à l'environnement (ERE).

Groleau, A., Arseneau, I., & Pouliot, C. (2022). **Miser sur les capacités citoyennes pour faire face à la crise climatique**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.7600
Dans ce texte, nous abordons la nécessité d'une éducation aux changements climatiques qui s'appuie sur les capacités citoyennes. Nous présentons d'abord le concept de déficit citoyen, puis nous discutons des raisons pour lesquelles il est important de s'intéresser aux capacités citoyennes dans les recherches en didactique des sciences et dans l'enseignement des technosciences. Cela nous mène à proposer différentes façons de mettre en lumière les capacités citoyennes et de contribuer à leur développement afin de former des personnes capables de comprendre les tenants et les aboutissants des questions environnementales et sanitaires contemporaines, de participer aux discussions sociopolitiques et d'agir sur les situations qui les concernent.

Harrison, T., & Polizzi, G. (2022). **(In)civility and adolescents' moral decision making online: drawing on moral theory to advance digital citizenship education**. *Education and Information Technologies*, *27*(3), 3277-3297. https://doi.org/10.1007/s10639-021-10710-0
This article draws on moral theory to advance digital citizenship education and explore how adolescents aged 13–16 make decisions when confronted with incivility, such as cyberbullying, on social media. Given the extent to which digital citizenship education may be approached in line with deontological (rules), utilitarian (consequences) and/or virtue ethical (character) theories, we argue that it is important to know which of these underpin adolescents' moral decision making online. To address this question, this article reports findings from a survey completed by 1947 13–16 year olds in England. Chi-square tests, binary logistic regressions and other exploratory analysis showed that most 13–16 year-olds use virtue ethical reasons to justify moral actions. We conclude that if online incivility is to be reduced, policymakers, educators and parents should focus more on virtue- and character-based approaches to digital citizenship education.

Jarraud, F. (2022a, avril 12). **Dépolitisés, les curricula scolaires empêchent-ils de former des citoyens aptes à traiter les questions environnementales ?** Consulté 13 avril 2022, à l'adresse Le café pédagogique website: http://www.cafepedagogique.net/lexpresso/Pages/2022/04/12042022Article637853423159883253.aspx?actId=ebwp0YMB8s1_OGEGSsDRkNUcvuQDVN7aFZ1E4yS5hsZMczVe0oRbhmAPNiXrAmaf&actCampaignType=CAMPAIGN_MAIL&actSource=515840
Nos analyses montrent que la manière dont les questions environnementales (QE) sont traitées privilégie la technologie comme source de solutions aux problèmes humains, participe d'une conception positiviste de la science, et relève d'une approche anthropocentrée. Les programmes et manuels transmettent implicitement un rapport au monde très ancré dans le paradigme de la modernité". Malou Delplancke et Hanaà Chalak (Université de Nantes) étudient de près, dans Education et socialisation n°63, les

programmes du collège et du lycée. Elles montrent qu'il reposent sur des conceptions qui empêchent une formation du citoyen.

Jarraud, F. (2022b, avril 15). **Qu'est ce qui motive l'engagement des élèves ?** Consulté 15 avril 2022, à l'adresse Le café pédagogique website: http://www.cafepedagogique.net/lexpresso/Pages/2022/04/15042022Article637856016 396016346.aspx?actId=ebwp0YMB8s1_OGEGSsDRkNUcvuQDVN7aFZ1E4yS5hsZMczVe0o RbhmAPNiXrAmaf&actCampaignType=CAMPAIGN_MAIL&actSource=515906
Alors que l'élection présidentielle montre un taux d'abstention record chez les plus jeunes, l'Ecole est souvent interpellée pour développer l'engagement de la jeunesse. Deux études publiées dans la revue Tréma (n°56) abordent l'engagement des élus lycéens des CAVL et des nouveaux éco-délégués, créés par JM Blanquer. Toutes deux montrent que l'engagement des élèves va dépendre beaucoup de l'accueil qui y est fait dans les établissements. Comme le disent les auteurs de l'article sur les écodélégués, "le développement de leur engagement et de leur pouvoir d'agir n'est en revanche possible qu'à condition de permettre à l'ensemble des élèves et professionnels de lui accorder du sens : « on ne peut s'épanouir qu'en servant une cause dont le sens dépasse le seul individu ».

Jordan, K. (2022). **The Feasibility of Integrating Insights from Character Education and Sustainability Education – a Delphi Study**. *British Journal of Educational Studies*, *70*(1), 39-63. https://doi.org/10.1080/00071005.2021.1897519
Although fostering values is promoted within sustainability education (SE), many educators appear concerned or conflicted about how, or whether, to approach values education. An interdisciplinary research project sought to draw on insights from character education (CE) in order to explore the problem. Using the Delphi technique, 12 CE and SE experts were gathered, via email, to explore their perceptions regarding the feasibility of integrating theoretical/practical insights from the CE and SE fields. Experts rated their agreement and made comments on 41 statements. Fourteen statements reached 'consensus'. Thematic analysis revealed experts' agreement on an ethical base of SE providing practical application of CE; a perceived tension between democracy, pluralism and normativity; reservations about the individual nature of CE; the need for CE, and SE, to more actively foster awareness of self as part of nature; a desire for holistic and interdisciplinary education; concern regarding exam-driven education and agreement on the need to re-examine the purpose of education. The findings reveal common ground between the two fields, as well as indicating where differences could be bridged and misunderstandings addressed, suggesting avenues for future collaboration and potential integration – possibilities that it would be fruitful to pursue through further interdisciplinary research.

Joublot-Ferré, S. (2022). **Former en géographie en Anthropocène : le pari d'une expérience de « repolitisation »**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18290
En Anthropocène, quelles stratégies sont à développer pour favoriser la formation de citoyen.e.s autonomes et capables de participer aux décisions publiques ? L'article présente un dispositif spécifique, expérimenté en formation initiale d'enseignant.e.s, à la Haute École pédagogique de Lausanne, en Suisse romande. Ce dispositif articule enquête et expérience spatiale, au sein d'une démarche sensible et participative. Cette proposition didactique est évaluée, du point de vue de sa capacité à répondre aux

attentes sociétales de « politisation » de l'enseignement en sciences sociales, notamment en géographie. Les enjeux épistémologiques mais également scolaires et didactiques, sont rappelés. La géographie de l'habiter est particulièrement mobilisée. L'analyse du dispositif, au prisme des apprentissages citoyen et politique, est appuyée par plusieurs références : la légitimation de l'éducation politique en Anthropocène, la pensée critique, la capacitation et l'expérience.

Legardez, A., Cadet-Mieze, M., & Jeziorski, A. (2022). **L'éducation au politique sur des questions socialement vives (QSV) liées au développement durable (DD) et aux objectifs de développement durable (ODD)**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18473
Les travaux de recherche menés sur les questions socialement vives (QSV) peuvent-ils contribuer à une éducation au politique ? De nombreux auteurs qui se réclament des QSV s'inscrivent dans une perspective d'éducation à une écocitoyenneté politique dans une perspective transformative-critique. Nous proposons d'illustrer ces relations par l'étude de questions liées à l'éducation au développement durable (EDD), dans une perspective didactique et, plus spécifiquement, par la présentation-discussion d'une formation-action-recherche collaborative : le projet FECODD (Formation, Education et Compétences et Objectifs de Développement Durable). Comment l'éducation au DD – via les ODD - peut-elle contribuer à une meilleure compréhension et appréhension des enjeux politiques qui en émanent ?

Louapre, S. (2022). **Colloque « Tout un monde en santé ! Enjeux pour l'éducation relative à l'environnement »**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). Consulté à l'adresse http://journals.openedition.org/ere/8337
Les 19 novembre 2021 s'est tenu en mode virtuel le colloque « Tout un monde en santé ! Enjeux pour l'éducation relative à l'environnement », organisé par l'Association québécoise pour la promotion de l'éducation relative à l'environnement (AQPERE). D'entrée de jeu, Jacqueline Romano-Toramanian, présidente de l'AQPERE, présente la thématique : La Covid 19 nous a fait cruellement prendre conscience que nous, êtres humains, faisons partie de quelque chose de plus grand que nous, le Vivant, au m...

Mangin, C., & Gousse-Lessard, A.-S. (2022). **Les sciences cognitives face aux changements climatiques : apports et limites pour l'éducation relative à l'environnement**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.8307
La nécessité d'apporter des réponses adéquates aux changements climatiques pose pour l'éducation relative à l'environnement (ERE), plusieurs défis quant à la diffusion des connaissances et leur traduction en actions, dans un contexte de déni persistant sur fond de polarisation idéologique. Certaines sciences cognitives, telle la psychologie cognitive, jettent un éclairage sur ces défis qui peut s'avérer riche en enseignements pour l'ERE. Toutefois, ces travaux s'exposent à au moins deux catégories de critiques. Les premières, d'ordre épistémologique et méthodologique, questionnent la reproductibilité et la validité externe des résultats et mettent au jour des penchants déterministes et centrés sur l'individu. Les autres, d'ordre éthique et politique, s'inquiètent des tendances post-démocratiques des solutions suggérées. Dès lors, que pourrait retenir l'ERE des enseignements des sciences cognitives pour favoriser l'action climatique et de quoi devrait-elle se garder ? Cette question est explorée à travers une analyse critique de ces enseignements, soulignant l'importance du développement de compétences

métacognitives et de la lutte contre l'individualisme, et la nécessité d'approches plus démocratiques.

Morin, É., Therriault, G., & Bader, B. (2022). **Le développement du sentiment de pouvoir agir des jeunes face aux changements climatiques à l'école secondaire**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.7710
Devant l'urgence d'agir face aux changements climatiques, les jeunes forment une génération qui a beaucoup à perdre ou à gagner des décisions prises par les groupes plus âgés. Malgré un fatalisme bien documenté, il apparaît de plus en plus évident que les jeunes sont particulièrement concernés par ce phénomène. Une éducation favorisant le développement du pouvoir agir semble ainsi des plus appropriées pour promouvoir une plus grande justice sociale et environnementale. De plus, il s'avère pertinent de s'attarder aux dimensions affectives et, plus particulièrement, à ce que nous nommons le sentiment de pouvoir agir (Morin, Therriault et Bader, 2019). Cet article présente divers appuis théoriques qui illustrent la pertinence de ce concept. Des résultats issus d'entretiens de groupe menés auprès de jeunes Québécoises et Québécois du secondaire montrent également comment le contexte scolaire peut influencer ce sentiment de pouvoir agir.

Onuegbu Ijeoma, E., Olotu Monisola, O., & Okoroafor, N. O. (2022). **Home-School Collaboration on the Development of Value Education of Primary School Pupils in Ondo West Local Government Area**. *British Journal of Education*, *10*(4), 22-34. https://doi.org/10.37745/bje.2013/vol10no4pp.22-34
The future of any nation rests on the shoulders of the youths and younger generations as they in the nearest future will become the leaders of tomorrow. Therefore, goal targeted at this group of persons must be valuable and focused at helping them accomplish their purpose as would-be future leaders of the nation. For this reason, the goal of early childhood education is for the children to develop holistically emphasising physical, social, moral, intellectual and emotional development without leaving out any one of them. In recent times, it has been noticed that the society have been flooded with youths whose moral values are at the lowest ebb and with little or no exhibition of sound value education. This paper examines the home-school collaboration on the development of moral values and value education of primary school pupils. It identifies the factors leading to moral decadence in children from home and the school and examines ways that the home and the school can collaborate to correct the menace of immorality that has taken over the youths in the society. The study adopted the survey research design and a self-designed instrument: Teachers and Development of Moral Values and Value Education of Primary School Pupils Questionnaire (TDMVVEPSPQ) was used to collect data for the study. 50 primary school teachers and 50 parents were selected at random which made up the population of the study. Four research questions were raised. Result were analysed using percentage, mean and standard deviation. Findings from the study suggested that the pattern of parenting styles and the school attitude towards moral education were the major factors against moral development in children and it was recommended that there is need for teachers and parents to join efforts together to revive the moral decadence among primary school pupils for a better society in the future to come.

Pérez Diez, A., García Vinuesa, A., M. Bisquert i Pérez, K., & Á. Meira Cartea, P. (2022). **L'éducation relative au changement climatique dans la recherche, les politiques climatiques et les curriculums de l'éducation secondaire**. *Éducation relative à l'environnement. Regards - Recherches - Réflexions*, (Volume 17-1). https://doi.org/10.4000/ere.7877

Cet article présente la démarche et les résultats de deux recherches doctorales réalisées dans le cadre du projet Resclima de la Universidade de Santiago de Compostela (Galice). Ces recherches sont complémentaires : elles offrent un état de la question de l'ERCC à l'échelle académique, politique et scolaire, plus spécifiquement dans l'enseignement secondaire. La première consiste en une analyse bibliométrique visant à caractériser la recherche portant sur le changement climatique (CC) à l'école secondaire. La deuxième permet de dresser un portrait de l'état général de la recherche actuelle sur l'éducation relative aux changements climatiques (ERCC) dans les programmes scolaires à travers ses principaux axes d'articulation : les politiques climatiques et éducatives, le développement des curricula ainsi que l'analyse de manuels scolaires et des pratiques pédagogiques innovantes. Ces deux recherches mettent en évidence l'importance de se doter d'un agenda international de recherche éducative sur l'ERCC, ainsi que la nécessité de développer de curricula nationaux qui placeraient la lutte contre le CC au centre de l'éducation formelle.

Point, C. (2022). **L'université à l'ère de l'anthropocène : repenser l'éducation au politique par l'écologie**. *Éducation et socialisation. Les Cahiers du CERFEE*, (63). https://doi.org/10.4000/edso.18168

Ce travail imagine un dialogue fictif entre Hannah Arendt et Greta Thunberg au sujet de la place de l'écologie politique à l'université. Ainsi, l'objectif de notre travail est d'interroger le cadre théorique nécessaire à l'inscription à l'université d'une éducation à l'écologie politique. Dans un premier temps, nous interrogeons ce qui empêche pour l'heure de développer une véritable pédagogie universitaire sur ce sujet. Plus spécifiquement, nous prenons l'exemple de la pensée de Hannah Arendt pour illustrer les dualismes conceptuels entre l'enfant et le monde, l'éducation et la politique, l'éducation et l'instruction, qui, selon nous, nous empêchent de penser pédagogiquement et politiquement la place de l'écologie au sein des universités. Les dégâts de ces dualismes sont ensuite illustrés à partir de notre façon d'appréhender l'éco-anxiété. Enfin, nous proposons quelques pistes prospectives et générales pour inscrire l'écologie comme cadre épistémologique de recherche, d'enseignement et de formation universitaires.

Román, D., Arias, J. M., Sedlacek, Q. C., & Pérez, G. (2022). **Exploring Conceptions of Creativity and Latinidad in Environmental Education Through the Lens of Culturally Sustaining Pedagogy**. *Review of Research in Education*, 46(1), 32-63. https://doi.org/10.3102/0091732X221084332

Environmental education seeks to foster meaningful connections to local and global environments through creative nature experiences. Responding to critiques of historical inequities, practitioners are prioritizing equitable access for historically marginalized youth, particularly from Black, Indigenous, and Latinx communities; this identity-centered prioritization, while essential, generates questions of normativity, diversity, relevance, and engagement within identity groups. Drawing on creativity as meaningful person-world encounters characterized by pluriperspective, future-oriented, nonlinear, and open-ended qualities, this chapter uses culturally sustaining pedagogy to explore how

environmental education studies (a) operationalize Latinidad and associated constructs, (b) enact creative experiences in environmental education, and (c) qualify the roles of Latinx communities in shaping these creative experiences. We review studies of environmental education with Latinx youth in the United States that explicitly employ culturally sustaining approaches to engage these communities. We bring together these frameworks as a strategy to move beyond discrete notions of Latinidad in environmental education and toward nuanced conceptions of what it means to acknowledge and cultivate environmental literacies in these diverse comunidades.

Sendag, S., Toker, S., Uredi, L., & Islim, O. F. (2022). **Predictors of e-democracy applicability in Turkish K-12 schools**. *Education and Information Technologies*, *27*(3), 3321-3340. https://doi.org/10.1007/s10639-021-10748-0
Today, the COVID-19 pandemic has paved the way for a more democratic climate in K-12 schools. Administrators and teachers have had to seek out new ways through which to interact. This raises two questions; "What about the quality of interaction and participation in decision-making?" and "Which factors affect the level of participation in decision-making?" The aim of the current research is to determine the factors that predict the applicability level of e-democracy (i.e., "reporting and declaring opinions" and "decision-making") in K-12 schools. An associational research design was used in order to attain the main goal of the study, with Discriminant Function Analysis (DFA) technique used to analyze the factors predicting the applicability level of e-democracy. Data were collected from a total of 765 inservice K-12 teachers through a questionnaire developed by the researchers. DFA results showed "motivation to participate," "the level of participatory democracy in the country," and higher levels of the "use of Twitter" as the significant determinants of different levels of e-democracy application. Moreover, the results also indicated that those participants with the belief of e-democracy's applicability at the decision-making level found the "motivation level of stakeholders" to be the most critical. Their level of Twitter use was higher. They also believed that the level of participatory democracy in the country was at a higher level. Another result of the DFA pointed to "security and ethical issues," and lower levels of the "use of Twitter" as factors differentiating the group believing that e-democracy can be applicable with reporting and the declaration of opinions to administrators from the other groups. The discussions highlighted the critical role of participation level in e-democracy within K-12 schools.

Zembylas, M. (2022). **Affective Pedagogies in Civic Education: Contesting the Emotional Governance of Responses to Terrorist Attacks**. *British Journal of Educational Studies*, *70*(1), 21-38. https://doi.org/10.1080/00071005.2020.1870929
This paper analyses the emotional governance of responses to terrorist attacks and examines the extent to which affective pedagogies in civic education may contest the emotional norms that are institutionalised in society. This analysis is important, not only because it makes visible how forms of violence (especially terrorism) have an emotional impact on school life, but also in that it adds a crucial dimension to the struggle against sentimental education as a form of political education that governs youth's affects and emotions. The analysis explores these tensions and theorises how affective pedagogies can elicit creative and productive rather than normative becomings within youth practices in the classroom. In particular, the paper discusses how affective pedagogies in civic education may be reframed to cultivate critical affective skills that resist sentimental responses and challenge superficial interpretations of terrorist events. Re-

articulating and re-imagining affective responses to terrorist attacks in the civics classroom will open pedagogical spaces that pay more attention to the kind of emotional governance that takes place in schools, politics and the society.