

Veille de l'IREDU



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Acquisition de compétences

Abdelghani, R., Law, E., Desvaux, C., Oudeyer, P.-Y., & Sauzéon, H. (2023). **Interactive environments for training children's curiosity through the practice of metacognitive skills : a pilot study.** IDC 2023 - The 22nd Annual ACM Interaction Design and Children Conference, 495-501. <https://doi.org/10.1145/3585088.3593880>

Curiosity-driven learning has shown significant positive effects on students' learning experiences and outcomes. But despite this importance, reports show that children lack this skill, especially in formal educational settings. To address this challenge, we propose an 8-session workshop that aims to enhance children's curiosity through training a set of specific metacognitive skills we hypothesize are involved in its process. Our workshop contains animated videos presenting declarative knowledge about curiosity and the said metacognitive skills as well as practice sessions to apply these skills during a reading-comprehension task, using a web platform designed for this study (e.g. expressing uncertainty, formulating questions, etc). We conduct a pilot study with 15 primary school students, aged between 8 and 10. Our first results show a positive impact on children's metacognitive efficiency and their ability to express their curiosity through question-asking behaviors.

Broc, L., Negro, I., Joye, N., & Olive, T. (2023). **Est-ce que les enfants avec un Trouble développemental du langage oral scolarisés en milieu ordinaire choisissent d'écrire des mots fréquents et consistants pour éviter les fautes d'orthographe ?** La nouvelle revue - Éducation et société inclusives, 97(1), 157-176. <https://doi.org/10.3917/nresi.097.0157>

Cette étude porte sur la qualité – en termes de fréquence et de consistance orthographique – du vocabulaire utilisé par des enfants et adolescents présentant un Trouble développemental du langage oral (TDL-O) scolarisés en milieu ordinaire et dans leurs classes d'âges. L'enjeu de cette étude est d'activer des leviers en faveur de l'école inclusive, notamment pour soutenir l'apprentissage du langage écrit en production (écriture). Les résultats montrent que, comparés à des enfants et adolescents typiques des mêmes âges 1/ les mots écrits par les participants TDL-O ne sont pas plus consistants orthographiquement, 2/ la fréquence des mots écrits est plus élevée chez les enfants que chez les adolescents, quel que soit le groupe et 3/ pour tous les participants, plus les mots sont consistants moins ils sont fréquents. Ces résultats montrent que la scolarisation des enfants et adolescents présentant un TDL-O, en classe ordinaire et dans leur classe d'âge leur permet d'utiliser à l'écrit, un vocabulaire de qualité équivalente à celui de leurs pairs du même âge.

Coşkun, T. K., & Filiz, O. (2023). **The impact of twenty-first century skills on university students' robotic achievements.** Education and Information Technologies, 28(12), 16255-16283. <https://doi.org/10.1007/s10639-023-11850-1>

New approaches are frequently used to provide students with twenty-first century skills. In this direction, robots are quickly integrated in today's educational environments. However, studies in which robots are integrated into the curriculum as a pedagogical tool and examine its effect on twenty-first century skills are limited. This research examines the impact of robotics training on cooperation and flexibility, autonomous, cognitive and innovation skills which are found in the skills set of the twenty-first century. 54 university students selected by criterion sampling were recruited for these 14 weeks long explanatory sequential mixed-method study. The data were collected using the Scale of the Use of 21st Century Learner Skills, Robotics Applications Achievement Test and semi-

structured interview form developed by the researchers. A paired sample t-test revealed that cooperation and flexibility, autonomous, cognitive and innovation skills were significantly improved. Moreover, linear regression analysis showed that all skills other than innovation were significant predictors of students' robotic achievement. The results reported in this study shed new light on robotic education.

Fornero, S. (2023). **Émergence de l'intelligence collective lors de la résolution de problèmes de mathématiques en contexte scolaire : Étude exploratoire au travers des interactions et autres facteurs au sein de groupes de travail restreints dans deux classes de 6ème au sein d'un collège en milieu urbain en France** (Phdthesis, Université Lumière - Lyon II). Consulté à l'adresse <https://theses.hal.science/tel-04327846>

Notre travail de recherche vise à pallier l'absence de travaux portant sur l'intelligence collective et sa prise en considération dans la classe. Il s'est agi en particulier de questionner la manière dont elle émerge dans un groupe de travail composé de jeunes élèves. Centrée sur les interactions comme porteuses des indices en relation avec cette intelligence collective, cette étude est inscrite dans une approche plutôt exploratoire, afin d'avoir une meilleure compréhension du problème posé, et d'explorer différentes pistes à approfondir dans d'autres recherches. Nous avons construit les données à partir d'un échantillon composé de 48 élèves scolarisés en classe de sixième de collège. Les conditions contextuelles n'ont pas permis de construire un échantillon par une méthode probabiliste. Nous avons dû choisir de le construire en composant avec les conditions contextuelles ordinaires dans le cadre d'une démarche de recherche collaborative avec un professeur de Mathématique enseignant en collège. Ce travail aborde la question des relations entre les facteurs favorisant théoriquement l'émergence de l'intelligence collective et son émergence effective. Il est développé autour de trois axes : celui de l'exploration sémantique du concept encore non stabilisé scientifiquement d'intelligence collective, celui de la pertinence de ce concept en milieu scolaire, et celui des conditions d'émergence d'intelligence collective dans un groupe de travail d'élèves du secondaire lors d'une résolution de problème mathématique. Cette étude s'inscrit, d'une certaine manière, dans le champ théorique de la complexité dans la perspective développée par le philosophe Edgar Morin. Mais, d'une part, les approches socioconstructivistes et interactionnistes et, d'autre part, la théorie de l'activité instrumentée et située de Léontiev et Engeström ont constitué aussi des cadres de référence. Nous avons choisi de définir le concept d'intelligence collective d'un groupe selon trois dimensions comme capacité, comme émergence et comme production collective. Nous cherchons à établir dans quelle mesure et comment les enfants comme les adultes vivent une expérience d'intelligence collective, dans quelle mesure le genre des participants a une importance, dans quelle mesure le niveau du QI peut être prédictif du résultat et enfin comment se produit cette émergence. Les données ont été construites par enquêtes par questionnaire et par entretien, et par des captations vidéo. Les analyses de ces données et leurs interprétations mettent en évidence des différences importantes entre les groupes. À partir des résultats des analyses des interactions et celles des réponses au questionnaire, nous avons pu construire un outil pour établir un score d'intelligence collective et expliciter six axes à mettre en œuvre pour faciliter l'émergence de l'intelligence collective dans la classe. Nous espérons avoir ainsi contribué à une meilleure connaissance de ce phénomène et suscité l'envie d'autres recherches à venir.

Gou, P. (2023). **Teaching english using mobile applications to improve academic performance and language proficiency of college students.** *Education and Information Technologies*, 28(12), 16935-16949. <https://doi.org/10.1007/s10639-023-11864-9>

The purpose of the study is to determine the effectiveness of mobile applications in conjunction with the students' online collaboration in the educational environment of Chinese colleges (the context of learning English). The students were selected from all those who study English in their educational programs. At the first stage, they passed a test on the level of language knowledge and among 423 students 140 were selected who had a level of B2 and below. Then they were divided into control and experimental groups. Each had 70 people. The experimental group was trained using the following mobile applications: Busuu, Lingoda, LinguaLeo, BBC Learning English. The results showed that the participants in the experimental group scored higher on the final test (74.71) than the control group participants (65.9). It suggests that mobile learning technologies can improve student achievement. The preliminary test determined the level of knowledge of the experimental group students in this way: 85% of students know English at the B2 level, 14% - B1, and 1% - A2. These figures improved significantly in the second test: the number of students who reached the C2 level was 7%, C1-79%, and 14% of all students remained with the B2 level. For the control group students, these indicators remained unchanged. Most of the students found this format of education suitable and interesting for online collaboration. These results may be useful for teaching practice, because they provide evidence base with the experimental research for the introduction of mobile technologies in the modern educational process. It solves the problem of using the certain mobile applications (Busuu, Lingoda, LinguaLeo, BBC Learning English) that have not been explored before.

Houot, I., & Lavielle-Gutnik, N. (2023). **Co-construire un référentiel de compétences : les écoles de la deuxième chance.** *Formation emploi*, 164(4), 85-110. <https://doi.org/10.4000/formationemploi.12164>

Une recherche-action, d'une durée de plus de quatre ans, sur l'ensemble du territoire national français, a conduit à la redéfinition formelle d'un référentiel de compétences, celui du Réseau E2C France (École de la 2ème Chance) accompagnant un public de 16 à 25 ans sans qualification. Cette contribution présente les modalités méthodologiques, théoriques et axiologiques selon lesquelles ce référentiel a été élaboré et dont l'originalité repose sur la considération de la relation Travail-Formation-Citoyenneté qui ouvre des perspectives pour l'élaboration de tout référentiel ayant prétention à définir des compétences. Cette expérience montre en effet tout l'intérêt, pour un public a priori éloigné des qualifications professionnelles, de disposer d'une attestation de la qualité de leur parcours, intégrant non seulement les preuves d'une acquisition de gestes professionnels, mais aussi celles d'une autonomie gagnée au travers d'un chemin de formation et d'alternance.

Huet, C. (2023). **Apprendre à argumenter : un enjeu didactique inclusif.** *La nouvelle revue - Éducation et société inclusives*, 97(1), 89-104. <https://doi.org/10.3917/nresi.097.0089>

Cet article propose d'investir le champ de l'argumentation, d'un point de vue clinique et didactique, comme espace à haut potentiel de médiation vers les savoirs et vers les autres. Cette étude prend appui sur une expérimentation centrée sur l'enseignement-apprentissage de l'argumentation, via le débat numérique portant sur des Questions socio-scientifiques (QSS), auprès d'un public adolescent accueilli en Itep (Institut thérapeutique, éducatif et pédagogique). Une étude de cas est ici proposée, celle du

parcours de Théo, qui a pris part à l'expérimentation pendant deux ans. Il s'agit d'explorer et d'identifier les conditions qui ont permis à Théo de s'engager progressivement et de manière singulière dans des échanges argumentés avec ses pairs portant sur les savoirs en jeu. Notre analyse portera à la fois sur les productions argumentatives de Théo et sur les interactions auxquelles il prend part lors de l'élaboration de son argumentation.

Li, X., & Zhu, W. (2023). **The influence factors of students' transferable skills development in Blended-Project-Based Learning environment: a new 3P model.** *Education and Information Technologies*, 28(12), 16561-16591. <https://doi.org/10.1007/s10639-023-11892-5>

Based on the existing 3P model, this paper constructed a new 3P model under the blended-project-based learning (BPBL) environment, used the course teaching data to verify this model, and revealed the potential factors that affect the learning process and learning outcomes. The results showed that the presage variables of academic motivation and course design positively affect the process variables of blended learning experience and learning engagement, respectively. The presage variable of academic motivation and the process variable of learning engagement positively affect the product variable of transferable skill development, respectively. In blended-project-based learning, it is necessary to enhance students' sense of experience and engagement by improving their academic motivation and optimizing course design, thereby promoting the development of students' transferable skills. This study has certain implications for optimizing blended-project-based teaching and promoting the development of students' team work ability, demonstration skills, management skills, and other transferable abilities.

Lin, X., & Powell, S. R. (2023). **Exploring academic and cognitive skills impacting retention and acquisition of word-problem knowledge gained during or after intervention.** *Child Development*, 94(6), e362-e376. <https://doi.org/10.1111/cdev.13970>

In the present study, we investigated the impact of a word-problem intervention in retention and acquisition of knowledge after the intervention ended. We based analyses upon Grade 4 students experiencing mathematics difficulty (average age at pretest = 8.77) who received one of two variants of a word-problem intervention (with [n = 111] vs. without [n = 110] embedded pre-algebraic reasoning instruction) and students within a business-as-usual condition (BaU [n = 127]) separately. Findings revealed that students who received the intervention not only tended to retain less, but they also showed more active knowledge acquisition after the intervention ended. Furthermore, word-problem intervention altered the contributions of some prior knowledge and skills on both retention and acquisition.

Ma, Q., Duan, Y., & Yao, Z. (2023). **Meta-analysis of the impact of geospatial technologies on learning outcomes.** *Education and Information Technologies*, 28(12), 15739-15764. <https://doi.org/10.1007/s10639-023-11712-w>

Many scholars have been using geospatial technologies (GST) to improve students' learning outcomes in the Web 2.0 age. However, many studies focus on the effectiveness of GST on cognitive domain of learning outcomes, which poses challenges to GST efficacy evaluation. This study aims to examine the effectiveness of GST on students' learning outcomes and identify potential moderators through meta-analysis. The results indicate that GST has a positive effect on students' learning outcomes on a medium

scale, while its effects on the cognitive domain were more significant than the non-cognitive domain. Moreover, we identified variable factors such as participant's country/region, education level, intervention duration, and type of geospatial technology to analyze whether the four moderator variables had an impact on the effectiveness of GST. The moderator analysis results show that GST's effectiveness on students' learning outcomes depended on participants' country/region, intervention duration and type of geospatial technology. This means that participants' country/region, intervention duration and type of geospatial technology had a significant effect on GST's effectiveness, while students' education level did not have a major impact. Thus, geography educators should promote a pedagogical model with GST, and take into account the individuals' country/region, while setting a reasonable intervention time of using GST in teaching. Teachers should also be flexible in using different types of geospatial technologies to achieve positive students' learning outcomes.

Moran, A. (2023). **Managing Your Own Learning at University**. Consulté à l'adresse <https://press.uchicago.edu/ucp/books/book/distributed/M/bo216868396.html>

A practical self-help guide for new and continuing students who are faced with taking responsibility for their own studies in college and university. This completely revised and updated third edition of Aidan Moran's best-selling book offers a wealth of practical tips on doing your best when it matters most. Moran, a widely-published expert in cognitive psychology, sport psychology and neuroscience, uses psychological principles, checklists and exercises to guide you through the crucial learning skills you will need in university. These include motivating yourself to study, taking useful lecture notes, concentrating effectively, and learning to think critically. You will also find tips on developing new skills that have become essential to the modern student, such as how to make the most of virtual learning environments, how to overcome digital distractions, and how to prepare and deliver engaging talks and poster presentations. Written in a lively, accessible style and laced with compelling examples, this book is essential reading for all students who wish to fulfil their academic potential in college and university.

OCDE. (2023). **Assessing, documenting, and recognising social and emotional skills in upper secondary education: An overview of practices, approaches, models, and strategies from OECD countries**. <https://doi.org/10.1787/69c7abe6-en>

This policy perspective was developed at the request of the Directorate for Education Reform, Scotland (United Kingdom) to provide an overview of how countries across the OECD assess social and emotional skills in upper secondary education. It is accompanied by, and draws on material from, a Peer Learning Discussion on the same topic in March 2023 in Scotland. It aims to provide an overview of literature and country approaches in an area where there is presently limited comparative information on national and system-wide approaches. The policy perspective addresses two key questions about country practices in assessing social and emotional skills (variously known among OECD countries as social and emotional skills, non-cognitive capacities, 21st-century skills, transversal competencies, and complex competencies): a) how do countries collect information on social and emotional on a systemic level; i.e. outside formal upper secondary certification, and b) how do countries assess social and emotional skills for the purposes of upper secondary certification? To answer these questions, the policy perspective provides an inventory and synthesis from 12 countries of approaches, models, and strategies used at the national level to document, assess, and recognise similarly

challenging skills, and detailed cases of the model and strategy for assessment of social and emotional skills in Canada (British Columbia), Finland, and New Zealand.

Odier-Guedj, D., Lefèvre, L., & Boisvert Hamelin, M.-E. (2023). **Valeurs et modalités de mise en œuvre de la conception universelle de l'apprentissage dans les pays de langue française : une étude de portée**. *La nouvelle revue - Éducation et société inclusives*, 97(1), 133-155. <https://doi.org/10.3917/nresi.097.0133>

Cet état de la connaissance de la littérature (appelé étude de portée en français ou scoping review en anglais) s'intéresse aux études empiriques francophones portant sur la Conception universelle de l'apprentissage (CUA) afin de mieux comprendre : (1) les aspects de la CUA pris en considération dans ces études et (2) les facilitateurs et les obstacles identifiés pour la mise en œuvre de la CUA. Les cinq articles identifiés permettent de constater que la mise en œuvre est souvent morcelée, ne s'appuyant pas toujours sur les visées de la CUA ou ne suivant pas tous ses principes. Les recherches identifient également des facilitateurs et des obstacles à la mise en œuvre de la CUA qui relèvent des personnes et des organisations. Pour soutenir l'appropriation, une meilleure prise en compte des motivations des personnels enseignants à s'engager dans la CUA est à envisager.

Schachner, J. N., & Wodtke, G. T. (2023). **Environmental inequality and disparities in school readiness: The role of neurotoxic lead**. *Child Development*, 94(6), e308-e327. <https://doi.org/10.1111/cdev.13949>

Developmental science has increasingly scrutinized how environmental hazards influence child outcomes, but few studies examine how contaminants affect disparities in early skill formation. Linking research on environmental inequality and early childhood development, this study assessed whether differences in exposure to neurotoxic lead explain sociodemographic gaps in school readiness. Using panel data tracking a representative sample of 1266 Chicago children (50% female, 16% White, 30% Black, 49% Hispanic, $\text{M}_{\text{age}} = 5.2$ months at baseline, collected 1994–2002), analyses quantified the contribution of lead contamination to class and racial disparities in vocabulary skills and attention problems at ages 4 and 5. Results suggested that lead contamination explains 15%–25% and 33%–66% of the disparities in each outcome, respectively, although imprecise estimates preclude drawing firm inferences about attention problems.

Sercemeli, M., & Baydas Onlu, O. (2023). **Prediction of students' learning outcomes by various variables in gamified online accounting courses**. *Education and Information Technologies*, 28(12), 16979-17007. <https://doi.org/10.1007/s10639-023-11873-8>

The study aims to examine student emotions and behavior in a Gamified Learning Environment (GLE) in detail. In the study, in order to reveal the behavior (dynamics) and feelings (emotions) that emerge within the framework of the mechanics applied in the GLE process, it is within the scope of the main objectives of the study to determine how perceived learning, academic achievement and GLE scores, which we accept as learning outcomes of the process, are predicted by various variables. For this aim, a scale was applied. In the study, non-experimental correlational and comparative designs were used together. The participant group of the study consisted of forty students enrolled in the Accounting 2 course at the Faculty of Economics and Administrative Sciences. The Kahoot system was used as a tool for the GLE. According to the results of the study, the 'expected outcome' and 'engagement' variables predict 'perceived learning'. It was also revealed that the 'expected outcome' variable predicts academic achievement.

A low-level correlation was found between the students' participation level and their scores in the GLE. A moderate correlation was found between their participation level and the GLE scores before the midterm. Contrary to this, no corelation was found between these variables after the midterm. It was found that students with a high perception of engagement could solve quiz questions faster in a GLE. Among the contributions of the GLE, it was mainly stated that the application was practical, fun, and reinforcing. Among the limitations of the GLE, it was stated that there was an inability to see the questions, as well as a limited answer time.

Su, H. (2023). **La compétence esthétique professionnelle : définition, enseignement et évaluation. Une étude comparative sur le point de vue des acteurs chinois et français dans l'enseignement professionnel des métiers d'art** (Phdthesis, Ecole normale supérieure de Lyon - ENS LYON; East China normal university (Shanghai)). Consulté à l'adresse <https://theses.hal.science/tel-04323447>

L'étude de l'esthétique en Chine et en France a une longue histoire, avec la théorie esthétique réaliste de Socrate et la théorie esthétique éthique de Confucius, qui ont ouvert la voie à l'étude de l'esthétique dans les pays européens et en Chine. En sciences de l'éducation, une vision d'ensemble des systèmes éducatifs de la Chine et de la France révèle que l'éducation esthétique est un élément important de ces deux systèmes. L'éducation esthétique existe dans l'enseignement général et l'enseignement professionnel (des cours d'art et d'histoire des arts sont présents dans toutes les classes du primaire au secondaire moyen, les cours d'Arts appliqués et de cultures artistiques dans l'enseignement professionnel en France). Tout particulièrement, dans les formations aux métiers d'art, il serait naturel qu'elle occupe une place importante, car elle semble au cœur de la compétence professionnelle dans ces métiers, puisque les qualités esthétiques font la valeur spécifique des objets produits dans ces métiers. Dans cette étude, nous proposons le concept de compétence esthétique professionnelle pour désigner les capacités des professionnels des métiers d'art à apprécier, à concevoir et à produire les qualités esthétiques des produits des métiers d'art. Elle devrait être donc une préoccupation pour les professionnels des métiers d'art, et donc pour les acteurs des filières de formation : les enseignants, les inspecteurs, et bien sûr les élèves. Mais comment la compétence esthétique professionnelle est-elle définie dans le monde de l'enseignement et dans celui de l'entreprise et du marché des métiers d'art ? Peut-on développer la compétence esthétique professionnelle ? Comment est-elle enseignée concrètement dans les cours et dans les stages en entreprise ? Quelles difficultés rencontre un tel enseignement ? Enfin, comment la compétence esthétique professionnelle est-elle évaluée dans les examens qualifiants ? Ces cinq questions majeures sont les préoccupations communes des parties prenantes de l'enseignement des métiers d'art, et ce sont nos questions de recherche. Pour des raisons pratiques, afin de permettre une comparaison France-Chine, nous avons limité notre enquête aux disciplines de la sculpture sur jade, de la conception de bijoux et de la sculpture sur bois. Pour commencer, nous avons d'abord étudié les textes officiels, les documents pédagogiques produits dans les écoles, les descriptifs et référentiels utilisés aux examens. Puis nous avons mené une série d'entretiens semi-directifs auprès d'enseignants, d'étudiants, de chercheurs, d'inspectrices dans les écoles professionnelles ; et auprès de designers et d'employeurs dans les entreprises, en Chine et en France. Les textes et verbatims ont été analysés par la méthode de la théorie ancrée (Pierre Paillé) pour coder, catégoriser, mettre en relation, intégrer et modéliser les réponses de toutes les parties prenantes et les textes des deux pays, pour finalement obtenir un modèle

exploratoire de la compétence esthétique professionnelle dans les métiers d'art en Chine et en France, ainsi qu'une analyse comparative des similitudes et des différences entre les deux pays. Nos principaux résultats sont les suivants : il existe des différences significatives dans la compréhension de la compétence esthétique professionnelle dans les deux pays, en lien avec les traditions culturelles et les contextes professionnels. Mais nous avons aussi observé des similitudes dans les préoccupations, les mesures prises, les difficultés rencontrées pour enseigner la compétence esthétique professionnelle. Enfin, notre étude qui ne peut être qu'exploratoire propose trois questions majeures pour les recherches à l'avenir sur la compétence esthétique professionnelle.

Tsakpinoglou, F., & Véronneau, M.-H. (2023). **La réussite des élèves en formation professionnelle au Québec : effets directs et modérateurs de la compétence émotionnelle.** Revue des sciences de l'éducation, 49(1). <https://doi.org/10.7202/1107843ar>

Cette étude examine le rôle de la compétence émotionnelle dans la réussite éducative des élèves en formation professionnelle au Québec. La compétence émotionnelle, les symptômes anxieux et dépressifs et la réussite éducative ont été mesurés par questionnaire chez 177 élèves pendant et après leur formation. Les compétences émotionnelles de base ont un lien direct avec la réussite éducative. Chez les élèves présentant de faibles symptômes anxieux ou dépressifs, une régulation émotionnelle élevée permettrait d'atteindre une réussite élevée, ce qui n'est pas le cas chez les élèves présentant des symptômes plus sévères. La priorisation des interventions auprès d'élèves à risque est discutée.

Zengin, Y. (2023). **Effectiveness of a professional development course based on information and communication technologies on mathematics teachers' skills in designing technology-enhanced task.** Education and Information Technologies, 28(12), 16201-16231. <https://doi.org/10.1007/s10639-023-11728-2>

The purpose of this study is to examine the effect of a professional development course based on information and communication technologies (ICTs) on mathematics teachers' skills in designing technology-enhanced task. A technology-enhanced professional development course for supporting mathematical reasoning is designed, implemented, and evaluated based on this aim. The participants of this study are 17 in-service mathematics teachers. In this study, data are collected from technology-enhanced tasks developed by the participants, dynamic mathematics software files, written documents, and their self-reflections. Both the quantitative and qualitative data are analyzed based on the Dynamic Geometry Task Analysis Framework. As a result of the analysis, it was determined that the professional development course based on ICTs contributed positively to the development of mathematics teachers' skills in designing technology-enhanced task. After the course based on ICTs, it was revealed that mathematics teachers designed a high-quality task by coordinating the mathematical depth with technological actions and these designed tasks had the potential to develop students' reasoning. In addition, in this process, the dragging and slider tools are considered specific tools of semiotic mediation contributing to fostering mathematical reasoning through the designed tasks.

Zhao, Y. V., & Gibson, J. L. (2023). **Early home learning support and home mathematics environment as predictors of children's mathematical skills between age 4 and 6: A**

longitudinal analysis using video observations and survey data. *Child Development*, 94(6), e377-e392. <https://doi.org/10.1111/cdev.13971>

This large-scale and longitudinal study examines early home support for learning, formal/informal home mathematics activities, and their associations with children's mathematical development between age two and six. Data were collected in Germany between 2012 and 2018, N = 1184 (49% girls, 51% boys), and 15% of children had parents with a migration history. Linguistically and mathematically stimulating, attentive, and responsive parent-child engagement at age two predicted children's mathematical skills at age four and six (small-to-medium effect size). Both formal and informal home mathematical activities at age five predicted children's mathematical skills at age six (small effect size), and were associated with children's prior mathematics attainment. This study also provides indicators where individual differences and social circumstances are relevant to understanding different early mathematics outcomes.

Aspects économiques de l'éducation

Argan, D., & Gary-Bobo, R. (2023). **Les diplômes français se sont-ils dévalorisés ? Les rendements de l'éducation et de l'expérience en France, 1992-2017.** *Revue économique*, 74(2), 95-137. <https://doi.org/10.3917/reco.742.0095>

Nous étudions l'évolution des salaires des jeunes diplômés français entre 1992 et 2017, en nous appuyant sur les enquêtes Génération du Céreq. La dévalorisation des diplômes est définie de manière simple comme la baisse des salaires réels moyens des diplômés d'une même catégorie, et nous observons qu'une telle dévalorisation des diplômes s'est bien produite, de l'ordre de 10 %, pour les diplômes universitaires de master et pour les diplômes des écoles d'ingénieurs, entre 1997 et 2015. Il n'y a en revanche pas de dévalorisation pour les diplômes de niveau inférieur au baccalauréat, et nous rapprochons ce dernier résultat de la hausse du Smic. En mettant les données sous la forme d'un panel nous estimons des équations de salaire en contrôlant pour l'expérience (potentielle et effective) et le niveau de diplôme des individus. Les estimations confirment les résultats et montrent que la dévalorisation observée est due en partie à une baisse des rendements de l'expérience. Avec ces méthodes, on ne sait pas ce qui est dû à des changements inobservables dans la sélection des diplômés, mais il semble vraisemblable que la dévalorisation est principalement le résultat de la hausse substantielle du nombre des diplômés du supérieur dans la période étudiée, et non un effet de la conjoncture ou de l'antisélection. Classification JEL : I24, I26, J24, J31.

Bárány, Z. L., Buchinsky, M., & Corblet, P. (2023). **Late Bloomers: The Aggregate Implications of Getting Education Later in Life** (NBER Working Paper N° 31874). Consulté à l'adresse National Bureau of Economic Research, Inc website: <https://econpapers.repec.org/paper/nbrnberwo/31874.htm>

It is generally agreed upon that most individuals who acquire a college degree do so in their early 20s. Despite this consensus, we show that in the US from the 1930 birth cohort onwards a large fraction – around 20% – of college graduates obtained their degree after age 30. We explore the implications of this phenomenon. First, we show that these so-called late bloomers have significantly contributed to the narrowing of gender and racial gaps in the college share, despite the general widening of the racial gap. Second, late bloomers are responsible for more than half of the increase in the aggregate college share from 1960 onwards. Finally, we show that the returns to having a college degree vary depending on the age at graduation. Ignoring the existence of late bloomers

therefore leads to a significant underestimation of the returns to college education for those finishing college in their early 20s.

Bentolila, S., Cabrales, A., & Jansen, M. (2023). **Does Dual Vocational Education and Training Pay Off?** (CESifo Working Paper Series N° 10762). Consulté à l'adresse CESifo website: https://econpapers.repec.org/paper/cesceswps_5f10762.htm

This paper analyzes the causal impact of dual vocational education and training (VET) on the labor market insertion of youth. Using matched education and social security records, we estimate the causal impact of a major reform that introduced a new dual track, which combines firm- and school-based training, on the labor market outcomes of the first three dual VET cohorts in the Spanish region of Madrid. The control group is composed of individuals who graduated in the same fields and years in school-based VET. Selection into dual VET is dealt with using a distance-based instrumental variable. Dual VET is found to generate sizable improvements in employment and earnings, but no significant impact on job quality. The results are not driven by pre-reform differences in the quality of the schools that adopted dual VET and the higher retention rate of dual VET graduates only partly explains the dual premium.

Bergeaud, A., Guillouzouic, A., Henry, E., & Malgouyres, C. (2022). **From public labs to private firms: magnitude and channels of R&D spillovers** [POID Working Paper]. Consulté à l'adresse Centre for Economic Performance, LSE website: <https://econpapers.repec.org/paper/ceppoidwp/041.htm>

Introducing a new measure of scientific proximity between private firms and public research groups and exploiting a multi-billion euro financing program of academic clusters in France, we provide causal evidence of spillovers from academic research to private sector firms. Firms in the top quartile of exposure to the funding shock increase their R&D effort by 20% compared to the bottom quartile. We exploit reports produced by funded clusters, complemented by data on labor mobility and R&D public-private partnerships, to provide evidence on the channels for these spillovers. We show that spillovers are driven by outsourcing of R&D activities by the private to the public sectors and, to a lesser extent, by labor mobility from one to the other and by informal contacts. We discuss the policy implications of these findings.

Bucci, A., Diallo, B., & Marsiglio, S. (2023). **On The Nonlinearity of the Finance and Growth Relation: the Role of Human Capital** (CEIS Research Paper N° 567). Consulté à l'adresse Tor Vergata University, CEIS website: <https://econpapers.repec.org/paper/rtvceisrp/567.htm>

We analyze the role that human capital plays in driving the non-monotonic relation between economic growth and financial development. At this aim we build a theoretical model of endogenous growth in which the nature of the growth and finance nexus is nonlinear and actually depends on the educational level, which ultimately determines the way through which financial development affects both the productivity and the depreciation of human capital. The dependence of the non-monotonic (i.e., bell-shaped) growth and finance nexus on human capital suggests that there may exist a threshold education level beyond which the sign of the relation changes. We econometrically test such a theoretical prediction in a rich and large data set comprising a cross-section of 133 countries over the period 1970-2011. We rely on the GMM instrumental variable approach to address endogeneity issues, and we consider a large number of control variables. After performing a number of robustness checks, all our

results are consistent with the view that human capital helps to explain the nonlinear relationship between finance and growth. In particular, we find support for our theoretical model's conclusion that financial development may be harmful to economic growth in countries that already have high levels of education, while it may be beneficial in those countries in which human capital is less abundant.

César, A., Ciaschi, M., Falcone, G., & Neidhöfer, G. (2023). **Trade shocks and social mobility: The intergenerational effect of import competition in Brazil** (ZEW Discussion Paper N° 23-042). Consulté à l'adresse ZEW - Leibniz Centre for European Economic Research website: <https://econpapers.repec.org/paper/zbwzewdp/279786.htm>

This paper investigates whether the impact of trade shocks on employment and wages persists across generations. Using survey data with retrospective information on parental employment, we study the causal effect of increased Chinese import competition in Brazilian industries on individuals with differently exposed fathers. Results show that several years after the shock, children of more exposed fathers have lower education and earnings, lower chances of formal jobs, and are more likely to rely on social assistance. These effects are substantially stronger for children from disadvantaged background, indicating that the shock had a negative impact on intergenerational mobility.

Clemens, M. A., & Chand, S. (2023). **Labour Mobility With Vocational Skill: Australian Demand and Pacific Supply**. *Australian Economic Review*, 56(4), 462-486. <https://doi.org/10.1111/1467-8462.12522>

Can new channels for mid-skill labour mobility simultaneously enhance the welfare of Australia and the Pacific Region? Answering this question requires forecasting Australian demand for vocationally-skilled migrants over the next generation, and the potential for Pacific supply of those migrants. We project demand for such mid-skill migrants over the next three decades by combining data on trends in the demand for basic tasks with data on trends in native investment in education commensurate with those tasks. We estimate that the Australian economy growing at historical rates through the year 2050 will demand approximately 1.6–2.1 million foreign workers with Technical and Vocational Education and Training. A large share of these could be supplied from the Pacific Islands with sufficient investment in training, with direct cooperation from Australian employers, and targeted access to the Australian labour market.

Feld, J., Lines, C., & Ross, L. (2023). **Writing Matters** (IZA Discussion Paper N° 16571). Consulté à l'adresse Institute of Labor Economics (IZA) website: <https://econpapers.repec.org/paper/izaizadps/dp16571.htm>

For papers to have scientific impact, they need to impress our peers in their role as referees, journal editors, and members of conference committees. Does better writing help our papers make it past these gatekeepers? In this study, we estimate the effect of writing quality by comparing how 30 economists judge the quality of papers written by PhD students in economics. Each economist judged five papers in their original version and five different papers that had been language edited. No economist saw both versions of the same paper. Our results show that writing matters. Compared to the original versions, economists judge edited versions as higher quality; they are more likely to accept edited versions for a conference; and they believe that edited versions have a better chance of being accepted at a good journal.

Ferry, M., de Talancé, M., & Niño-Zarazúa, M. (2022). **Less debt, more schooling? Evidence from cross-country micro data** [Post-Print]. Consulté à l'adresse HAL website: <https://econpapers.repec.org/paper/haljournl/hal-04258128.htm>

Soaring levels of public debt in low-income countries are fuelling concerns about their ability to achieve the Sustainable Development Goals, such as free access to primary education. In the late 1990s and 2000s, international financial institutions introduced a series of debt relief initiatives aimed to restore debt sustainability among highly indebted countries. This study examines the impact of these initiatives on primary school attendance. We exploit the temporal variation in the implementation of these policies, in combination with individual-level data from 177 Demographic and Health Surveys covering more than 1.5 million school-age children from 44 low-income countries to implement difference-in-differences and spatial difference-in-discontinuity estimators. Results suggest that debt relief initiatives, by freeing up additional public resources, have significantly contributed to increasing primary school attendance in heavily indebted countries. Impact heterogeneity analysis also shows that debt relief has been effective at reducing wealth-based, intergenerational, religious, ethnic and spatial inequalities in education. Our results provide robust evidence to assert that debt relief, in combination with other financing sources, can contribute to improving educational outcomes in highly indebted poor countries.

Fialaire, B. **Projet de loi de finances pour 2024 : Enseignement technique agricole**. , Pub. L. No. Avis n° 133 (2023-2024), tome III, fascicule 2 (2023). <https://www.senat.fr/rap/a23-133-32/a23-133-32.html>

Goller, D., & Wolter, S. C. (2023). **Reaching for gold! The impact of a positive reputation shock on career choice** (Economics of Education Working Paper Series N° 0208). Consulté à l'adresse University of Zurich, Department of Business Administration (IBW) website: <https://econpapers.repec.org/paper/isoeducat/0208.htm>

We analyze the causal influence a positive reputation shock for a particular occupation may have on career choice. The measure of the positive reputation shock is the unpredictable event that a young adult from one's own country wins a (gold) medal in a particular occupation at the World Skills - the world championship of vocational skills. In an occupation with a gold medal won, searches for apprenticeship vacancies increase significantly by around 7 percent compared to occupations that do not win a competition. In occupations where only a silver or bronze medal is awarded, the effect is also positive and statistically significant, but less pronounced. More importantly, the increase in searches for apprenticeship vacancies in the current year has also led to around 2.5 percent more contracts being signed in the winning occupation, and there are indications that these apprenticeships have a better match between employers and employees (trainees).

Grospperrin, J. **Projet de loi de finances pour 2024 : Enseignement scolaire**. , Pub. L. No. Avis n° 133 (2023-2024), tome III, fascicule 1 (2023). <https://www.senat.fr/rap/a23-133-31/a23-133-31.html>

Huang, J., & Kilenthong, W. (2023). **Heterogeneous Returns to Education across Hukou-Migration Subgroups in China** (PIER Discussion Paper N° 210). Consulté à l'adresse Puey Ungphakorn Institute for Economic Research website: <https://econpapers.repec.org/paper/puidpaper/210.htm>

This paper uses the China Household Income Project 2018 dataset to estimate returns to education for various Hukou-migration subgroups. We overcome the endogeneity problem of years of schooling using an instrument based on the Great Expansion of Higher Education policy. Our results indicate that the highest returns are for urban native workers (27.4%), followed by urban Hukou-converted (25.0%) and rural native workers (14.7%). In contrast, the returns to education for rural-urban migrant workers are insignificant. Further analyses suggest that Hukou conversion significantly increased the returns to education for rural-origin people by enabling them access to better job opportunities.

James-Brabham, E., Loveridge, T., Sella, F., Wakeling, P., Carroll, D. J., & Blakey, E. (2023). **How do socioeconomic attainment gaps in early mathematical ability arise?** *Child Development*, 94(6), 1550-1565. <https://doi.org/10.1111/cdev.13947>

Socioeconomic attainment gaps in mathematical ability are evident before children begin school, and widen over time. Little is known about why early attainment gaps emerge. Two cross-sectional correlational studies were conducted in 2018–2019 with socioeconomically diverse preschoolers, to explore four factors that might explain why attainment gaps arise: working memory, inhibitory control, verbal ability, and frequency of home mathematical activities (N = 304, 54% female; 84% White, 10% Asian, 1% black African, 1% Kurdish, 4% mixed ethnicity). Inhibitory control and verbal ability emerged as indirect factors in the relation between socioeconomic status and mathematical ability, but neither working memory nor home activities did. We discuss the implications this has for future research to understand, and work towards narrowing attainment gaps.

Jepsen, C., Mueser, P., Troske, K., & Jeon, K.-S. (2023). **Estimates of Earnings Returns by Field of Study for For-Profit Schools and Community Colleges** (CESifo Working Paper Series N° 10754). Consulté à l'adresse CESifo website: https://econpapers.repec.org/paper/cesceswps_5f10754.htm

This paper estimates labor-market returns for students pursuing certificates or associate's degrees in eight broad fields of study at community colleges and for-profit institutions. The data contain 400,000 students beginning their studies between 2005 and 2012 in one state. We estimate two-step models to address recent econometric concerns with two-way fixed effects models. Our analyses show important differences in return by field, with similar patterns for for-profit schools and community colleges. Apart from those studying in health fields, returns are generally greater for those attending for-profit schools than those attending community colleges. Higher estimated overall returns for for-profit schools are not primarily due to differences in areas of study.

Jiang, X., Staudt, J., & Weinberg, B. A. (2023). **A Tale of Two Fields? STEM Career Outcomes** (NBER Working Paper N° 31835). Consulté à l'adresse National Bureau of Economic Research, Inc website: <https://econpapers.repec.org/paper/nbrnberwo/31835.htm>

Is the labor market for US researchers experiencing the best or worst of times? This paper analyzes the market for recently minted Ph.D. recipients using supply-and-demand logic and data linking graduate students to their dissertations and W2 tax records. We also construct a new dissertation-industry "relevance" measure, comparing dissertation and patent text and linking patents to assignee firms and industries. We find large disparities across research fields in placement (faculty, postdoc, and industry positions), earnings, and the use of specialized human capital. Thus, it appears to simultaneously be a good time for some fields and a bad time for others.

McNally, S., Schmidt, L., & Valero, A. (2022). **Do management practices matter in further education?** [POID Working Paper]. Consulté à l'adresse Centre for Economic Performance, LSE website: <https://econpapers.repec.org/paper/ceppoidwp/026.htm>

Further Education colleges are a key way in which 16-19 year olds acquire skills in the UK (much like US Community Colleges), especially those from low income backgrounds. Yet, little is known about what could improve performance in these institutions. We design and conduct the world's first management practices survey in these colleges (based on the World Management Survey) and match this to administrative longitudinal data on over 40,000 students. Value added regressions with rich controls suggest that structured management matters for educational outcomes (e.g. upper secondary qualifications), especially for students from low-income backgrounds. In a hypothetical scenario where a learner is moved from a college at the 10th percentile of management practices to the 90th, this would be associated with 8% higher probability of achieving a good high school qualification, which is nearly half of the educational gap between those from poor and non-poor backgrounds. Hence, improving management practices may be an important channel for reducing inequalities.

Mediavilla, M., Mancebón, M.-J., Pires, L., & Gómez-Sancho, J.-M. (2023). **Bilingual school choice and socio-economic segregation: an analysis for Spain based on PISA 2015.** Research Papers in Education, 38(6), 944-965. <https://doi.org/10.1080/02671522.2023.2188247>

In the academic year of 2004–2005, the Spanish region of Madrid began to implement a bilingual educational programme (MBP hereinafter) in state schools. One of the objectives of this programme was to make the study of a foreign language (English) accessible to students from economically disadvantaged families who cannot afford private foreign language classes. Our study aims to evaluate whether students from a disadvantaged socio-economic background really do have the same probability of participating in the MBP as their more privileged peers. The analysis use the PISA 2015 database which corresponds to the representative sample of the Community of Madrid in Spain, with added administrative information supplied by the Madrid Regional Ministry of Education concerning the identification of bilingual and non-bilingual schools. Using these data, we estimate a logit model directed at identifying which factors explain the choice by students of whether to attend a bilingual state school. The results obtained reveal that the probability of attending a bilingual school is higher for students belonging to socio-economically and culturally better-off households. This suggests that the MBP could be fostering segregation within the state education sector in Madrid.

Paccaud, O. **Projet de loi de finances pour 2024 : Enseignement scolaire.** Rapport général n° 128 (2023-2024), tome III, annexe 14 (2023). <https://www.senat.fr/rap/I23-128-314/I23-128-314.html>

Paoli-Gagin, V., & Rapin, J.-F. **Projet de loi de finances pour 2024 : Recherche et enseignement supérieur**, Rapport général n° 128 (2023-2024), tome III, annexe 24 (2023).

Salvanes, K. G. (2023). **What Drives Intergenerational Mobility? The Role of Family, Neighborhood, Education, and Social Class: A Review of Bukodi and Goldthorpe's Social Mobility and Education in Britain.** Journal of Economic Literature, 61(4), 1540-1578. <https://doi.org/10.1257/jel.20211622>

Sommerfeld, A.-M. (2023). *The Effect of Schooling on Parental Integration* (Jena Economics Research Paper N° 2023-018). Consulté à l'adresse Friedrich-Schiller-University Jena website: <https://econpapers.repec.org/paper/jrpjrpwprp/2023-018.htm>

Exploiting the age-at-enrollment policies in 16 German states as exogenous source of variation, I examine whether the schooling of the oldest child in a migrant household affects parents' integration. My analysis links administrative records on primary school enrollment cutoff dates with micro data from the German Socioeconomic Panel (GSOEP). Using a regression discontinuity design around the school enrollment cutoff and an instrumental variable approach I show that children's schooling improves the integration of parents along several dimensions, such as labor market outcomes, financial worries, and German language skills. Labor market outcomes are most positively affected for mothers. Additional analysis of underlying mechanisms suggests that results are driven by gains in disposable time and exposure to the German language and culture.

Valdés, M. T., Espadafor, M. C., & Keivabu, R. C. (2023). *Can a low emission zone improve academic performance? Evidence from a natural experiment in the city of Madrid* (MPIDR Working Paper N° WP-2023-048). Consulté à l'adresse Max Planck Institute for Demographic Research, Rostock, Germany website: <https://econpapers.repec.org/paper/demwpaper/wp-2023-048.htm>

-In late 2018, the government of Madrid instituted a low emission zone (LEZ) in the central district of the city, aiming primarily to alleviate traffic-related emissions and enhance air quality. Extensive research has documented the adverse effects of air pollution on academic performance. Consequently, the success of Madrid's LEZ in reducing traffic-related emissions could potentially translate into improved performance among students schooled in the designated area. Through a difference-in-differences design, we demonstrate the policy's effectiveness in improving air quality during the four years following its implementation. Subsequently, we show a noteworthy increase of 0.17 standard deviations in the average EvAU scores (high-stakes examinations for university admittance) of high schools within the LEZ, a crucial advantage for gaining entry into the most competitive university programs. Importantly, our findings reveal positive spillover effects in the surroundings of the LEZ area and a larger effect the longer and earlier the exposure to cleaner air. In sum, our study offers compelling empirical evidence of the beneficial educational impacts resulting from the implementation of a low emission zone successful in improving air quality.

Aspects psychologiques de l'éducation

de Ron, J., Deserno, M., Robinaugh, D., Borsboom, D., & van der Maas, H. L. J. (2023). *Towards a general modeling framework of resource competition in cognitive development*. *Child Development*, 94(6), 1432-1453. <https://doi.org/10.1111/cdev.13973>

The current paper presents an integrated formal model of typical and atypical development based on the mechanisms of mutualism and resource competition. The mutualistic network model is extended with the dynamics of competition for limited resources, such as time and environmental factors. The proposed model generates patterns that resemble established phenomena in cognitive development: the positive manifold, developmental phases, developmental delays and lack of early indicators in atypical development, developmental regression, and "quasi-autism" caused by

extreme environmental deprivation. The presented modeling framework fits a general movement towards formal theory construction in psychology. The model is easy to replicate and develop further, and we offer several avenues for future work.

Elbawab, M., & Henriques, R. (2023). **Machine Learning applied to student attentiveness detection: Using emotional and non-emotional measures.** *Education and Information Technologies*, 28(12), 15717-15737. <https://doi.org/10.1007/s10639-023-11814-5>

Electronic learning (e-learning) is considered the new norm of learning. One of the significant drawbacks of e-learning in comparison to the traditional classroom is that teachers cannot monitor the students' attentiveness. Previous literature used physical facial features or emotional states in detecting attentiveness. Other studies proposed combining physical and emotional facial features; however, a mixed model that only used a webcam was not tested. The study objective is to develop a machine learning (ML) model that automatically estimates students' attentiveness during e-learning classes using only a webcam. The model would help in evaluating teaching methods for e-learning. This study collected videos from seven students. The webcam of personal computers is used to obtain a video, from which we build a feature set that characterizes a student's physical and emotional state based on their face. This characterization includes eye aspect ratio (EAR), Yawn aspect ratio (YAR), head pose, and emotional states.

McDaniel, S. C., Mahatmya, D., & Bruhn, A. L. (2024). **Educator burnout in the age of COVID-19: A mediation analysis of perceived stressors, work sense of coherence, and sociodemographic characteristics.** *Teaching and Teacher Education*, 137, 104384. <https://doi.org/10.1016/j.tate.2023.104384>

This national study sought to determine if work and COVID-19 related stressors are associated with higher levels of educator burnout and stress, if differences in levels of educator burnout and stress by sociodemographic and school characteristics exist and, how work-related Sense of Coherence affect the association between work and COVID-19 stressors on educator burnout and stress. Participants (N = 236) across primary and secondary schools predominately inside the US completed a survey that included demographic variables which were included in the analyses. Overall, work and COVID-19 stressors were positively correlated with educator burnout and perceived stress. There were statistically significant differences in emotional exhaustion and depersonalization by gender with female educators reporting higher emotional exhaustion than male educators. Also importantly, educators who considered leaving their teaching jobs reported personal accomplishment levels lower than educators who did not consider leaving and when students were a high source of stress, educator stress, reported emotional exhaustion, depersonalization, and overall perceived stress increased. Implications for policy and practice are included.

Moran, A. (2023). **Managing Your Own Learning at University.** Consulté à l'adresse <https://press.uchicago.edu/ucp/books/book/distributed/M/bo216868396.html>

A practical self-help guide for new and continuing students who are faced with taking responsibility for their own studies in college and university. This completely revised and updated third edition of Aidan Moran's best-selling book offers a wealth of practical tips on doing your best when it matters most. Moran, a widely-published expert in cognitive psychology, sport psychology and neuroscience, uses psychological principles, checklists and exercises to guide you through the crucial learning skills you will need in

university. These include motivating yourself to study, taking useful lecture notes, concentrating effectively, and learning to think critically. You will also find tips on developing new skills that have become essential to the modern student, such as how to make the most of virtual learning environments, how to overcome digital distractions, and how to prepare and deliver engaging talks and poster presentations. Written in a lively, accessible style and laced with compelling examples, this book is essential reading for all students who wish to fulfil their academic potential in college and university.

Plantade-Gipch, A., Martin-Krumm, C., Blanchet, A., Müller, A., Le Roux, F., & Maire, H. (2023). **Influence des buts de performance, de l'évitement de la maîtrise et de la timidité sur l'engagement dans les études universitaires.** Revue française de pédagogie, 219(2), 69-89. Consulté à l'adresse <https://www.cairn.info/revue-francaise-de-pedagogie-2023-2-page-69.htm>

Dans l'enseignement supérieur, l'engagement des étudiants influence largement leur réussite. Cette étude vise à évaluer si l'orientation de performance, ainsi que la timidité, influencent cet engagement. 394 étudiants français de premier et deuxième cycles universitaires ont rempli des échelles de timidité, de buts de performance et d'évitement de la maîtrise, ainsi que d'engagement dans les études. Les résultats indiquent que les buts de performance prédisent l'enthousiasme dans les études. Également, la timidité est médiateuse du lien entre le but de performance et l'engagement de l'étudiant. La recherche propose divers moyens de favoriser l'engagement dans les études.

Zanna, O. (2023, décembre 6). **Passer au tableau : comment faire de ce rituel scolaire un moyen de réguler ses émotions ?** Consulté 13 décembre 2023, à l'adresse The Conversation website: <http://theconversation.com/passer-au-tableau-comment-faire-de-ce-rituel-scolaire-un-moyen-de-reguler-ses-emotions-216303>

Passer au tableau est souvent vécu par les élèves comme une épreuve exposant au jugement des autres. Mais ne peut-on pas faire de ce rituel une occasion d'apprendre à apprivoiser ses émotions ?

Aspects sociaux de l'éducation

Akou, O. K., Dupeyron, J.-F., Malanda, É., Mozziconacci, V., & Vermeren, P. (2023). **Présentation.** Le Télémaque, 64(2), 41-46. <https://doi.org/10.3917/tele.064.0041>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du Télémaque.

Ben Boubaker, M., & Dor, T. (2023). **Nommer la race : une pédagogie du conflit au lycée.** Le Télémaque, 64(2), 121-133. <https://doi.org/10.3917/tele.064.0121>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du Télémaque.

Ben Hamouda, L. (2023, décembre 6). **PISA 2022 : la France, encore et toujours, championne des inégalités.** Consulté 6 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/06/pisa-2022-la-france-encore-et-toujours-championne-des-inegalites-3/>

Que nous apprend PISA 2022 sur les inégalités sociales ? « La France est toujours l'un des pays de l'OCDE où le lien entre le statut socio-économique des élèves et la performance qu'ils obtiennent au PISA est le plus fort », écrit l'OCDE qui tempère en soulignant qu'il n'y a pas d'aggravation « notable sur la période 2012-2022 ». PISA...

Bessone, M. (2023). **L'institution universitaire et le racisme institutionnel.** Le Télémaque, 64(2), 51-63. <https://doi.org/10.3917/tele.064.0051>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du Télémaque.

Brunner, A., & Maurin, L. (2023). **Rapport sur les discriminations en France** (p. 96). Consulté à l'adresse <https://www.inegalites.fr/Rapport-sur-les-discriminations-en-France>

Cet ouvrage réunit des preuves chiffrées des discriminations en France, que leur motif soit la couleur de peau, l'origine, le sexe, le handicap, l'orientation sexuelle, l'identité de genre ou encore l'appartenance syndicale. Il apporte également les explications utiles sur la définition et la mesure des discriminations.

César, A., Ciaschi, M., Falcone, G., & Neidhöfer, G. (2023). **Trade shocks and social mobility: The intergenerational effect of import competition in Brazil** (ZEW Discussion Paper N° 23-042). Consulté à l'adresse ZEW - Leibniz Centre for European Economic Research website: <https://econpapers.repec.org/paper/zbwzewdip/279786.htm>

This paper investigates whether the impact of trade shocks on employment and wages persists across generations. Using survey data with retrospective information on parental employment, we study the causal effect of increased Chinese import competition in Brazilian industries on individuals with differently exposed fathers. Results show that several years after the shock, children of more exposed fathers have lower education and earnings, lower chances of formal jobs, and are more likely to rely on social assistance. These effects are substantially stronger for children from disadvantaged background, indicating that the shock had a negative impact on intergenerational mobility.

Diagne, S. B. (2023). **Réflexions sur la racialisation du monde.** Le Télémaque, 64(2), 7-10. <https://doi.org/10.3917/tele.064.0007>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du Télémaque.

Doray, P., Laplante, B., Kamanzi, P. C., & Pilote, A. (2023). **Enseignement supérieur et inégalités sociales: Entre politiques publiques et parcours éducatifs.** Consulté à l'adresse <https://www.puq.ca/catalogue/livres/enseignement-superieur-inegalites-sociales-3991.html>

Le Québec, comme l'ensemble des provinces canadiennes, a fortement investi dans l'enseignement postsecondaire depuis le début des années 1960. Les cheminement scolaires et la structure du système éducatif en ont été profondément transformés. De nombreuses personnes, en provenance de différentes fractions sociales et d'âges variés, ont davantage investi l'école, particulièrement au niveau des études supérieures. Les progrès en matière de démocratisation réalisés à ce jour sont indéniables. Cependant, des processus de reproduction sociale persistent et produisent toujours des inégalités sociales. Si, depuis le milieu des années 1980, les politiques éducatives ont donné lieu à de nouvelles réformes davantage axées sur sa néolibéralisation, la question des inégalités revient aussi à l'ordre du jour. Les contributions réunies dans cet ouvrage visent à mieux comprendre la situation récente des inégalités scolaires et de l'expérience étudiante. Le point commun tient dans l'approche longitudinale, permettant d'analyser les liens entre les changements historiques et les parcours éducatifs. Cette approche jette un éclairage inédit sur le développement de l'enseignement supérieur, les choix politiques et leurs effets sur les inégalités et la diversité des expériences scolaires. En ce sens, tous les acteurs et actrices de l'enseignement supérieur sont interpellés ; la lecture des contributions éclairera leur expérience étudiante, enseignante ou gestionnaire.

Dubreucq, É. (2023). **Application : une notion en voie de disparition ?** *Le Télémaque*, 64(2), 25-38. <https://doi.org/10.3917/tele.064.0025>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du *Télémaque*.

Emiroğlu İlvan, T., & Ceylan, R. (2023). **Predicting preschool children's digital play addiction tendency during Covid-19 pandemic: Regarding the mother-child relationship, and child- and family-related factors.** *Education and Information Technologies*, 28(12), 15687-15716. <https://doi.org/10.1007/s10639-023-11802-9>

Previous research about children's digital play has predominantly focused on parental perspectives and parental mediation strategies. Although research on the effects of digital play on young children's development is plentiful, there is little evidence on young children's digital play addiction tendency. Herein, preschool children's digital play addiction tendency, and the mother-child relationship perceived by mothers, examining child- and family-related factors were explored. The present study also aimed to contribute to the current research pertaining to preschool-aged children's digital play addiction tendency through an examination of the mother-child relationship, and child- and family-related factors as potential predictors of children's digital play addiction tendency. A sample of 450 mothers of children between 4 and 6 years filled out two measures that identify the mother-child relationship and children's digital play addiction tendency. Correlational analyses revealed that in general, the mother-child relationship was significantly associated with children's digital play addiction tendency. Significant differences were evident in the relationship between numerous child- and family-related factors, and children's digital play addiction tendency, as well as the mother-child relationship. Hierarchical regression analyses indicated that a negative mother-child relationship, the children's digital play usage, and the mothers' digital device usage predicted the children's digital play addiction tendency.

Fairley, M. J. (2024). **Exploring transnationality as a resource for promoting social justice in language teacher identity construction: Insights from an inquiry group.** *Teaching and Teacher Education*, 137, 104398. <https://doi.org/10.1016/j.tate.2023.104398>

This study explored the transnational identities of six English language teachers in an Egyptian university context, using an identity-focused teacher inquiry group. Grounded in the theoretical frameworks of identity as critical pedagogy, and transnationality as a disposition that can be cultivated, narrative analysis revealed insights into what a transnational disposition entails, and how teachers (can) draw on their transnationality as a resource for promoting social justice in their work. Specifically, three prominent themes emerged: the adoption of humanizing teaching approaches, the bridging of cultural divides, and the promotion of transformative teaching. Implications for pedagogizing language teacher identity are discussed.

Ferry, M. (2023, décembre 17). **La mixité en entreprise, l'autre enjeu du système éducatif.** Consulté 18 décembre 2023, à l'adresse The Conversation website: <http://theconversation.com/la-mixite-en-entreprise-lautre-enjeu-du-systeme-educatif-219842>

Les difficultés à atteindre les objectifs d'égalité hommes-femmes dans certaines entreprises s'expliquent par des choix d'orientation et des préférences professionnelles qui restent fortement genrés.

Hamouda, L. B. (2023, décembre 14). **Les inégalités, la France en tête de palmarès.** Consulté 18 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/14/pour-reduire-les-inegalites-scolaires-sattaquer-aux-inegalites-sociales-qui-les-produisent/>

Mathieu Ichou est chercheur à l'Ined – Institut National d'Études Démographiques. Il travaille sur la sociologie de l'immigration, de l'éducation et de la stratification sociale. À la lumière de son expertise, il analyse les résultats de l'enquête PISA en matière d'inégalités. Encore une fois, les résultats de l'enquête PISA montrent que la France est...

James-Brabham, E., Loveridge, T., Sella, F., Wakeling, P., Carroll, D. J., & Blakey, E. (2023). **How do socioeconomic attainment gaps in early mathematical ability arise?** *Child Development*, 94(6), 1550-1565. <https://doi.org/10.1111/cdev.13947>

Socioeconomic attainment gaps in mathematical ability are evident before children begin school, and widen over time. Little is known about why early attainment gaps emerge. Two cross-sectional correlational studies were conducted in 2018–2019 with socioeconomically diverse preschoolers, to explore four factors that might explain why attainment gaps arise: working memory, inhibitory control, verbal ability, and frequency of home mathematical activities (N = 304, 54% female; 84% White, 10% Asian, 1% black African, 1% Kurdish, 4% mixed ethnicity). Inhibitory control and verbal ability emerged as indirect factors in the relation between socioeconomic status and mathematical ability, but neither working memory nor home activities did. We discuss the implications this has for future research to understand, and work towards narrowing attainment gaps.

Koini, C., Jindal-Snape, D., & Robb, A. (2023). **Children's and parents' perspectives of their multiple and multi-dimensional international transitions: Longitudinal study across four time points.** *Journal of Research in International Education*, 22(3), 256-277. <https://doi.org/10.1177/14752409231217222>

Existing literature presents a fragmented and negative account of international family transitions. This longitudinal study focuses on the contemporaneous experiences of internationally mobile families during their transitions to a new country and international school, drawing on Multiple and Multi-dimensional Transitions (MMT) Theory. The study adopted a small-scale, multiple case study design and focused on the experiences of primary aged children and their parents over the period of one year from July 2019 to July 2020. The findings, presented here as a cross-section, revealed that participants navigated multiple, complex transitions across several domains and contexts on a daily basis and that their transition experiences were largely positive. This study challenges previous chronological models of international transitions and demonstrates that through the application of MMT theory, international family transitions are best understood as ongoing, complex, and multi-dimensional processes.

Mediavilla, M., Mancebón, M.-J., Pires, L., & Gómez-Sancho, J.-M. (2023). **Bilingual school choice and socio-economic segregation: an analysis for Spain based on PISA 2015.** Research Papers in Education, 38(6), 944-965.
<https://doi.org/10.1080/02671522.2023.2188247>

In the academic year of 2004–2005, the Spanish region of Madrid began to implement a bilingual educational programme (MBP hereinafter) in state schools. One of the objectives of this programme was to make the study of a foreign language (English) accessible to students from economically disadvantaged families who cannot afford private foreign language classes. Our study aims to evaluate whether students from a disadvantaged socio-economic background really do have the same probability of participating in the MBP as their more privileged peers. The analysis use the PISA 2015 database which corresponds to the representative sample of the Community of Madrid in Spain, with added administrative information supplied by the Madrid Regional Ministry of Education concerning the identification of bilingual and non-bilingual schools. Using these data, we estimate a logit model directed at identifying which factors explain the choice by students of whether to attend a bilingual state school. The results obtained reveal that the probability of attending a bilingual school is higher for students belonging to socio-economically and culturally better-off households. This suggests that the MBP could be fostering segregation within the state education sector in Madrid.

Nyambek-Mebenga, F. (2023). **Éduquer contre le racisme sans dire la race : d'une pédagogie colorblind à une pédagogie antiraciste critique.** Le Télémaque, 64(2), 79-92.
<https://doi.org/10.3917/tele.064.0079>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du Télémaque.

Patel, D., & Walker, Z. (2023). **Uncovering the Knowledge Box: Exploring Cross-Cultural Perspectives on the Intersectionality of Race, Skin Colour and Class in Education.** Journal of Research in International Education, 22(3), 201-221.
<https://doi.org/10.1177/14752409231217154>

This study highlights the importance of providing a global education so that students are prepared for and aware of the wider world. The study explored the lived experiences of Adult Cross-Cultural Kids within education, and their cross-cultural perspectives on how

the intersectionality of race, skin colour and class impacts life in and out of school. The key highlights include that education needs to better prepare students for the world; ensure that students are aware of people, places and events globally; provide different perspectives and critical discourse; and that internationalism should be embedded within the workforce, pedagogy and learning culture. Participants in the study also highlighted the impact of cultural inequality on their own learning. This study suggests that cultural bias and hierarchy within existing curricula, pedagogy and institutional cultures should be addressed by increasing diversity and intercultural competence to embrace and harness different cultures, perspectives and epistemologies.

Ringrose, J., & Regehr, K. (2023). **Recognizing and addressing how gender shapes young people's experiences of image-based sexual harassment and abuse in educational settings.** *Journal of Social Issues*, 79(4), 1251-1281. <https://doi.org/10.1111/josi.12575>

This paper explores findings from a study with 150 young people (aged 12-21) across England, which employed qualitative focus groups and arts-based methods to investigate young people's experiences of digital image-sharing practices. In this paper, we explore how gendered pressures to send nudes experienced by girls is a form of Image-Based Sexual Harassment (IBSH) and how pressures upon boys to secure nudes and prove they have them by sharing them non-consensually is Image-Based Sexual Abuse (IBSA). In addition, we argue boys' sending nudes (dick pics) non-consensually is a form of image based sexual harassment, which can be compounded by harassment of girls to send nudes back. We look at the gendered nature of combined practices of Image-Based Sexual Harassment and Abuse (IBSHA) and how sexual double standards create sexual shaming and victim blaming for girls who experience IBSHA. We also explore young people's perspectives on their digital sex and relationship education and their suggestions for improvement. We conclude by arguing that schooling policies and practices would benefit from adopting the conceptual framework of IBSHA. We suggest this would be a good first step in better supporting young people in managing and negotiating digital gendered and sexualized consent, harms, and risks.

Rosello, J. A. A., Campaña, C. P., & Gascon, M. G. (2023). **Students' Issues and Challenges in the Use of the Learning Management System in Davao City.** *Asian Journal of Education and Social Studies*, 49, 529-539. <https://doi.org/10.9734/ajess/2023/v49i31177>

This research focused on the issues and challenges in the use of the learning management system in Davao City. The significance of this study is to be aware of the narratives experienced by the students in implementing technological ideas in the institutions. The purpose of the study was To identify the different challenges in using learning management systems and online payment platforms in the "new normal." In order to gather data for the study, qualitative methodologies through an interview with the students. The approach involves analyzing and identifying the themes, which are thought to be more effective and valid. This study conducted an interview with 20 students and identified four (4) themes to help this research achieve the results.

Salvanes, K. G. (2023). **What Drives Intergenerational Mobility? The Role of Family, Neighborhood, Education, and Social Class: A Review of Bukodi and Goldthorpe's Social Mobility and Education in Britain.** *Journal of Economic Literature*, 61(4), 1540-1578. <https://doi.org/10.1257/jel.20211622>

Schachner, J. N., & Wodtke, G. T. (2023). **Environmental inequality and disparities in school readiness: The role of neurotoxic lead.** *Child Development*, 94(6), e308-e327. <https://doi.org/10.1111/cdev.13949>

Developmental science has increasingly scrutinized how environmental hazards influence child outcomes, but few studies examine how contaminants affect disparities in early skill formation. Linking research on environmental inequality and early childhood development, this study assessed whether differences in exposure to neurotoxic lead explain sociodemographic gaps in school readiness. Using panel data tracking a representative sample of 1266 Chicago children (50% female, 16% White, 30% Black, 49% Hispanic, $\bar{age} = 5.2$ months at baseline, collected 1994–2002), analyses quantified the contribution of lead contamination to class and racial disparities in vocabulary skills and attention problems at ages 4 and 5. Results suggested that lead contamination explains 15%–25% and 33%–66% of the disparities in each outcome, respectively, although imprecise estimates preclude drawing firm inferences about attention problems.

Shear, B. R. (2023). **Gender Bias in Test Item Formats: Evidence from PISA 2009, 2012, and 2015 Math and Reading Tests.** *Journal of Educational Measurement*, 60(4), 676-696. <https://doi.org/10.1111/jedm.12372>

Large-scale standardized tests are regularly used to measure student achievement overall and for student subgroups. These uses assume tests provide comparable measures of outcomes across student subgroups, but prior research suggests score comparisons across gender groups may be complicated by the type of test items used. This paper presents evidence that among nationally representative samples of 15-year-olds in the United States participating in the 2009, 2012, and 2015 PISA math and reading tests, there are consistent item format by gender differences. On average, male students answer multiple-choice items correctly relatively more often and female students answer constructed-response items correctly relatively more often. These patterns were consistent across 34 additional participating PISA jurisdictions, although the size of the format differences varied and were larger on average in reading than math. The average magnitude of the format differences is not large enough to be flagged in routine differential item functioning analyses intended to detect test bias but is large enough to raise questions about the validity of inferences based on comparisons of scores across gender groups. Researchers and other test users should account for test item format, particularly when comparing scores across gender groups.

Smyth, E., & Privalko, I. (2023). **The long road to secondary school: background, home learning environment, and transition difficulties in Scotland.** *Research Papers in Education*, 38(6), 847-864. <https://doi.org/10.1080/02671522.2022.2065520>

This paper explores the association between children's difficulty in moving to secondary school and their family background. School transition difficulty is associated with a range of poor outcomes in young people, but studies have rarely taken a fully longitudinal perspective or looked in detail at inequalities in transition processes. This perspective can unpack the long-term processes behind any inequalities in such difficulties. We use longitudinal data from the Growing Up in Scotland survey to model school transition difficulty at age 12 using ordinary least squares regression models. We adopt a multidimensional approach to social background, taking account of social class, parental education, and household income. All three dimensions, especially income, are associated with school transition difficulty. This social gradient is not explained by differences in the home learning environment, school engagement at primary level or

cognitive development in early to middle childhood. Results show the limits of agency-based measures, like school engagement and home learning, in explaining inequality and children's disadvantage in school. Results also show the importance of adopting a multidimensional approach to family background when analysing inequality in education, regardless of the outcome.

Sommerfeld, A.-M. (2023). **The Effect of Schooling on Parental Integration** (Jena Economics Research Paper N° 2023-018). Consulté à l'adresse Friedrich-Schiller-University Jena website: <https://econpapers.repec.org/paper/jrpjrpwprp/2023-018.htm>

Exploiting the age-at-enrollment policies in 16 German states as exogenous source of variation, I examine whether the schooling of the oldest child in a migrant household affects parents' integration. My analysis links administrative records on primary school enrollment cutoff dates with micro data from the German Socioeconomic Panel (GSOEP). Using a regression discontinuity design around the school enrollment cutoff and an instrumental variable approach I show that children's schooling improves the integration of parents along several dimensions, such as labor market outcomes, financial worries, and German language skills. Labor market outcomes are most positively affected for mothers. Additional analysis of underlying mechanisms suggests that results are driven by gains in disposable time and exposure to the German language and culture.

Sung, C. C. M. (2023). **International students' identity negotiation in the context of international education: experiences of Burmese students in Hong Kong**. *Research Papers in Education*, 38(6), 987-1007. <https://doi.org/10.1080/02671522.2022.2089207>

This paper reports findings of a qualitative study that explored international students' identity negotiation during their cross-border studies against the backdrop of the internationalisation of higher education in Asia. Through a comparative narrative-based case study of two Burmese international students' experiences during their studies in a Hong Kong university, the paper reveals both similarities and differences in their negotiation of (i) identities as 'non-local'/'international' students in the university context and (ii) national identities in relation to the local community and the imagined global/international community. In particular, the findings illustrate the divergent ways in which the two international students negotiate the meanings they attach to the 'non-local' student label, respond to local students' (mis)recognition of their national identities, and perceive the (in)compatibility between their national and global identities. Overall, the findings point to the diversity and heterogeneity in international students' experiences which appear to be variably shaped by differential dispositions and capacities in exercising strategic agency for identity (re)construction. The case study also calls for the need to problematise the reification and over-simplification of the so-called 'international student experience' and argues for the importance of paying attention to the complexity of international students' identity negotiation in the context of international education.

Teague Tsopgny, A. (2023). **Relation élève-enseignant·e et choix d'orientation en mathématiques selon le genre : analyse des effets médiateurs**. *Revue des sciences de l'éducation*, 49(1). <https://doi.org/10.7202/110784ar>

L'objectif de ce travail est d'étudier l'effet des composantes de la relation élève-enseignant·e sur le choix d'études en mathématiques selon le genre et les mécanismes par lesquels ces composantes agissent sur ce choix. Une collecte des données par

questionnaire a été menée auprès de 405 élèves, parmi lesquel·le·s les des deux sexes étaient représentés, en classe de seconde C au Lycée Général-Leclerc de Yaoundé. Les résultats confirment en grande partie nos hypothèses de recherche. Les perceptions associées aux relations chaleureuses et au soutien de l'enseignant·e de mathématiques déterminent le choix des mathématiques, indépendamment du sexe de l'élève. Le sentiment d'efficacité personnelle et l'anxiété en mathématiques sont les médiateurs de ces liens.

Thiery, N. (2023). **Représenter la diversité phénotypique dans les albums de fiction pour la jeunesse : pour quelles approches d'une éducation antidiscriminatoire ?** *Le Télémaque*, 64(2), 93-106. <https://doi.org/10.3917/tele.064.0093>

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Valdés, M. T., & Requena, M. (2023). **Date de référence pour l'entrée à l'école et calendrier des naissances : aucune preuve de décalage en Espagne.** *Population*, 78(2), 301-318. <https://doi.org/10.3917/popu.2302.0301>

La date de référence du début de la scolarité des enfants peut inciter les parents à avancer ou à retarder la naissance lorsqu'elle s'approche de cette date. La recherche a mis en évidence cette pratique dans les pays asiatiques aux systèmes éducatifs très compétitifs. Notre analyse d'une base de données exhaustive constituée à partir de registres administratifs ne révèle aucune preuve de ce phénomène en Espagne. La stratification de l'échantillon en fonction du niveau d'études et du pays de naissance de la mère confirme la validité de nos résultats. Ces conclusions différencient les contextes européens et asiatiques. Elles procurent également une base empirique solide aux travaux qui utilisent la méthode de régression sur discontinuité en faisant l'hypothèse du caractère aléatoire des naissances autour de la date de référence pour l'entrée dans la scolarité.

Waldfogel, J., Kwon, S. J., Wang, Y., Washbrook, L., Casoni, V. P., Olczyk, M., ... Akabayashi, H. (2023). **Inequalities in Resources for Preschool-Age Children by Parental Education: Evidence from Six Advanced Industrialized Countries.** *European Journal of Population*, 39(1), 37. <https://doi.org/10.1007/s10680-023-09685-0>

This paper provides new evidence on inequalities in resources for children age 3–4 by parental education using harmonized data from six advanced industrialized countries—United States, United Kingdom, France, Germany, Netherlands, and Japan—that represent different social welfare regime types. We analyze inequalities in two types of resources for young children—family income, and center-based child care—applying two alternative measures of parental education—highest parental education, and maternal education. We hypothesize that inequalities in resources by parental education will be less pronounced in countries where social policies are designed to be more equalizing. The results provide partial support for this hypothesis: the influence of parental education on resources for children does vary by the social policy context, although not in all cases. We also find that the measurement of parental education matters: income disparities are smaller under a maternal-only definition whereas child care disparities are larger. Moreover, the degree of divergence between the two sets of estimates differs

across countries. We provide some of the first systematic evidence about how resources for young children vary depending on parents' education and the extent to which such inequalities are buffered by social policies. We find that while early inequalities are a fact of life in all six countries, the extent of those inequalities varies considerably. Moreover, the results suggest that social policy plays a role in moderating the influence of parental education on resources for children.

Zhao, Y. V., & Gibson, J. L. (2023). **Early home learning support and home mathematics environment as predictors of children's mathematical skills between age 4 and 6: A longitudinal analysis using video observations and survey data.** *Child Development*, 94(6), e377-e392. <https://doi.org/10.1111/cdev.13971>

This large-scale and longitudinal study examines early home support for learning, formal/informal home mathematics activities, and their associations with children's mathematical development between age two and six. Data were collected in Germany between 2012 and 2018, N = 1184 (49% girls, 51% boys), and 15% of children had parents with a migration history. Linguistically and mathematically stimulating, attentive, and responsive parent-child engagement at age two predicted children's mathematical skills at age four and six (small-to-medium effect size). Both formal and informal home mathematical activities at age five predicted children's mathematical skills at age six (small effect size), and were associated with children's prior mathematics attainment. This study also provides indicators where individual differences and social circumstances are relevant to understanding different early mathematics outcomes.

Zoubir, Z. (2023). **Éducation, société et race en France : une perspective historique et épistémologique sur la controverse autour du racisme d'État.** *Le Télémaque*, 64(2), 65-77. <https://doi.org/10.3917/tele.064.0065>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du Télémaque.

Climat de l'école

Brown, C. S., Biefeld, S. D., & Bulin, J. (2023). **High school policies about sexual harassment: What's on the books and what students think.** *Journal of Social Issues*, 79(4), 1411-1430. <https://doi.org/10.1111/josi.12505>

Sexual harassment (SH) in schools is unwanted and unwelcome behavior of a sexual nature that, when severe, offensive, and pervasive, creates a hostile environment that is prohibited under Title IX of the Education Amendments of 1972. In the current mixed methods study, using analyses of school policies and reports, and student survey and qualitative data, we examined (a) whether public high schools' policies about SH were in compliance with Title IX guidance, (b) whether SH policies were related to alumni's knowledge and attitudes about their schools' SH policies, and (c) whether SH policies were related to alumni's experiences with and reporting of SH. Results indicated that, of the 172 school districts within one state, only one-fourth of the school districts had SH policies in which SH was clearly defined and in which there were noted consequences for perpetrating SH. Despite students experiencing SH, very few students ever reported SH to an adult at school. However, of the small number of students who reported SH to

an adult at school, 87.5% went to a school with an explicit SH policy. Many students stated that they did not report SH because they did not trust adults to handle it fairly or effectively.

Font, S. A., Kennedy, R., & Littleton, T. (2023). **Child protective services involvement and exclusionary school discipline.** *Child Development*, 94(6), 1625-1641. <https://doi.org/10.1111/cdev.13941>

The study examined the impact of child protective services (CPS) contact on out-of-school suspensions for 49,918 Wisconsin students (followed from ages 5–6 to 14–15; [school years 2010–2019; 74% White; 7% Black; 11% Hispanic; 8% other; 49% female]). A quasi-experimental design comparing recent CPS contact to upcoming (future) CPS contact shows that both recent CPS contact without foster care and future CPS contact predict higher odds of suspension compared with no contact. Higher odds of suspension emerged prior to CPS contact and did not substantially increase during or after CPS contact, suggesting that system-induced stress is not a primary driver of behavioral problems leading to suspension. Foster care reduced the odds of suspension among White children and children in special education.

Joing, I., & Llena, C. (2023). **Les toilettes scolaires : une approche spatiale pour comprendre la qualité des expériences vécues par les élèves.** *Revue française de pédagogie*, 219(2), 29-45. Consulté à l'adresse <https://www.cairn.info/revue-francaise-de-pedagogie-2023-2-page-29.htm>

Cet article s'intéresse aux rapports divers qu'entretiennent des collégiens et collégiennes à un lieu singulier de l'espace scolaire, à savoir celui des toilettes scolaires. Une enquête ethnographique en collège urbain révèle comment les élèves pratiquent, vivent et perçoivent ce lieu. Au-delà de la dépréciation pour le lieu physique, les toilettes jouent un rôle de repli, de planque ou de refuge. Ces usages et pratiques multiples témoignent non seulement de l'importance du lieu dans le quotidien scolaire des élèves mais aussi de l'expression de besoins particuliers. Pour redonner aux toilettes scolaires leur fonctionnalité initiale, il conviendrait de repenser l'espace scolaire dans son ensemble pour qu'il réponde au mieux aux besoins des élèves.

Ormerod, A. J., Parisi, T., DeBlaere, C., & Sagrestano, L. M. (2023). **School climate tolerant of sexual harassment is indirectly related to academic disengagement through peer sexual harassment and feeling safe in high school girls.** *Journal of Social Issues*, 79(4), 1231-1250. <https://doi.org/10.1111/josi.12528>

Although illegal, sexual harassment is endemic in US schools, with students perceiving that school officials ignore complaints of harassment. Research findings have linked school climate tolerant of sexual harassment to peer sexual harassment (PSH) and school outcomes, yet there is a need to better understand these relationships. This cross-sectional study examined whether there was an indirect effect of school climate tolerant of sexual harassment on disengagement from school, individually and serially, through experiences of PSH victimization and feeling safe at school in a sample of 171 predominantly Black and White girls (14–19 years old) attending high school in the wider Memphis, Tennessee area. The findings supported that a climate tolerant of sexual harassment was indirectly related to school disengagement through PSH and feeling less safe. These findings add to the literature by demonstrating that a climate tolerant of sexual harassment, PSH victimization, and perceptions about personal safety are associated with harm to students' academic outcomes in the form of school and

academic disengagement. Further, the current findings suggest that a national agenda for school safety needs to consider school climate tolerant of sexual harassment in order to be effective in responding to sexual harassment and supporting student engagement.

Ringrose, J., & Regehr, K. (2023). **Recognizing and addressing how gender shapes young people's experiences of image-based sexual harassment and abuse in educational settings.** *Journal of Social Issues*, 79(4), 1251-1281. <https://doi.org/10.1111/josi.12575>

This paper explores findings from a study with 150 young people (aged 12-21) across England, which employed qualitative focus groups and arts-based methods to investigate young people's experiences of digital image-sharing practices. In this paper, we explore how gendered pressures to send nudes experienced by girls is a form of Image-Based Sexual Harassment (IBSH) and how pressures upon boys to secure nudes and prove they have them by sharing them non-consensually is Image-Based Sexual Abuse (IBSA). In addition, we argue boys' sending nudes (dick pics) non-consensually is a form of image based sexual harassment, which can be compounded by harassment of girls to send nudes back. We look at the gendered nature of combined practices of Image-Based Sexual Harassment and Abuse (IBSHA) and how sexual double standards create sexual shaming and victim blaming for girls who experience IBSHA. We also explore young people's perspectives on their digital sex and relationship education and their suggestions for improvement. We conclude by arguing that schooling policies and practices would benefit from adopting the conceptual framework of IBSHA. We suggest this would be a good first step in better supporting young people in managing and negotiating digital gendered and sexualized consent, harms, and risks.

Stein, N. D., & Taylor, B. G. (2023). **Reflections, research, and implications of decades of activism by educators to create a movement to address sexual harassment in K-12 schools in the United States.** *Journal of Social Issues*, 79(4), 1282-1305. <https://doi.org/10.1111/josi.12562>

An organized response to sexual harassment (SH) in K-12 schools in the US traces its development as a social movement to the larger women's rights movement in the late 1970s. It was an outgrowth of the social movement of feminist activists who protested and filed lawsuits to draw attention to SH in the workplace to gain recognition for the problem as one of equity for working women. The focus on SH in K-12 schools did not begin as an academic pursuit or with an emphasis on research – rather shares its origins as an activist movement to rectify injustices. Authors document the unwritten history of this social movement, by examining the early roots to address and prevent SH in K-12 schools. The authors review survey and intervention research from the initial movement through the past couple of decades, noting limitations and challenges for future efforts to prevent and eliminate SH in K-12 schools. The role of youth activism in advancing the movement against SH in schools represents hope of a renewal of activism with a robust gendered perspective. Authors provide next steps for research and action.

Évaluation des dispositifs d'éducation-formation

Abdelghani, R., Law, E., Desvaux, C., Oudeyer, P.-Y., & Sauzéon, H. (2023). **Interactive environments for training children's curiosity through the practice of metacognitive skills : a pilot study.** IDC 2023 - The 22nd Annual ACM Interaction Design and Children Conference, 495-501. <https://doi.org/10.1145/3585088.3593880>

Curiosity-driven learning has shown significant positive effects on students' learning experiences and outcomes. But despite this importance, reports show that children lack this skill, especially in formal educational settings. To address this challenge, we propose an 8-session workshop that aims to enhance children's curiosity through training a set of specific metacognitive skills we hypothesize are involved in its process. Our workshop contains animated videos presenting declarative knowledge about curiosity and the said metacognitive skills as well as practice sessions to apply these skills during a reading-comprehension task, using a web platform designed for this study (e.g. expressing uncertainty, formulating questions, etc). We conduct a pilot study with 15 primary school students, aged between 8 and 10. Our first results show a positive impact on children's metacognitive efficiency and their ability to express their curiosity through question-asking behaviors.

Formation continue

Bárány, Z. L., Buchinsky, M., & Corblet, P. (2023). **Late Bloomers: The Aggregate Implications of Getting Education Later in Life** (NBER Working Paper N° 31874). Consulté à l'adresse National Bureau of Economic Research, Inc website: <https://econpapers.repec.org/paper/nbrnberwo/31874.htm>

It is generally agreed upon that most individuals who acquire a college degree do so in their early 20s. Despite this consensus, we show that in the US from the 1930 birth cohort onwards a large fraction – around 20% – of college graduates obtained their degree after age 30. We explore the implications of this phenomenon. First, we show that these so-called late bloomers have significantly contributed to the narrowing of gender and racial gaps in the college share, despite the general widening of the racial gap. Second, late bloomers are responsible for more than half of the increase in the aggregate college share from 1960 onwards. Finally, we show that the returns to having a college degree vary depending on the age at graduation. Ignoring the existence of late bloomers therefore leads to a significant underestimation of the returns to college education for those finishing college in their early 20s.

Bas, J., Galli, C., Gayraud, L., & Segon, M. (2023). **Vers un accompagnement « inclusif » des adultes handicapés dans la formation professionnelle ?** Céreq Bref, (444), 1-4. Consulté à l'adresse <https://www.cereq.fr/accompagnement-adultes-handicap-formation>

Deville, J. (2023). **Utiliser ou contourner les référentiels en Validation des Acquis de l'Expérience à l'université : une pratique incertaine.** Formation emploi, 164(4), 65-84. <https://doi.org/10.4000/formationemploi.12153>

Cet article propose une exploration des pratiques de la Validation des Acquis de l'Expérience (VAE) à l'université, en France, sous l'angle des usages ou non des référentiels dans l'accompagnement et les pratiques des jurys. Il s'appuie principalement sur une enquête par entretiens auprès de conseillères VAE et d'enseignants-chercheurs. Les données convergent avec la littérature quant à la nécessaire interprétation des référentiels, dont une lecture normative n'est guère adaptée aux trajectoires singulières des candidats. Mais elles révèlent aussi qu'une partie de la difficulté des conseillers et enseignants réside dans une perception biaisée de ces outils.

Hamouda, L. B. (2023, décembre 5). **Qui a accès à la formation continue ?** Consulté 13 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/05/qui-a-acces-a-la-formation-continue/>
Le rapport statistique de la Depp donne à voir le profil des enseignants ayant obtenu une formation au cours de l'année 21-22. « Le taux d'accès des enseignants du premier degré public ayant au moins une affectation en éducation prioritaire est inférieur à ceux des enseignants hors éducation prioritaire », souligne l'enquête. Dans le second...

McNally, S., Schmidt, L., & Valero, A. (2022). **Do management practices matter in further education?** [POID Working Paper]. Consulté à l'adresse Centre for Economic Performance, LSE website: <https://econpapers.repec.org/paper/ceppoidwp/026.htm>
Further Education colleges are a key way in which 16-19 year olds acquire skills in the UK (much like US Community Colleges), especially those from low income backgrounds. Yet, little is known about what could improve performance in these institutions. We design and conduct the world's first management practices survey in these colleges (based on the World Management Survey) and match this to administrative longitudinal data on over 40,000 students. Value added regressions with rich controls suggest that structured management matters for educational outcomes (e.g. upper secondary qualifications), especially for students from low-income backgrounds. In a hypothetical scenario where a learner is moved from a college at the 10th percentile of management practices to the 90th, this would be associated with 8% higher probability of achieving a good high school qualification, which is nearly half of the educational gap between those from poor and non-poor backgrounds. Hence, improving management practices may be an important channel for reducing inequalities.

Roche, M., Pentecouteau, H., Leray, P., Djelil, F., Bertrand, E., Eneau, J., ... Lameul, G. (2022). **L'autorégulation des apprentissages dans une formation pour adulte. L'exemple de la demande d'aide.** Congrès international d'Actualité de la Recherche en Éducation et en Formation (AREF). Présenté à Lausanne, Switzerland. Consulté à l'adresse <https://hal.science/hal-03794749>

Marché du travail

Capus, E., & Senée, G. **Projet de loi de finances pour 2024 : Travail et emploi.** Rapport général n° 128 (2023-2024), tome III, annexe 32 (2023). <https://www.senat.fr/rap/I23-128-332/I23-128-332.html>

Couppié, T., & Gasquet, C. (2023). **Métiers en tension et jeunes : les jeunes peuvent-ils être une réponse ?** Céreq Bref, (446), 1-4. Consulté à l'adresse <https://www.cereq.fr/les%20jeunes-dans-metiers-en-tension>

Donne, V. (2023). **Qualité de l'emploi : une question de métiers ?** La note d'analyse de France stratégie, (130), 1-20. Consulté à l'adresse <https://www.strategie.gouv.fr/publications/qualite-de-lemploi-une-question-de-metiers>
France Stratégie, le Commissariat général à la stratégie et à la prospective, est un organisme de réflexion, d'expertise et de concertation placé auprès du Premier ministre. 4 missions orchestrent son action : Évaluer, Anticiper, Débattre, Proposer

Ferraton, C., & Michun, S. (2023). **Aide à domicile : concilier l'autonomie et l'engagement dans un collectif.** Céreq Bref, (445), 1-4. Consulté à l'adresse <https://www.cereq.fr/aide-a-domicile-metier-collectif>

Métier quasi exclusivement féminin, peu considéré et mal rémunéré, l'aide à domicile concentre nombre de caractéristiques des emplois dits « peu qualifiés », dont une forte pénibilité physique et psychologique. Le plus souvent seules dans l'exercice de leur travail, les intervenantes ne sont pas pour autant autonomes dans la définition de leur planning. Une enquête réalisée par le Céreq dans le cadre de l'ANR Squapin se penche sur la capacité des structures associatives du secteur à redonner des marges de manœuvre à leurs salariées, et à concilier leur autonomie avec l'intégration dans un collectif de travail.

Jiang, X., Staudt, J., & Weinberg, B. A. (2023). **A Tale of Two Fields? STEM Career Outcomes** (NBER Working Paper № 31835). Consulté à l'adresse National Bureau of Economic Research, Inc website: <https://econpapers.repec.org/paper/nbrnberwo/31835.htm>

Is the labor market for US researchers experiencing the best or worst of times? This paper analyzes the market for recently minted Ph.D. recipients using supply-and-demand logic and data linking graduate students to their dissertations and W2 tax records. We also construct a new dissertation-industry “relevance” measure, comparing dissertation and patent text and linking patents to assignee firms and industries. We find large disparities across research fields in placement (faculty, postdoc, and industry positions), earnings, and the use of specialized human capital. Thus, it appears to simultaneously be a good time for some fields and a bad time for others.

Lambert, A., Remillon, D., & Segú, M. (2023). **Partir ou passer à temps partiel: inégalité des effets des restructurations selon le genre.** Revue Internationale Du Travail, 162(4), 587-613. <https://doi.org/10.1111/ilrf.12291>

Alors que la littérature sur les inégalités de genre en lien avec les restructurations d'entreprises porte sur le caractère discriminatoire des processus descendants, les autrices examinent si ces inégalités existent lorsque le plan de restructuration repose sur l'autosélection. À partir de l'exemple d'une compagnie aérienne et de l'utilisation de méthodes mixtes, elles constatent que les hommes sont plus susceptibles d'accepter un départ volontaire et moins susceptibles d'opter pour un temps partiel aidé. Ils sont plus sensibles aux incitations financières et mieux préparés à se reconvertis dans une activité secondaire, tandis que les femmes choisissent le temps partiel pour mieux concilier vie privée et vie professionnelle. Les restructurations semblent donc amplifier la précarité des femmes sur le marché du travail, même dans le cadre de plans de départs volontaires.

Merveilleux, D. (2023, décembre 4). **Ces jeunes diplômés heureux dans les « big corps » : « J'ai envie de gagner des sous, et je ne vais pas arrêter de faire ce que je fais pour aider la collectivité ».** Le Monde.fr. Consulté à l'adresse https://www.lemonde.fr/campus/article/2023/12/04/ces-jeunes-diplomes-heureux-dans-les-big-corpos-j-ai-envie-de-gagner-des-sous-et-je-ne-vais-pas-arreter-de-faire-ce-que-je-fais-pour-aider-la-collectivite_6203799_4401467.html

Bien que conscients des enjeux environnementaux, une large partie des jeunes diplômés des grandes écoles intègrent des multinationales, préférant faire passer leurs ambitions professionnelles avant leur utilité sociale et écologique.

Métiers de l'éducation

Arneton, M., & Numa-Bocage, L. (2023). **Les tribulations d'un chercheur en éducation au prisme de ses archives.** Inter-congrès AREF "Engagement dans la recherche, recherches engagées, recherches sur l'engagement: que nous disent les sciences de l'éducation et de la formation ?". Présenté à Nanterre (92), France. Consulté à l'adresse <https://hal.science/hal-04321463>

Cette contribution propose de retracer le parcours de Gérard Vergnaud (1933-2021) à partir d'archives. Ses travaux sur la conceptualisation en action marquent aujourd'hui encore l'enseignement des mathématiques de la maternelle au lycée mais aussi la formation professionnelle des apprentis. Décédé en 2021, les hommages rendus dans plusieurs revues évoquent l'engagement d'un chercheur tout au long de son cheminement intellectuel (Delbrayelle et Guiet-Silvain, 2021 ; Rogalski et Robert, 2021 ; Weil-Barais et Vinatier, 2022). Le premier corpus est constitué du site web que Gérard Vergnaud a souhaité proposer à la fin de sa vie (Vergnaud, 2021). Ce site relevait pour lui d'un engagement au service de la communauté scientifique mais aussi et surtout au service des praticiens et des praticiennes. L'analyse des textes sélectionnés par le chercheur (structuration du site, type de contributions, publics...) donne à voir ses ficelles théoriques et méthodologiques concernant le développement d'un modèle théorique relatif au développement des connaissances : la conceptualisation en action. Le second corpus concerne la constitution d'un fonds Vergnaud à partir des archives professionnelles et personnelles présentes au domicile du chercheur. Ses données mettent en exergue l'environnement historico-culturel dans lequel il a baigné. Attaché de recherche au CNRS dès 1962, il côtoie Paul Fraisse ou François Bresson. Doctorant de Jean Piaget, il conserve ensuite des liens étroits avec la faculté des sciences de l'éducation de l'université de Genève. En France, Gérard Vergnaud participe aux débats et prises de position en faveur de la constitution de la discipline des sciences de l'éducation tandis qu'à l'international il constitue et anime plusieurs réseaux internationaux tant en direction des pays anglosaxons qu'en Europe ou vers l'URSS. Le troisième corpus est constitué d'entretiens avec des proches (doctorants, membres de sa famille) menés lors de la constitution du fonds. Ses contextualisations permettent d'identifier la provenance d'ouvrages comme ceux en russe données par la fille de Lev Vygostky au chercheur. La conviction de Gérard Vergnaud que les sciences sont au service de la société l'a conduit à participer à différentes missions parlementaires sur l'éducation dans les années 80 et 90. Sa conception selon laquelle, les scientifiques doivent co-construire avec les acteurs et actrices professionnel-le-s des manières d'apprendre utile pour tous et toutes, est liée à un idéal humaniste. L'objectif est l'émancipation de chaque être humain, mieux comprendre comment l'individu apprend vise ainsi à lui permettre d'acquérir par lui-même et pour lui-même des outils cognitifs afin d'apprendre tout au long de sa vie de manière autonome et critique. Si l'engagement de Gérard Vergnaud est déjà plus ou moins connu tant pour la défense des organismes de recherche, des espaces de recherche-intervention en éducation qu'en médiation scientifique, l'analyse des différentes archives révèle aussi un engagement plus intime en tant que militant politique.

Audrin, C., & Hascoët, M. (2024). **Ode to joy: The impact of enjoyment on pre-service teacher persistence.** *Teaching and Teacher Education*, 137, 104406. <https://doi.org/10.1016/j.tate.2023.104406>

Persistence in teaching is a crucial matter all around the world, as teaching is related to a high level of attrition. In this paper, we are interested in how persistence in teaching may be predicted by 1) teacher emotions and 2) their self-perceived competence as well as the value placed on the teaching profession. Using self-reported questionnaires, we collected data on 655 pre-service teachers. Results revealed that value allowed to teaching and teaching self-perceived competence significantly predict emotions felt when teaching. Moreover, results highlight that value and enjoyment are positively related to the propensity to persist in teaching.

Benoit, A., Knobé, S., & Pichot, L. (2021). **Du gestionnaire à l'entrepreneur : rôles et figures différenciés du responsable de diplôme dans l'enseignement supérieur.** Recherche & formation, 98(3), 33-46. Consulté à l'adresse <https://www.cairn.info/revue-recherche-et-formation-2021-3-page-33.htm>

À partir des points de vue des responsables de diplôme, cet article s'intéresse aux processus de sélection à l'entrée en formation à travers notamment les catégories de jugement et d'appréciation mobilisées. L'article étudie aussi le rôle d'intermédiation des responsables de diplôme dans le lien entre formation et emploi. Deux figures principales émergent, le gestionnaire et l'entrepreneur, traduisant la variabilité des manières de s'approprier ce rôle et de s'engager pour favoriser l'insertion professionnelle des diplômés.

Bock, C. (2021). **La formation d'animateur socioculturel : de l'Union européenne au marché local.** Recherche & formation, 98(3), 75-87. Consulté à l'adresse <https://www.cairn.info/revue-recherche-et-formation-2021-3-page-75.htm>

Dans cet article, nous nous demandons dans quelle mesure l'éducation populaire s'inscrit dans le marché des nouvelles formations d'animateur. À ce titre, trois niveaux d'analyse sont proposés : tout d'abord, l'influence des directives européennes dans les formations, en particulier le processus de Bologne, afin d'appréhender l'influence de l'Union européenne sur les formations ; ensuite, les stratégies des pouvoirs publics en termes de plan de formation à l'échelle nationale dans le but de saisir les orientations nationales des formations ; enfin, l'interprétation des acteurs à un niveau local vise à mettre en lumière la place accordée à l'éducation populaire dans trois marchés locaux (Paris, Grenoble et Toulouse). L'intérêt est donc d'analyser l'influence des directives initiées par l'Union européenne sur les formations d'animateurs socioculturels. Par déclinaison, la place de l'éducation populaire est interrogée à la fois à travers les diplômes et les acteurs qui les proposent.

Brunel, M., & Foliot, C. (2021). **Le reverse mentoring au service de la formation à l'enseignement de la littérature pour le cours de français : faire de la formation initiale un outil de formation des enseignants tuteurs ?** Recherche & formation, 98(3), 59-74. Consulté à l'adresse <https://www.cairn.info/revue-recherche-et-formation-2021-3-page-59.htm>

Les recherches en didactique peinent à irriguer les pratiques d'enseignement. Cette enquête interroge la professionnalisation des tuteurs en charge de la formation initiale sur le terrain d'apprentissage. Convoquant deux domaines de recherche, didactique de la littérature et sciences de l'éducation et de la formation, l'étude mobilise une méthodologie centrée sur le suivi de binômes tuteurs-tutorés en établissement scolaire. Le but est d'identifier comment la préoccupation de la formation de la personne-élève fait l'objet de transactions dans le cadre du dispositif de formation tuteur-tutoré.

Camelo-Ordaz, C., Diánez-González, J. P., Franco-Leal, N., & Sousa-Ginel, E. (2024). **Opportunity recognition in academic spin-offs: a contingency approach.** *R&D Management*, 54(1), 76-94. <https://doi.org/10.1111/radm.12641>

This paper analyses the factors that influence opportunity recognition (OR) of academic spin-offs (ASOs) from a contingency perspective. We focus on factors linked to the academic entrepreneur and propose that their relevance for explaining OR in ASOs depends on the context in which these firms operate: discovery (the necessary information for entrepreneurs to assess the new opportunities is available in the market) versus creation (complete information about opportunity exploitation and the likelihood of achieving certain outcomes is not available in the market). Results obtained in a sample of 167 Spanish ASOs show that, in a discovery context, academic entrepreneurs' OR is positively related to entrepreneurial self-efficacy, previous managerial experience and access to academic and industry networks. In a creation context, only entrepreneurial self-efficacy and access to industry networks become critical to OR, whereas previous managerial experience exerts a negative effect. Our results also show that the most relevant factor in a discovery context is previous managerial experience, while in a creation context, entrepreneurial self-efficacy is the most significant.

Chang, S. (2024). **Developing preservice bilingual teachers' transformative agency.** *Teaching and Teacher Education*, 137, 104405. <https://doi.org/10.1016/j.tate.2023.104405>

U.S. bilingual educators struggle with English hegemonic ideology and inadequate ethnolinguistic resources. Using the theoretical framework of transformative agency by double stimulation, this qualitative case study investigated how preservice Chinese and Spanish bilingual teachers actively confronted such struggles during their practicum experiences to improve their culturally responsive pedagogies. Four types of warping actions were found: amplifying bilingual instruction, formulating support for bilingual learning, generating new bilingual pedagogical knowledge, and taking charge of their own professional growth as bilingual teachers. The study concludes that preservice teachers' transformative agency can be pedagogically facilitated with mediational tools offered through formative intervention research methods. (100 words).

Dicharry-Pomarez, S., & Kohout-Diaz, M. (2023). **L'enseignant spécialisé compris comme sujet chercheur en contexte inclusif.** *La nouvelle revue - Éducation et société inclusives*, 97(1), 45-57. <https://doi.org/10.3917/nresi.097.0045>

L'article présente une recherche qui vise à explorer la définition de l'identité d'un enseignant inclusif par un acte d'engagement de sa parole comme sujet. Il est considéré comme « sujet d'une éthique et non objet d'une science » (Kohout-Diaz, 2018, p. 110). La chercheure elle-même se positionne en tant que « chercheure accompagnatrice » (Beauvais, 2004) impliquée auprès d'enseignants spécialisés en formation, dans l'objectif de comprendre le professionnel de terrain comme chercheur qui agit dans la complexité de la diversité des besoins des élèves. Le sujet est envisagé comme « un acteur compétent » (Guignon, Morissette, 2006) qui mobilise dans son acte de parole ses savoirs d'expérience. La méthode de l'entretien et du questionnaire formatif permet d'en rendre compte. Les résultats permettent de cerner une posture d'enseignant spécialisé qui agit à la manière d'un chercheur sur le terrain.

Fairley, M. J. (2024). **Exploring transnationality as a resource for promoting social justice in language teacher identity construction: Insights from an inquiry group.** *Teaching and Teacher Education*, 137, 104398. <https://doi.org/10.1016/j.tate.2023.104398>

This study explored the transnational identities of six English language teachers in an Egyptian university context, using an identity-focused teacher inquiry group. Grounded in the theoretical frameworks of identity as critical pedagogy, and transnationality as a disposition that can be cultivated, narrative analysis revealed insights into what a transnational disposition entails, and how teachers (can) draw on their transnationality as a resource for promoting social justice in their work. Specifically, three prominent themes emerged: the adoption of humanizing teaching approaches, the bridging of cultural divides, and the promotion of transformative teaching. Implications for pedagogizing language teacher identity are discussed.

Feld, J., Lines, C., & Ross, L. (2023). **Writing Matters** (IZA Discussion Paper № 16571). Consulté à l'adresse Institute of Labor Economics (IZA) website: <https://econpapers.repec.org/paper/izaizadps/dp16571.htm>

For papers to have scientific impact, they need to impress our peers in their role as referees, journal editors, and members of conference committees. Does better writing help our papers make it past these gatekeepers? In this study, we estimate the effect of writing quality by comparing how 30 economists judge the quality of papers written by PhD students in economics. Each economist judged five papers in their original version and five different papers that had been language edited. No economist saw both versions of the same paper. Our results show that writing matters. Compared to the original versions, economists judge edited versions as higher quality; they are more likely to accept edited versions for a conference; and they believe that edited versions have a better chance of being accepted at a good journal.

Granger, N., Toullec-Théry, M., & Bourdon, P. (2022). **Les enseignants personnes-ressources au Québec et en France : quels rôles dans une école inclusive ?** *La nouvelle revue - Éducation et société inclusives*, 96(4), 177-203. <https://doi.org/10.3917/nresi.096.0177>

La surdité d'un enfant est un événement qui entraîne des bouleversements au sein des familles entendantes. Comment communiquer avec l'enfant sourd ? Est-il un enfant avec une autre langue et si c'est le cas, comment se définit cette nouvelle langue au sein de la société et/ou de la famille, quelles sont les représentations liées à cette langue des signes ? L'enfant sourd est-il un enfant « handicapé », avec quel type de prise en charge, quel accompagnement pour les parents et leur enfant ? Pour les parents entendants d'un enfant sourd, la surdité affecte particulièrement les sphères familiale et éducative. Ils ont souvent besoin d'être accompagnés afin de mieux cerner ce qu'implique la surdité, ce qu'elle sous-tend ainsi que les choix auxquels ils peuvent être confrontés. Cet accompagnement se manifeste par de multiples informations et services disponibles, parfois contradictoires entre eux ou encore avec les choix des parents. Ces derniers vont alors chercher par eux-mêmes les informations et les voies qui leur sont accessibles. Les divers professionnels impliqués dans les mesures d'inclusion des enfants vivant avec une surdité sont ainsi sollicités de multiples façons par des parents qui sont très souvent dans une quête sans fin : celle de tout donner à leur enfant pour qu'il se développe et soit inclus comme les autres enfants. Or, l'espace d'engagement que les parents investissent ou qu'ils se forgent est souvent marqué par des tensions concernant les savoirs et les savoir-faire. Méfiants et sceptiques, souvent désinformés ou seulement

non informés, les parents peuvent se tourner vers des stratégies uniquement centrées sur la réadaptation et l'apprentissage de la parole. Dans ce dossier, nous proposons de réunir les réflexions et les résultats d'études scientifiques dont la question de départ porte sur l'accompagnement des parents entendants et de leur enfant sourd, cet accompagnement pouvant être psychologique, médical et/ou linguistique. A partir d'études qualitatives, le dossier souhaite explorer différents aspects de ces accompagnements ainsi que l'implication des parents dans le choix des structures et les options que ces dernières peuvent leur proposer.

Gravelle, F., Étienne, R., Gagnon, C., & Monette, J. (2023). **Bien-être des personnels de direction au Québec et en France: Agir et faire agir pour surmonter les crises et changer.** Consulté à l'adresse <https://www.editionsjfd.com/boutique/sciences-de-leducation-1231/bien-etre-despersonnels-de-direction-au-quebec-eten-france-11641>

Des modifications dans la gouvernance scolaire semblent avoir entraîné des conséquences sur le bien-être des directeurs d'établissement d'enseignement au Québec ainsi que sur celui des personnels de direction en France. Afin d'essayer de remédier à ces problématiques, une équipe de chercheurs a entrepris un projet de recherche scientifique au Québec et en France, en collaboration avec la Fédération québécoise des directions d'établissement d'enseignement (FQDE), l'Association montréalaise des directions d'établissement scolaire (AMDES), l'Association québécoise du personnel de direction des écoles (AQPDE), le Syndicat National des Personnels de Direction de l'Éducation Nationale (SNDPEN) ainsi que Éducation & Devenir (E&D). L'objectif de cette étude était d'analyser la nature de l'épuisement professionnel et les différentes manifestations qu'il peut prendre. En résumé, l'équipe de recherche et les collaborateurs ont souhaité que ces nouvelles connaissances puissent contribuer à sensibiliser les gestionnaires scolaires quant à l'importance de prendre soin de leur bien-être pour ainsi demeurer des PASSIONNÉS DE L'ÉDUCATION!

Hamouda, L. B. (2023a, décembre 1). «**J'ai découvert ce que c'est de travailler normalement depuis que je ne suis plus prof**». Consulté 13 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/01/jai-decouvert-ce-que-cest-de-travailler-normalement-depuis-que-je-ne-suis-plus-prof/>

Dans un rapport sur la loi de finances 2024 réalisé pour la Commission des Finances du Sénat, Olivier Paccaud, sénateur Les Républicains alerte sur les démissions des professeurs. «Si le nombre de démissions demeure très marginal chez les enseignants, la tendance à l'œuvre doit véritablement constituer un signal d'alarme. En 2021-2022, dernière année pour...

Hamouda, L. B. (2023b, décembre 1). **Satisfaction dans le travail : les profs moins satisfaits que la moyenne française.** Consulté 13 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/01/satisfaction-dans-le-travail-les-profs-moins-satisfaits-que-la-moyenne-francaise/>

En 2022, le centre pour la recherche économique et ses applications (CEPREMAP) a participé à la première enquête permettant d'élaborer le Baromètre du bien-être des personnels de l'Éducation nationale. «Les données collectées révèlent le très faible niveau de satisfaction des enseignants dans plusieurs domaines clés, notamment la rémunération, les perspectives de carrière et la...

Hamouda, L. B. (2023c, décembre 4). **2 836 enseignants ont démissionné en 2022.** Consulté 13 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/04/2-836-enseignants-ont-demissionne-en-2022/>

Avec une nouvelle hausse des départs volontaires, le plus beau métier du monde peine à retrouver son attractivité d'autan. Ils sont 1 657 dans le premier degré et 1 179 dans le second degré à démissionner. Le rapport de la Depp souligne que les départs des enseignants avec le plus d'ancienneté représentent désormais la moitié...

Hamouda, L. B. (2023d, décembre 14). **PPPE : Le futur de la formation initiale ?** Consulté 18 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/14/pppe-le-futur-de-la-formation-initiale/>

Le Parcours Préparatoire au Professorat des Ecoles, ouvert depuis la rentrée 2021, préfigure-t-il les modalités futures de la formation initiale des enseignantes et enseignants ? Le dispositif, encore jeune et méconnu, prépare à une licence en 3 ans qui est menée alternativement au lycée, à l'université et en stages, et qui débouche sur l'entrée en...

Heikonen, L., Ahtiainen, R., Hotulainen, R., Oinas, S., Rimpelä, A., & Koivuhovi, S. (2024). **Collective teacher efficacy, perceived preparedness for future school closures and work-related stress in the teacher community during the COVID-19 pandemic.** *Teaching and Teacher Education*, 137, 104399. <https://doi.org/10.1016/j.tate.2023.104399>

Based on survey data collected from 2159 teachers, multilevel structural equation modelling was applied to explore associations between collective teacher efficacy, teachers' perceptions about the school's preparedness to confront school closure in the future and work-related stress in the teacher community during the COVID-19 pandemic. Higher levels of collective teacher efficacy in a school were associated with the teacher community perceiving school as better prepared for future challenges. Collective teacher efficacy was also related to lower levels of work-related stress in the teacher community.

Kéroulas, F., Misery, P., Catoir, D., La Marne, P., Jeauffroy, B., & Sorbe, X. (2023). **Le protocole PPCR pour les enseignants : place et rôle des rendez-vous de carrière dans l'évolution et la progression de la carrière** (N° 22-23 008A; p. 65). Consulté à l'adresse IGÉSR website: <https://www.education.gouv.fr/le-protocole-ppcr-pour-les-enseignants-place-et-role-des-rendez-vous-de-carriere-dans-l-evolution-et-380184>

Introduit dans les décrets statutaires par le décret du 5 mai 2017, le parcours professionnel, carrière et rémunération a modifié les modalités d'évaluation des enseignants qui demeurent spécifiques en regard de l'évaluation des agents de la fonction publique.

Laville, M. (2023). **Analyse de quelques dimensions de la professionnalisation et des épreuves subjectives vécues par la première génération d'enseignants référents (2006-2013).** *La nouvelle revue - Éducation et société inclusives*, 97(1), 11-30. <https://doi.org/10.3917/nresi.097.0011>

Depuis la rentrée scolaire 2006, un nouveau groupe professionnel, celui des enseignants référents, a pour mission de coordonner les parcours de scolarisation des élèves handicapés. À partir d'un dispositif d'enquête pluridimensionnel, cet article propose d'étudier la professionnalisation de ce groupe. Cette étude, circonscrite à la première

génération d'enseignants référents (de 2006 à 2013), envisage la professionnalisation comme un processus dynamique, portant sur « ce que le travail doit être » qui implique tout à la fois les représentants d'un métier et les acteurs avec lesquels ils interagissent au quotidien (Demazière, 2009). Les notions de « professionnalité », de « professionnisme » et de « professionnalisme », empruntées à Bourdoncle (1991), offrent la possibilité de saisir certaines dimensions de la professionnalisation des enseignants référents. La prise en compte de ces dimensions permet également de rendre compte des « épreuves subjectives » (Barrère, 2004) vécues par les enseignants référents, enserrées entre des prescriptions inclusives en matière de coordination des parcours scolaires et leurs mises en œuvre, parfois difficiles, sur le terrain.

Lutovac, S., Uitto, M., Keränen, V., Kettunen, A., & Flores, M. A. (2024). **Teachers' work today: Exploring Finnish teachers' narratives.** *Teaching and Teacher Education*, 137, 104378. <https://doi.org/10.1016/j.tate.2023.104378>

This study employs narrative as a theoretical perspective and methodological approach, looking at the current nature of teachers' work from the viewpoint of 25 Finnish basic education teachers. Several categories such as multiple teacher roles and fragmentation of teachers' work, teamwork and multi-professional cooperation, pupils' diverse backgrounds, changed learning skills and behaviour, opportunities and challenges of digitalization, schools' open architecture, and pandemic were identified. These categories illustrate teachers' work today as hectic and changing, involving relational intensification, and as challenging and redefining teachers' identities. The implications for pre- and in-service teachers' professional development are discussed.

McDaniel, S. C., Mahatmya, D., & Bruhn, A. L. (2024). **Educator burnout in the age of COVID-19: A mediation analysis of perceived stressors, work sense of coherence, and sociodemographic characteristics.** *Teaching and Teacher Education*, 137, 104384. <https://doi.org/10.1016/j.tate.2023.104384>

This national study sought to determine if work and COVID-19 related stressors are associated with higher levels of educator burnout and stress, if differences in levels of educator burnout and stress by sociodemographic and school characteristics exist and, how work-related Sense of Coherence affect the association between work and COVID-19 stressors on educator burnout and stress. Participants (N = 236) across primary and secondary schools predominately inside the US completed a survey that included demographic variables which were included in the analyses. Overall, work and COVID-19 stressors were positively correlated with educator burnout and perceived stress. There were statistically significant differences in emotional exhaustion and depersonalization by gender with female educators reporting higher emotional exhaustion than male educators. Also importantly, educators who considered leaving their teaching jobs reported personal accomplishment levels lower than educators who did not consider leaving and when students were a high source of stress, educator stress, reported emotional exhaustion, depersonalization, and overall perceived stress increased. Implications for policy and practice are included.

Monahan, C., Zhang, Y., & Levy, S. R. (2023). **COVID-19 and K-12 teachers: Associations between mental health, job satisfaction, perceived support, and experiences of ageism and sexism.** *Analyses of Social Issues and Public Policy*, 23(3), 517-536. <https://doi.org/10.1111/asap.12358>

K-12 public school teachers faced unprecedented and novel disruptions in their workplace during the first entire school year of the COVID-19 pandemic, leading to concerns about their treatment, mental health, and job satisfaction. Between April and June 2021, 341 public U.S. K-12 school teachers from 12 states (covering Northeast, Southeast, Midwest, Southwest, West, and Pacific Northwest) completed online surveys regarding their perceived general support, experiences of ageism and sexism, job satisfaction, and mental health. Mental health symptoms mediated the relationships between sexism, ageism, and perceived support with job satisfaction (Model 1) and job satisfaction mediated the relationships between sexism, ageism, and perceived support with mental health symptoms (Model 2). Thus, the data supported two models pointing to dual co-existing pathways from (a) general support and (b) experiences of discrimination to both job satisfaction and mental health. These results highlight the importance of developing and implementing policies and programs that can improve teachers' general support from their community along with addressing job satisfaction.

Moraal, E., Suhre, C., & van Veen, K. (2024). **The importance of an explicit, shared school vision for teacher commitment.** *Teaching and Teacher Education*, 137, 104387. <https://doi.org/10.1016/j.tate.2023.104387>

This study investigated the relationship of different explicit school visions and the presence of a shared school vision among teachers with teachers' personal commitment to their work. Multilevel analyses of four types of schools show that teachers in schools with an explicit school vision more strongly share the school vision and this shared vision is positively related to their affective and normative commitment. The practical implications of this are discussed.

Oitre, F., & Prevel, S. (2023). **Le système d'activité des directeurs des écoles : une modélisation en termes de problèmes professionnels pour appréhender la complexité de la fonction.** *Revue française de pédagogie*, 219(2), 47-67. Consulté à l'adresse <https://www.cairn.info/revue-francaise-de-pedagogie-2023-2-page-47.htm>

Cet article s'intéresse à l'activité des directeurs et directrices d'école en la concevant dans un système organisé autour de trois pôles que sont l'institution, l'équipe éducative et les partenaires de l'école (élus, parents, etc.), tous trois ayant des logiques qui leur sont propres. Nous envisageons le fonctionnement de ce système et l'interaction entre les différents pôles qui le composent en termes de tensions susceptibles de générer des problèmes professionnels spécifiques à la fonction. À partir d'une commande de photos dites « emblématiques » de la fonction réalisées et commentées par les enquêtés, les analyses montrent deux manières distinctes et typées de s'emparer de la fonction de directeur et d'y engager des priorités. Les résultats sont discutés à l'aune de l'ancienneté du directeur dans la fonction, des représentations de celle-ci, du poids du contexte et de l'interaction entre la fonction de directeur et celle d'enseignant. L'article conclut sur une complexité reconnue de la fonction qui appelle une professionnalité spécifique sans trancher sur la manière de la gérer.

Pov, S., Kawai, N., & Nov, S. (2024). **Preparing pre-service teachers to work in Cambodian inclusive classrooms: Knowledge, experience, and attitudes toward inclusion.** *Teaching and Teacher Education*, 137, 104402. <https://doi.org/10.1016/j.tate.2023.104402>

This survey study examined the influence of 148 pre-service teachers' knowledge and experience on attitudes toward inclusive education in Cambodia. Descriptive statistics, exploratory factor analysis, reliability tests, Pearson correlation coefficient, and multiple

regression were used for data analysis. The findings revealed that pre-service teachers exhibited extremely poor knowledge of all-inclusive education areas. Experience teaching students with disabilities, knowledge about gender, and knowledge about inclusive education significantly influenced their attitudes toward inclusion. The findings denoted the need to improve pre-service teachers' knowledge and practical skills required to work in inclusive classroom settings.

Sancho Sora, C. (2021). **Former pour transformer la profession enseignante : le cas d'une formation en établissement.** Recherche & formation, 98(3), 47-58. Consulté à l'adresse <https://www.cairn.info/revue-recherche-et-formation-2021-3-page-47.htm>

Cet article, qui étudie la réception d'une formation en établissement dont les contenus sont présentés comme innovants, vise à mieux comprendre ce que l'Institution nomme parfois la résistance des enseignants au changement. Au-delà des contenus qui semblent, à première vue, adaptés aux problèmes rencontrés par l'établissement, nous étudions les modalités de leur mise en œuvre pour tenter d'expliquer les tensions suscitées par cette action de formation. Celles-ci apparaissent comme le résultat d'une construction collective à laquelle participent les orchestrateurs de la formation.

Suaud, G. (2023). **La prise de fonction des accompagnants des élèves en situation de handicap Référents (AESH-Référents). Quels problèmes professionnels ?** La nouvelle revue - Éducation et société inclusives, 97(1), 31-44. <https://doi.org/10.3917/nresi.097.0031>

La recherche présentée questionne la fonction des Accompagnants des élèves en situation de handicap Référents (AESH-Réf.) dans le système éducatif français, qui est encore peu définie et suscite de nombreuses interrogations. À partir de six extraits, nous analysons leurs craintes, leurs inquiétudes, dans un espace de paroles individuel, élaboré dans un dispositif de recherche dont un des objectifs est de leur donner une place en tant que sujet de l'institution. Nous mettons en évidence certaines questions et problèmes professionnels dans leur prise de fonction, tels qu'un sentiment d'isolement relationnel, un manque de reconnaissance au sein de la communauté éducative et un faible équipement praxéologique pour soutenir le développement professionnel des AESH.

Teng, J., Yang, Z., Yu, M., Crowley, C. B., & Jing, X. (2024). **Chinese primary school teachers' working time allocation after the enactment of the "Double Reduction" policy: A mixed-methods study.** Teaching and Teacher Education, 137, 104385. <https://doi.org/10.1016/j.tate.2023.104385>

This study uses mixed methods to explore Chinese primary school teachers' working time allocation after the enactment of the "Double Reduction" Policy. Data were collected from 364 questionnaires and six subsequent in-depth interviews. Findings reveal that despite having brought about some benefits, the "Double Reduction" Policy has increased Chinese primary school teachers' working time. Moreover, the teachers' working time is unevenly allocated, with disproportionately more time devoted to subject teaching and less time devoted to professional development. As a result, the nature of the different types of Chinese primary school teachers' working time further affect the teachers' perceived workload and work-related stress. Therefore, it is recommended that teachers receive greater support and time for their ongoing professional development.

Thievenaz, J., & Fabre, M. (2023). **La Théorie de l'enquête de John Dewey : fondements, réception et usages dans la recherche francophone en éducation et formation.** Revue française de pédagogie, 219(2), 129-178. Consulté à l'adresse <https://www.cairn.info/revue-francaise-de-pedagogie-2023-2-page-129.htm>

La Théorie de l'enquête de John Dewey fait, depuis plus d'une vingtaine d'années, l'objet d'un regain d'intérêt en sciences humaines et sociales (SHS) et notamment dans le domaine des sciences de l'éducation et de la formation (SEF). Les travaux qui la convoquent ne se contentent pas d'une simple relecture ou redécouverte de ce concept central et emblématique de la théorie de l'expérience de Dewey. Ils réinterrogent ses origines, sa nature et ses potentialités pour aborder les problématiques, les enjeux et les défis contemporains qui traversent le monde de l'éducation et de la formation. Ce phénomène de «retour à l'enquête» s'inscrit, plus fondamentalement, dans une démarche analysant les processus d'apprentissages, d'enseignement, d'éducation, de formation ou d'accompagnement sous un jour renouvelé en s'appuyant sur une théorie suffisamment robuste et universelle de l'expérience. C'est en partant de ces constats et des enjeux scientifiques qui leur sont liés que cette note de synthèse étudie les fondements de la Théorie de l'enquête, son originalité, sa réception et les différents types d'usages contemporains qui en sont faits. Une première partie expose la genèse du concept d'enquête et son élaboration progressive dans la trajectoire philosophique et pédagogique de son auteur. Une seconde partie se consacre à l'étude de la réception de cette approche dans la recherche francophone en éducation et formation. La troisième partie expose les différentes interprétations et types d'usages qui en sont faits ainsi qu'un certain nombre de questionnements épistémologiques sur leurs intérêts et leurs limites. Il s'agit ce faisant de montrer la richesse et la modernité d'une telle conception de l'expérience qui depuis près d'un siècle continue d'éclairer, d'inspirer et d'étonner.

Numérique et éducation

Ali, I., Butt, K., & Warraich, N. F. (2023). **Factors effecting digital citizenship in education sector: A systematic review and future direction.** Education and Information Technologies, 28(12), 15789-15821. <https://doi.org/10.1007/s10639-023-11811-8>

The main objective of the study was to identify variables and factors affecting Digital Citizenship (DC) in education sector. The study used Preferred Reporting Items for the Systematic Review and Meta-analysis (PRISMA) guidelines for achieving the objectives of the study. Moreover, a search strategy was formulated including keywords, inclusion, and exclusion criteria. The researchers initially, retrieved 2192 studies from selected databases (Google Scholar, Web of Science, and Scopus) and manual search. Thirty relevant studies were selected that fulfilled objectives of the study and inclusion criteria. Extracted data was later analyzed qualitatively by using thematic analysis and four factors that affect DC were identified during the process. The most identifiable factors include personal, psychological, technological and information related, and social factors. The study also revealed the most prominent variables (categories) related to these factors. The researchers have learned through literature review that no comprehensive study has been conducted in identifying the factors affecting digital citizenship. The current study recommended the importance of using factors and variables that affect DC in the education sector so that it can help decision makers take into account personal,

psychological, technological and social factors while developing information literacy instruction programs for digital citizenship, especially in education sector.

Azar, A. S., & Tan, N. H. I. (2023). **Text presentation or video: Malaysian university students' preferences with synchronous and asynchronous learning.** *Education and Information Technologies*, 28(12), 15969-15990. <https://doi.org/10.1007/s10639-023-11796-4>

In overcoming the obstacles of online learning with the current Covid-19 pandemic crisis, synchronous and asynchronous learning has been a significant part of teaching strategies applied by educators to construct a collaborative online environment with Malaysian university students. Synchronous learning has always been the most effective strategy for social learning, while asynchronous learning allows students to learn on their own schedule. Moreover, despite having many educational platforms created for higher educational settings, the practicality of selection between two teaching-learning approaches of text-presentation and video is still a debate among teachers/ lecturers with students' learning styles. Therefore, this paper explored Malaysian university students' preferences between synchronous and asynchronous learning modes with text-presentation or video. Qualitative and quantitative data from 178 participants from both public and private universities were collected via open and close-ended questions in the designed questionnaire. The findings indicated that 68% of the students preferred synchronous learning mode compared to asynchronous. Meanwhile, 39% of the students favoured both text-presentation and video learning tools to be implemented in synchronous and asynchronous approaches as it provided them better opportunities to grasp the learning content better. Thus, it can be concluded that the synchronous learning mode is preferred if only one method is provided as the students highly value the teacher's presence for ease of communication, but students prefer a range of delivery methods. Moreover, the students also displayed a strong preference for applying both text-presentation and video to achieve their learning outcomes. Thus, it is suggested that the university lecturers need to explore and apply interactive pedagogical methods in online teaching-learning process, while contributing to the development of motivation, participation, and engagement among the university students in acquiring their subjects. As such, the findings of this study have informed the pedagogical implications, and further studies are mandatory.

Baig, M. I., Yadegaridehkordi, E., Shuib, L., & Sallehuddin, H. (2023). **Identifying determinants of big data adoption in the higher education sector using a multi-analytical SEM-ANN approach.** *Education and Information Technologies*, 28(12), 16457-16484. <https://doi.org/10.1007/s10639-023-11875-6>

Even though big data offers new opportunities to organizations, big data adoption (BDA) is still in the early stages of introduction, and its determinants remain unclear in many sectors. Therefore, this research intended to identify the determinants of BDA in the education sector. A theoretical model was developed based on the integration of the Technology–Organization–Environment (TOE) and Diffusion of Innovation (DOI) theories. The data was collected from 190 decision-makers in university campuses in Pakistan. A two-step structural equation modeling–artificial neural network (SEM-ANN) approach was employed to unveil the determinants of BDA and predict their levels of importance. The results obtained from the SEM showed that compatibility, IT infrastructure, management support, financial resources, security and privacy, and government guidelines were important determinants of BDA. Meanwhile, the ANN algorithm highlighted security and privacy as the most important predictors of BDA. The findings

can assist higher education commissions, big data facilitators, and university managements in providing safe and successful BDA in university campuses.

Benabbes, K., Housni, K., Hmedna, B., Zellou, A., & Mezouary, A. E. (2023). **Explore the influence of contextual characteristics on the learning understanding on LMS.** *Education and Information Technologies*, 28(12), 16823-16861. <https://doi.org/10.1007/s10639-023-11899-y>

Today, with the extension of learning management systems (LMSs) and the diversity of learners' needs for online learning, instructors have to be assisted to adapt their syllabus to meet learners' needs. Therefore, it is necessary to tailor course instruction to meet individual needs and determine how well they serve the learners using these online platforms. In this case, technological advances are used to enhance e-learning by personalizing the learners' learning styles. For instance, gathering traces of systemic and contextual knowledge about learners and their learning preferences contribute to the design of a meaningful learning experience for learners. Our study, based on a questionnaire and learning traces, focuses on predicting learners' styles. The Felder Silverman Learning Style Model (FSLSM), among the best models in technology-enhanced learning, was applied to run an unsupervised clustering technique to cluster learners by preference degree in terms of profile and context for sequential/global dimension of the FSLSM. This paper presents the attributes of the learning contextual data-driven model which can be auto-populated and the appropriate data source determined to fill this model. To reach our aim, the data gathered from three agronomy courses taught in winter 2018, 2019, and 2020 in an LMS at the Hassan II Institute of Agronomy and Veterinary Medicine was analyzed. This paper concludes with the results achieved during the application of the proposed method in which most learners expressed their preferences as strong, balanced, or moderate for global and sequential learning styles in a predefined learning context.

Boullier, D., & Faye, M. (2023, décembre 13). **Avec ChatGPT, « les enseignants ne peuvent pas s'appuyer sur un système qui n'a aucune éthique ».** Le Monde.fr. Consulté à l'adresse https://www.lemonde.fr/campus/article/2023/12/13/avec-chatgpt-les-enseignants-innovent-le-couteau-sous-la-gorge_6205524_4401467.html

Dominique Boullier, professeur de sociologie émérite à Sciences Po Paris, craint, dans une interview au « Monde », que l'utilisation des intelligences artificielles génératives dépouille les étudiants de leur esprit critique.

Carmichael, J. (2023). **Tour d'horizon de possibles utilisations des nouvelles technologies avec des élèves à besoins éducatifs particuliers.** *La nouvelle revue - Éducation et société inclusives*, 97(1), 237-254. <https://doi.org/10.3917/nresi.097.0237>

Tour d'horizon des différents types d'aides que peut apporter le numérique aux élèves à besoins éducatifs particuliers. Trois contextes d'utilisations sont étudiés du point de vue de l'élève d'abord : le numérique pour les apprentissages scolaires (depuis l'acquisition des apprentissages pré scolaires en cas de polyhandicap jusqu'à l'aide à la production de contenus aux élèves ayant des difficultés motrices ou sensorielles dans les classes supérieures), le numérique pour faciliter la prise d'autonomie au quotidien (pailler les difficultés de communication, d'organisation...) et le numérique pour les loisirs (démultiplication des possibilités...). L'auteure se positionne ensuite du côté de l'enseignant et montre comment le numérique facilite la production de supports adaptés autant qu'il aide à mieux comprendre les points forts et limites des élèves.

Chen, C.-Q., Wang, C.-Y., Shan, X.-F., Zhan, L., & Chen, S.-J. (2024). **An empirical investigation of reasons influencing pre-service teachers acceptance and rejection of immersive virtual reality usage.** *Teaching and Teacher Education*, 137, 104391. <https://doi.org/10.1016/j.tate.2023.104391>

During the deployment of the new technology, the behavioral intentions (BI) of pre-service teachers will play a significant role in its effectiveness. This study using the extended TAM model to explored pre-service teachers' BI to adopt Immersive Virtual Reality (IVR) in education. The participants of this study were 210 pre-service teachers who completed a self-reported questionnaire after experiencing IVR environment. Results indicated that subjective norms such as endorsement, recommendation, and sharing from mentors and peers had a significant impact on preservice teachers' intention to use IVR compared to other IVR acceptance studies.

Chen, H., Zhang, Y., Zhang, S., & Lyu, T. (2023). **Exploring the role of gamified information security education systems on information security awareness and protection behavioral intention.** *Education and Information Technologies*, 28(12), 15915-15948. <https://doi.org/10.1007/s10639-023-11771-z>

This study examines the effect of a gamified information security education system (ISES) on developing users' information security awareness and protection behavioral intention. We developed a research model based on affordance theory and means-end chain theory. Using a scenario-based experimental survey approach, we obtained 220 valid samples and then conducted partial-least-squares structural equation modeling (PLS-SEM) to test the model. The results showed that (1) the affordance of the gamified ISES can enhance users' information security awareness through both emotional and cognitive paths; (2) information security awareness positively influences information security protection behavioral intention, but physical presence and information security knowledge growth do not; and (3) interest-type curiosity positively moderates the relationship between enjoyment affordance and physical presence, and deprivation-type curiosity positively moderates the relationship between knowledge affordance and information security knowledge growth. This study identifies the emotional and cognitive stimulation paths of the gamified ISES to enhance users' information security awareness and protection behavior intention and reveals the moderating role of curiosity, which enriches the empirical research on the impact mechanism of the gamified education system in the field of information security. In addition, our research can provide practical and feasible suggestions for education departments and design units to reasonably apply and design gamified ISESSs. The influence of education level and other factors on information security protection behavioral intention can be further explored in future research.

Chugh, R., Turnbull, D., Cowling, M. A., Vanderburg, R., & Vanderburg, M. A. (2023). **Implementing educational technology in Higher Education Institutions: A review of technologies, stakeholder perceptions, frameworks and metrics.** *Education and Information Technologies*, 28(12), 16403-16429. <https://doi.org/10.1007/s10639-023-11846-x>

In a world driven by constant change and innovation, Higher Education Institutions (HEIs) are undergoing a rapid transformation, often driven by external factors such as emerging technologies. One of the key drivers affecting the design and development of educational delivery mechanisms in HEIs is the fast pace of educational technology

development which not only impacts an institution's technical capacity to infuse hardware and software solutions into existing learning infrastructure but also has implications for pedagogical practice, stakeholder acceptance of new technology, and HEI administrative structures. However, little is known about the implementation of contemporary educational technology in HEI environments, particularly as they relate to competing stakeholder perceptions of technology effectiveness in course delivery and knowledge acquisition. This review fills that gap by exploring the evidence and analyses of 46 empirical research studies focussing on technology implementation issues in a diverse range of institutional contexts, subject areas, technologies, and stakeholder profiles. This study found that the dynamic interplay of educational technology characteristics, stakeholder perceptions on the effectiveness of technology integration decisions, theoretical frameworks and models relevant to technology integration in pedagogical practices, and metrics to gauge post-implementation success are critical dimensions to creating viable pathways to effective educational technology implementation. To that end, this study proposes a framework to guide the development of sound implementation strategies that incorporates five dimensions: technology, stakeholder perceptions, academic discipline, success metrics, and theoretical frameworks. This study will benefit HEI decision-makers responsible for re-engineering complex course delivery systems to accommodate the infusion of new technologies and pedagogies in ways that will maximise their utility to students and faculty.

Coşkun, T. K., & Filiz, O. (2023). **The impact of twenty-first century skills on university students' robotic achievements.** *Education and Information Technologies*, 28(12), 16255-16283. <https://doi.org/10.1007/s10639-023-11850-1>

New approaches are frequently used to provide students with twenty-first century skills. In this direction, robots are quickly integrated in today's educational environments. However, studies in which robots are integrated into the curriculum as a pedagogical tool and examine its effect on twenty-first century skills are limited. This research examines the impact of robotics training on cooperation and flexibility, autonomous, cognitive and innovation skills which are found in the skills set of the twenty-first century. 54 university students selected by criterion sampling were recruited for these 14 weeks long explanatory sequential mixed-method study. The data were collected using the Scale of the Use of 21st Century Learner Skills, Robotics Applications Achievement Test and semi-structured interview form developed by the researchers. A paired sample t-test revealed that cooperation and flexibility, autonomous, cognitive and innovation skills were significantly improved. Moreover, linear regression analysis showed that all skills other than innovation were significant predictors of students' robotic achievement. The results reported in this study shed new light on robotic education.

Doo, M. Y. (2023). **An investigation of the social influence processes of flipped class students: An application of the extension of the technology acceptance model.** *Education and Information Technologies*, 28(12), 16593-16613. <https://doi.org/10.1007/s10639-023-11878-3>

Universities are increasingly incorporating flipped learning as an effective instructional approach. Given the popularity of flipped learning, numerous studies have examined the psychological aspects of students and learning achievement in flipped learning classes. However, little research has examined the social influence processes of students in flipped class. This study investigated the effects of social influence processes (i.e.,

subjective norm, image, and voluntariness) on students' perceived usefulness of and intention to register for flipped learning using the extension of technology acceptance model (TAM2). A total of 306 undergraduates who took flipped classes participated in this research. The primary research findings indicated that subjective norm influenced perceived usefulness and intention to register for flipped classes. However, image did not influence perceived usefulness or intention to register for flipped classes. Voluntariness affected perceived usefulness and influenced intention to register for flipped classes through perceived usefulness.

Elbawab, M., & Henriques, R. (2023). **Machine Learning applied to student attentiveness detection: Using emotional and non-emotional measures.** *Education and Information Technologies*, 28(12), 15717-15737. <https://doi.org/10.1007/s10639-023-11814-5>

Electronic learning (e-learning) is considered the new norm of learning. One of the significant drawbacks of e-learning in comparison to the traditional classroom is that teachers cannot monitor the students' attentiveness. Previous literature used physical facial features or emotional states in detecting attentiveness. Other studies proposed combining physical and emotional facial features; however, a mixed model that only used a webcam was not tested. The study objective is to develop a machine learning (ML) model that automatically estimates students' attentiveness during e-learning classes using only a webcam. The model would help in evaluating teaching methods for e-learning. This study collected videos from seven students. The webcam of personal computers is used to obtain a video, from which we build a feature set that characterizes a student's physical and emotional state based on their face. This characterization includes eye aspect ratio (EAR), Yawn aspect ratio (YAR), head pose, and emotional states.

Emiroğlu İlvan, T., & Ceylan, R. (2023). **Predicting preschool children's digital play addiction tendency during Covid-19 pandemic: Regarding the mother-child relationship, and child- and family-related factors.** *Education and Information Technologies*, 28(12), 15687-15716. <https://doi.org/10.1007/s10639-023-11802-9>

Previous research about children's digital play has predominantly focused on parental perspectives and parental mediation strategies. Although research on the effects of digital play on young children's development is plentiful, there is little evidence on young children's digital play addiction tendency. Herein, preschool children's digital play addiction tendency, and the mother-child relationship perceived by mothers, examining child- and family-related factors were explored. The present study also aimed to contribute to the current research pertaining to preschool-aged children's digital play addiction tendency through an examination of the mother-child relationship, and child- and family-related factors as potential predictors of children's digital play addiction tendency. A sample of 450 mothers of children between 4 and 6 years filled out two measures that identify the mother-child relationship and children's digital play addiction tendency. Correlational analyses revealed that in general, the mother-child relationship was significantly associated with children's digital play addiction tendency. Significant differences were evident in the relationship between numerous child- and family-related factors, and children's digital play addiction tendency, as well as the mother-child relationship. Hierarchical regression analyses indicated that a negative mother-child relationship, the children's digital play usage, and the mothers' digital device usage predicted the children's digital play addiction tendency.

Faye, M. (2023, décembre 12). **Des étudiants tentés par ChatGPT pour les « assister » dans leur mémoire : « Je suis assez décomplexée par rapport à l'intelligence artificielle ».** Le Monde.fr. Consulté à l'adresse https://www.lemonde.fr/campus/article/2023/12/12/des-etudiants-tentes-par-chatgpt-pour-les-assister-dans-leur-memoire-je-suis-assee-decomplexee-par-rapport-a-l-intelligence-artificielle_6205324_4401467.html

Depuis qu'OpenAI a lancé, en 2022, le robot conversationnel ChatGPT capable de générer du contenu écrit, certains étudiants l'utilisent pour rédiger leur mémoire universitaire. Une pratique que les établissements ont du mal à contrôler.

Gani, M. O., Ayyasamy, R. K., Sangodiah, A., & Fui, Y. T. (2023). **Bloom's Taxonomy-based exam question classification: The outcome of CNN and optimal pre-trained word embedding technique.** *Education and Information Technologies*, 28(12), 15893-15914. <https://doi.org/10.1007/s10639-023-11842-1>

The automated classification of examination questions based on Bloom's Taxonomy (BT) aims to assist the question setters so that high-quality question papers are produced. Most studies to automate this process adopted the machine learning approach, and only a few utilised the deep learning approach. The pre-trained contextual and non-contextual word embedding techniques effectively solved various natural language processing tasks. This study aims to identify the optimal pre-trained word embedding technique and propose a Convolutional Neural Network (CNN) model with the optimal word embedding technique. Therefore, non-contextual word embedding techniques: Word2vec, GloVe, and FastText, whereas contextualised embedding techniques: BERT, RoBERTa, and ELECTRA, were analysed in this study with two datasets. The experiment results showed that FastText is the most optimal technique in the first dataset, whereas RoBERTa is in the second dataset. This outcome of the first dataset differs from the text classification since contextual embedding generally outperforms non-contextual embedding. It could be due to the comparatively smaller size of the first dataset and the shorter length of the examination questions. Since RoBERTa is the most optimal word embedding technique in the second dataset, hence used along with CNN to build the model. This study used CNN instead of Recurrent Neural Networks (RNNs) since extracting relevant features is more important than the learning sequence from data in the context of examination question classification. The proposed CNN model achieved approximately 86% in both weighted F1-score and accuracy and outperformed all the models proposed by past studies, including RNNs. The proposed model's robustness could be assessed in the future using a more comprehensive dataset.

Garg, A., & Rajendran, R. (2023). **Investigating behavioral patterns of procrastinators in a Wiki-based activity.** *Education and Information Technologies*, 28(12), 16705-16721. <https://doi.org/10.1007/s10639-023-11893-4>

Procrastination is one of the issues affecting more than half of the student population and is known to impact them negatively. It is also one of the major reasons for failure and dropout. Therefore, several studies have been conducted in this domain to understand when and why students procrastinate. The existing studies use self-reported procrastination scales and/or digital traces of student interactions recorded in learning environments to identify procrastination behavior. The majority of the extant studies leverage individual tasks such as assignments submission, quizzes attempted, course materials assessed by a student, etc., to study such behavior. This paper uses group-based collaborative wiki activity to explore the procrastination behavior among the students. This study will help us explore student behavior in a group activity. The results

would help us investigate if the student's behavior changes when it comes to a group activity. The results would be beneficial for instructors, practitioners, and educational researchers to know if group activity could be utilized to overcome procrastination behavior.

Geçer, E., Bagci, H., & Atar, C. (2023). **"Nothing replaces meeting my students at class": Analysing academics' views regarding distance education.** *Education and Information Technologies*, 28(12), 16615-16636. <https://doi.org/10.1007/s10639-023-11887-2>

Distance education, also called distance learning, e-learning, and online learning, is a practice of teaching and learning in which teachers and learners are not in a closed class or room in person, but where education takes place through various new-media technologies and all parties (student-teacher, teacher-teacher, student-student) are able to communicate, interact and exchange information and emotions. Being on the agenda of educational science for a long time now and gaining further importance during COVID-19 lockdowns, both advantages (e.g., reducing social anxiety, and a flexible schedule) and disadvantages (lack of social interactivity, and miscommunication) of distance education are highly debated in the related literature. Therefore, this study, through a qualitative method (i.e., a case study design and semi-structured interviews), aims to analyse the opinions and experiences of academics regarding distance education and its applications. The participants consist of 36 lecturers working at 16 different Turkish universities selected by the purposeful sampling method (i.e., typical case sampling). The results suggest that the participants still have doubts about online distance education, and they mention both ups (ease of connection, and cost-effectiveness) and downs (lack of self-motivation, socialization, and the sense of isolation) of it. Nonetheless, none of the academics thinks distance education will replace an in-person learning environment in the near future. Thus, this study presents a general illustration of distance education activities through the views of Turkish academics and gives recommendations for future digital/distance/online learning activities and functionalities.

Gou, P. (2023). **Teaching english using mobile applications to improve academic performance and language proficiency of college students.** *Education and Information Technologies*, 28(12), 16935-16949. <https://doi.org/10.1007/s10639-023-11864-9>

The purpose of the study is to determine the effectiveness of mobile applications in conjunction with the students' online collaboration in the educational environment of Chinese colleges (the context of learning English). The students were selected from all those who study English in their educational programs. At the first stage, they passed a test on the level of language knowledge and among 423 students 140 were selected who had a level of B2 and below. Then they were divided into control and experimental groups. Each had 70 people. The experimental group was trained using the following mobile applications: Busuu, Lingoda, LinguaLeo, BBC Learning English. The results showed that the participants in the experimental group scored higher on the final test (74.71) than the control group participants (65.9). It suggests that mobile learning technologies can improve student achievement. The preliminary test determined the level of knowledge of the experimental group students in this way: 85% of students know English at the B2 level, 14% - B1, and 1% - A2. These figures improved significantly in the second test: the number of students who reached the C2 level was 7%, C1-79%, and 14% of all students remained with the B2 level. For the control group students, these indicators remained unchanged. Most of the students found this format of education suitable and interesting

for online collaboration. These results may be useful for teaching practice, because they provide evidence base with the experimental research for the introduction of mobile technologies in the modern educational process. It solves the problem of using the certain mobile applications (Busuu, Lingoda, LinguaLeo, BBC Learning English) that have not been explored before.

Guillén-Gámez, F. D., Ruiz-Palmero, J., & García, M. G. (2023). **Digital competence of teachers in the use of ICT for research work: development of an instrument from a PLS-SEM approach.** *Education and Information Technologies*, 28(12), 16509-16529. <https://doi.org/10.1007/s10639-023-11895-2>

All spheres of our life are being affected using technology, particularly its integration in the research processes carried out by teachers. The success of the integration of specific digital resources in research work can be affected by several factors, such as: digital skills for finding information, managing it, analyzing it, and communicating results; digital flow; anxiety in the use of ICT; digital ethics; quality of digital resources; and finally, the behavioral intention to integrate ICT. The purpose of this study is to examine the factors that influence the integration of ICT in the research process of the Higher Education teacher, and the relation between them. An online survey was used to collect data, and 1740 participants. This study used a causal model through partial least squares structural equations modeling (PLS-SEM). With this, the hypotheses established between the integration of ICT and its possible incident factors were verified. The findings revealed a significant influence path from factor integration to digital skills, ethics, flow digital, and behavior intention. Although, resource quality and ICT anxiety had significant effects on the causal model, they did not have a large impact on teachers' integration of digital resources. The total of these factors corresponded to 48.20% of the variance in the integration of the researcher of the specific digital resources to be used in the research process. These results confirm that this model is effective in explaining the technological integration of teachers to use ICT in research work.

Huang, L., Doleck, T., Chen, B., Huang, X., Tan, C., Lajoie, S. P., & Wang, M. (2023). **Multimodal learning analytics for assessing teachers' self-regulated learning in planning technology-integrated lessons in a computer-based environment.** *Education and Information Technologies*, 28(12), 15823-15843. <https://doi.org/10.1007/s10639-023-11804-z>

Teachers' self-regulated learning (SRL) plays a crucial role in developing technological pedagogical content knowledge (TPACK), a complex professional skill. It is crucial to identify teachers' SRL activities that may lead to favorable TPACK. Previous studies have focused on the analysis of individual data sources from self-reported surveys or log files, which are insufficient to capture all SRL activities in the TPACK context. While multimodal learning analytics (MMLA) has the potential to improve SRL measurement, it remains unknown how multimodal data collected from different sources can be combined to identify salient features of SRL activities and examine how TPACK outcomes can be predicted by SRL activities identified from multimodal data. This study combined multimodal data from computer logs and think-aloud data to analyze teachers' SRL activities in designing a technology-integrated lesson. We identified the salient features of SRL from the combined data and explored how identified SRL activities might predict TPACK outcomes reflected in teacher-generated lesson plans. The results of random forest regression analysis show that three SRL activities from the logs and two from the think-aloud data formed the best combination that explained a significant proportion of

variances in TPACK performance. The impact of MMLA in SRL measurement and the implication of this study are discussed.

Huang, T. (2023). **Factors affecting students' online courses learning behaviors.** *Education and Information Technologies*, 28(12), 16485-16507. <https://doi.org/10.1007/s10639-023-11882-7>

Online course learning is an important part of higher education curriculum. However, the factors influencing college students' online course learning behavior are poorly understood. The purpose of this study is to analyze the factors affecting college students' online course learning behavior. This study integrated the Information System Success Model, the Technology Acceptance Model, and Self-efficacy Theory to construct an online course learning acceptance model. A total of 308 college students participated from China filled out the questionnaire, and 18 of them also participated in a semi-structured interview. The structural equation model was used to analyze the research data. The empirical analysis showed that self-efficacy has a positive impact on perceived usefulness and perceived ease-of-use; Perceived usefulness, attitude, system quality, and information quality affect users' behavioral intentions positively; Perceived ease of use has a positive effect on users' attitudes and perceived usefulness; and perceived usefulness has a direct effect on users' attitudes; Furthermore, behavioral intention can predict the actual use of online courses by college students. In addition, we will discuss these results and provide recommendations. This study provides a theoretical basis for the study of online course learning acceptance and extends the technology acceptance model. The research can provide inspiration for the design of online course learning and the decision-making of management institutions, and contribute to the sustainable development of education.

Jeon, J., & Lee, S. (2023). **Large language models in education: A focus on the complementary relationship between human teachers and ChatGPT.** *Education and Information Technologies*, 28(12), 15873-15892. <https://doi.org/10.1007/s10639-023-11834-1>

Artificial Intelligence (AI) is developing in a manner that blurs the boundaries between specific areas of application and expands its capability to be used in a wide range of applications. The public release of ChatGPT, a generative AI chatbot powered by a large language model (LLM), represents a significant step forward in this direction. Accordingly, professionals predict that this technology will affect education, including the role of teachers. However, despite some assumptions regarding its influence on education, how teachers may actually use the technology and the nature of its relationship with teachers remain under-investigated. Thus, in this study, the relationship between ChatGPT and teachers was explored with a particular focus on identifying the complementary roles of each in education. Eleven language teachers were asked to use ChatGPT for their instruction during a period of two weeks. They then participated in individual interviews regarding their experiences and provided interaction logs produced during their use of the technology. Through qualitative analysis of the data, four ChatGPT roles (interlocutor, content provider, teaching assistant, and evaluator) and three teacher roles (orchestrating different resources with quality pedagogical decisions, making students active investigators, and raising AI ethical awareness) were identified. Based on the findings, an in-depth discussion of teacher-AI collaboration is presented, highlighting the importance of teachers' pedagogical expertise when using AI tools.

Implications regarding the future use of LLM-powered chatbots in education are also provided.

Jin, Y., & Tiejun, Z. (2023). **The application of Metaverse XiRang game in the mixed teaching of art and Design in Colleges and Universities.** *Education and Information Technologies*, 28(12), 15625-15655. <https://doi.org/10.1007/s10639-023-11844-z>

Metaverse is a digital world created by human beings according to the physical world. Its deep integration of virtual and real features has created a new opportunity for the innovative development of game teaching in art design courses in colleges and universities under the epidemic situation. In the field of art design, the investigation and research on the learning mode of its courses show that traditional teaching can hardly bring good experience to students, which is manifested in the following aspects: the lack of "presence" in online learning caused by epidemic situation, resulting in weak display of teaching effect, and unreasonable organization of group learning in the course. Therefore, in view of these problems, this paper puts forward three paths about the innovative application of art design courses by using the teaching strategy of Xirang games, namely, interaction on the same screen and presence experience, interaction between real individuals and virtual images, and division of cooperative learning interest groups. At last, by using the research methods of semi-structured interview, eye movement experiment and scale, it is concluded that virtual game learning plays an active role in promoting the teaching reform in colleges and universities, stimulating learners to develop higher-order thinking abilities such as creativity and criticism, solving the problems of traditional teaching, and promoting learners to move from "outside the teaching scene" to "inside the teaching scene" and from "outside the knowledge" to "inside the knowledge", which leads to a new teaching direction for the future teaching mode.

Landa, E., Zhu, C., Sesabo, J., & Machumu, H. (2023). **Leader support and the integration of innovative teaching-learning technologies: the mediating role of technological level of knowledge.** *Education and Information Technologies*, 28(12), 15523-15541. <https://doi.org/10.1007/s10639-023-11776-8>

While there have been recent trends in investigating the role of leader support on technological integration, such research in educational settings is rare. Moreover, the attention paid towards investigating leadership support for the integration of technological changes in education has not led to the explicit specification of what support teachers would entail from their mid-level academic leaders regarding the current challenge of ITLTs-low uptake in developing countries. Therefore, the present study investigates the influence of leader support and integration of ITLTs among academicians of the selected Tanzanian universities, mediating the effect of the Technological Knowledge Level (TKL). A questionnaire was used as the main collection tool to collect data from 192 academic staff. The study used Structural Equation Modeling (SEM) to analyse the extent to which leader support influences the integration of ITLTs, mediated by the TKL when controlled for demographic factors such as age, gender, and ITLTs prior knowledge. The yielded results reveal that the integration of ITLTs among academics is positively influenced by leader support; the higher the support the academics receive from their leaders, the better the integration of ITLTs. Furthermore, the perceived leader support is also predictive of academicians' technological knowledge level; however, no significant effect of technological knowledge level was found when mediating the two variables, indicating that leaders support strongly influenced the

integration of ITLTs. This study, therefore, proves the inclusive findings and extends the research on the potential of mid-level academic leadership to bring about educational change in higher learning and thus, enhance the integration of ITLTs.

Lee, J.-C., & Xiong, L. (2023). **Exploring learners' continuous usage decisions regarding mobile-assisted language learning applications: A social support theory perspective.** *Education and Information Technologies*, 28(12), 16743-16769. <https://doi.org/10.1007/s10639-023-11884-5>

Mobile-assisted language learning (MALL) applications (apps) can provide users with personalized learning content to meet their learning needs. Besides, from the learner perspective, the apps can be regarded as 'social' individuals, like anthropomorphic instructors who offer social support to help them with language learning. However, the current literature lacks an investigation of the dominant technological feature of MALL, that is, personalization function influencing users' assessments of social support and trust towards MALL and subsequently determining their continuous usage intention toward MALL. To address this gap, using stimulus-organism-response theory and social support theory, this study develops a research model by investigating how personalization (stimulus) affects social support in terms of information, emotional and appraisal support and trust (organism), which eventually influence users' continuance intentions toward MALL apps (response). A total of 455 valid questionnaires were collected, and the data were analysed by the partial least squares (PLS) method. The results showed that personalization increases users' information, emotional and appraisal support. Information, emotional and appraisal support enhance user's trust when using MALL. Users' trust fosters their continuous usage of MALL. Moreover, the mediation analysis revealed that information, emotional support and appraisal support fully mediate the relationship between personalization and trust. Trust acts as a full mediator between information, emotional and appraisal support and continuance usage intention. This study provides theoretical contributions to the existing literature and practical suggestions for practitioners to develop MALL apps. Finally, research limitations and future research directions are also discussed.

Lestari, D. P., Supahar, Paidi, Suwarjo, & Herianto. (2023). **Effect of science virtual laboratory combination with demonstration methods on lower-secondary school students' scientific literacy ability in a science course.** *Education and Information Technologies*, 28(12), 16153-16175. <https://doi.org/10.1007/s10639-023-11857-8>

Virtual laboratory is computer software that has the ability to perform mathematical modeling of computer equipment presented in the form of simulations. Virtual laboratory is not a substitute for real laboratory, but are used to complement and improve the weaknesses of real laboratory. This study aims to determine the effect of virtual laboratory combination with demonstration methods on lower-secondary school students' scientific literacy ability in a science course. The design of this research is quasi-experimental. The sample in this study was 102 students (12-14 years old) in a lower-secondary school in the city of Yogyakarta, Indonesia, used as experiment 1 group 1 ($n = 34$), experiment 2 group ($n = 34$), and control group ($n = 34$). The three groups (experiment 1, experiment 2, and control) were tested with pretest and posttest. Experiment 1 group used virtual laboratory combination with demonstration methods, experiment 2 group used only virtual laboratory, and the control group used only a demonstration method. Scientific literacy ability was measured using multiple-choice tests before and after treatment. Statistical tests on mixed methods ANOVA were used to determine how effective the use of virtual

laboratory combination with demonstration methods was in improving scientific literacy ability. The research result based tests of Within-Subjects Effects showed that there is a difference between the pretest-posttest scores of scientific literacy ability ($F=10.50$; $p<0.05$) in each group. The results based pairwise comparison show that the significance value is <0.05 , and there is a significant increase in the pretest-posttest scores of scientific literacy ability in every group. The result of effect size (partial eta squared) shows that the experiment 1 group to increase scientific literacy ability is 84.5%; experiment 2 group is 78.5%; control group is 74.3%. So, it can be concluded that experiment 1 group (virtual laboratory combination with demonstration methods) provides the most effective contribution to improving scientific literacy ability when compared to experiment 2 group (virtual laboratory only) and control group (demonstration methods only).

Li, X., & Zhu, W. (2023). **The influence factors of students' transferable skills development in Blended-Project-Based Learning environment: a new 3P model.** *Education and Information Technologies*, 28(12), 16561-16591. <https://doi.org/10.1007/s10639-023-11892-5>

Based on the existing 3P model, this paper constructed a new 3P model under the blended-project-based learning (BPBL) environment, used the course teaching data to verify this model, and revealed the potential factors that affect the learning process and learning outcomes. The results showed that the presage variables of academic motivation and course design positively affect the process variables of blended learning experience and learning engagement, respectively. The presage variable of academic motivation and the process variable of learning engagement positively affect the product variable of transferable skill development, respectively. In blended-project-based learning, it is necessary to enhance students' sense of experience and engagement by improving their academic motivation and optimizing course design, thereby promoting the development of students' transferable skills. This study has certain implications for optimizing blended-project-based teaching and promoting the development of students' team work ability, demonstration skills, management skills, and other transferable abilities.

Li, Y., Jiang, Q., Xiong, W., & Zhao, W. (2023). **Investigating behavior patterns of students during online self-directed learning through process mining.** *Education and Information Technologies*, 28(12), 15765-15787. <https://doi.org/10.1007/s10639-023-11830-5>

One of the recognized ways to enhance teaching and learning is having insights into the behavior patterns of students. Studies that explore behavior patterns in online self-directed learning (OSDL) are scant though. In addition, the focus is lacking on how high-achieving (HA) students' behavior patterns affect the academic performance of low-achieving (LA) students. To fill these research gaps, this study investigates (1) how the behavior patterns in OSDL vary between HA and LA students and (2) how HA students' behavior patterns affect LA students' academic performance. We used three perspectives of learning achievement, engagement, and cognitive load to examine academic performance. By utilizing process mining, we reviewed the log data of 71 college students on the Moodle platform and designed a pretest-posttest test without a control group. Results show obvious variances in the behavior patterns between HA and LA students. In particular, HA students performed more OSDL behaviors; their behavior patterns were more in line with self-directed logic. By contrast, LA students exhibited unmethodical behavior patterns; they were unable to process course content in depth.

An instructional intervention was created with HA students' behavior patterns as basis. The engagement of LA students increased, and their cognitive load was reduced after the instructional intervention. However, their learning achievement did not increase substantially. The interview results were consistent with the quantitative data. These findings indicate that the behavior patterns of HA students can shed light on how to guide the OSDL of LA students. This study also provides fresh methodological perspectives for assessing OSDL.

Liu, C., Liu, H., & Tan, Z. (2023). **Choosing optimal means of knowledge visualization based on eye tracking for online education.** *Education and Information Technologies*, 28(12), 15845-15872. <https://doi.org/10.1007/s10639-023-11815-4>

In online education, the appropriate choice of means of knowledge visualization can reduce cognitive load and improve cognitive efficiency. However, no universal basis for selection can cause confusion in the pedagogical context. This study used the revised Bloom's taxonomy to combine the types of knowledge with cognitive goals. We used a course on marketing research as an example to summarize the choices for visualizing factual knowledge (FK), conceptual knowledge (CK), procedural knowledge (PK), and metacognitive knowledge (MK) through four experiments. Visualized cognitive stages were used to determine the cognitive efficiencies of visualization for different knowledge types. In this stage, eye tracking is used for collecting eye movement indicators to measure cognitive load. The cognitive goals stage is used to get cognitive goals of the means of knowledge visualization. Combining the two stages, we get the conclusions as follows: Teachers and students can mostly benefit from presenting FK and CK points via mind maps. Using mind maps to teach FK online could be indirectly beneficial for improving students' creativity. Concept maps may be chosen for this point if the linked knowledge points are PK and the achievement of the analytical objective is emphasized in the student's knowledge points. The flowchart can be used to display PK, while timelines could be utilized if the PK point is to be presented in a temporal dimension. Teachers should choose the curve area chart to display MK. A pie chart might be chosen and added more instructions. The findings suggest that mind maps are very effective as a means of knowledge visualization in online education. In the meantime, it suggests that overly simplistic graphs increase cognitive load, while it also raises the possibility that redundant information in the text may increase cognitive load.

Liu, K., Yao, J., Tao, D., & Yang, T. (2023). **Influence of Individual-technology-task-environment Fit on University Student Online Learning Performance: The Mediating Role of Behavioral, Emotional, and Cognitive Engagement.** *Education and Information Technologies*, 28(12), 15949-15968. <https://doi.org/10.1007/s10639-023-11833-2>

The present study aimed to examine whether and to what extent university student online learning performance was influenced by individual-technology fit (ITF), task-technology fit (TTF), environment-technology fit (ETF), and whether the influence was mediated by their behavioral, emotional, and cognitive engagement. A theoretical research model was developed by integrating the extended TTF theory and student engagement framework. The validity of the model was assessed using a partial least squares structural equation modeling approach based on data collected from 810 university students. Student learning performance was influenced by TTF ($\beta = 0.25$, $p < 0.001$), behavioral engagement ($\beta = 0.25$, $p < 0.001$), and emotional engagement ($\beta = 0.27$, $p < 0.001$). Behavioral engagement was affected by TTF ($\beta = 0.31$, $p < 0.001$) and ITF ($\beta = 0.41$, $p < 0.001$). TTF, ITF, and ETF were observed as significant antecedents of emotional

engagement ($\beta = 0.49$, $p < 0.001$; $\beta = 0.19$, $p < 0.001$; $\beta = 0.12$, $p = 0.001$, respectively) and cognitive engagement ($\beta = 0.28$, $p < 0.001$; $\beta = 0.34$, $p < 0.001$; $\beta = 0.16$, $p < 0.001$, respectively). Behavioral and emotional engagement served as mediators between fit variables and learning performance. We suggest the need for an extension to the TTF theory by introducing ITF and ETF dimensions and demonstrate the important role of these fit variables in facilitating student engagement and learning performance. Online education practitioners should carefully consider the fit between the individual, task, environment, and technology to facilitate student learning outcomes.

Liu, L., Luo, Y., & Yin, N. (2023). **Does Review Replying Matter? Influence of online course eWOM on learning satisfaction.** *Education and Information Technologies*, 28(12), 15469-15496. <https://doi.org/10.1007/s10639-023-11680-1>

Despite emerging use of review replying function in online course eWOM, little attention has been paid to its role. The lack of theoretical researches and contradictory views have caused great inconsistencies in practice. The research designed two studies to explore the impact of review replying. Based on real data crawled, study 1 explored the relationship between review replying and learners' satisfaction. Based on social presence theory, study 2 analyzed the mediating effects of social presence and perceived learning between review replies and learning satisfaction, as well as the moderating effects of learners' participation degree. The two studies provide empirical evidence that review replying could increase learning perception and learning satisfaction by enhancing learners' social presence, no matter they are commenters (posters and repliers) or divers. Qualitative features (what people say) instead of numeric features (how much people say) of review replying determine how learners feel about online courses. The findings of research suggest online course providers to adopt review replying function as a new interactive tool, and encourage learners to engage in vivid and emotionally charged eWOM communication.

Liu, Y.-C., Wang, W.-T., & Huang, W.-H. (2023). **The effects of game quality and cognitive loads on students' learning performance in mobile game-based learning contexts: The case of system analysis education.** *Education and Information Technologies*, 28(12), 16285-16310. <https://doi.org/10.1007/s10639-023-11856-9>

Prior research has demonstrated the advantages of applying mobile game-based learning (MGBL) applications to supporting students' learning. However, studies that specifically examine the effects of game quality and different types of cognitive loads on learning effectiveness in MGBL contexts are scarce. Therefore, this study aims to address this research gap by developing and validating a research model of cognitive loads and learning performance in MGBL contexts. Data collected from 130 college students who were asked to use an MGBL application developed specifically for this study were analyzed to validate the research model. The results indicate that both game quality of MGBL applications and extraneous cognitive load of the users of the MGBL application have significant effects on their perceived and actual learning effectiveness, while their germane cognitive load significantly influences their perceived learning effectiveness only. Implications for theory and for practice of the research results are discussed subsequently.

Lu, H.-P., & Wang, J.-C. (2023). **Exploring the effects of sudden institutional coercive pressure on digital transformation in colleges from teachers' perspective.** *Education and*

Information Technologies, 28(12), 15991-16015. <https://doi.org/10.1007/s10639-023-11781-x>

While past technology acceptance studies focus on organization readiness, little is known about the acceptance behavior under sudden institutional coercive pressure. Against COVID-19 and distance teaching, this study explores the relationship between digital transformation readiness, adoption intention, digital transformation success, and sudden institutional coercive pressure based on the readiness research model and institutional theory. Surveying 233 college teachers who participated in distance teaching under COVID-19 in Taiwan for model and hypothesis validation using the partial least square structural equation modeling (PLS-SEM) approach. This result shows that (1) Teacher, social/public, and content readiness are crucial to distance teaching. Individuals, organizational resources, and external stakeholders influence distance teaching success and adoption; and (2) Sudden institutional coercive pressure has a negative moderated effect on teachers' readiness and adoption intention. When teachers are unprepared to implement distance teaching, this unanticipated epidemic and sudden institutional coercive pressure will accelerate and enhance their intention. The study provides government, educational policymakers, and teachers with a better understanding of distance teaching during the COVID-19 pandemic.

Ma, Q., Duan, Y., & Yao, Z. (2023). **Meta-analysis of the impact of geospatial technologies on learning outcomes.** Education and Information Technologies, 28(12), 15739-15764. <https://doi.org/10.1007/s10639-023-11712-w>

Many scholars have been using geospatial technologies (GST) to improve students' learning outcomes in the Web 2.0 age. However, many studies focus on the effectiveness of GST on cognitive domain of learning outcomes, which poses challenges to GST efficacy evaluation. This study aims to examine the effectiveness of GST on students' learning outcomes and identify potential moderators through meta-analysis. The results indicate that GST has a positive effect on students' learning outcomes on a medium scale, while its effects on the cognitive domain were more significant than the non-cognitive domain. Moreover, we identified variable factors such as participant's country/region, education level, intervention duration, and type of geospatial technology to analyze whether the four moderator variables had an impact on the effectiveness of GST. The moderator analysis results show that GST's effectiveness on students' learning outcomes depended on participants' country/region, intervention duration and type of geospatial technology. This means that participants' country/region, intervention duration and type of geospatial technology had a significant effect on GST's effectiveness, while students' education level did not have a major impact. Thus, geography educators should promote a pedagogical model with GST, and take into account the individuals' country/region, while setting a reasonable intervention time of using GST in teaching. Teachers should also be flexible in using different types of geospatial technologies to achieve positive students' learning outcomes.

Macedo-Rouet, M., Pérez, A., Potocki, A., & Rouet, J.-F. (2022). **Les adolescents face aux défis de l'information numérique : une intervention pour promouvoir l'évaluation critique des sources.** Education & Formation, (e-317), 69-79. Consulté à l'adresse <https://hal.science/hal-03814671>

Evaluating online information sources is an advanced reading skill that many teenagers have not mastered, or not completely, and which requires explicit training. Our study

aimed to promote the ability of ninth-graders to read and critically interpret information from different types of sources, particularly in digital environments. Three workshops on key dimensions of sources (author's competence, author's intentions and type of medium) were conducted with 146 middle school students from four socially heterogeneous middle schools. The results show that, compared with a control group, the students who took part in the intervention evaluated unreliable Internet links more critically, and based their choice of web documents to answer a question on more source criteria. Adolescents are not devoid of evaluation skills, but these workshops enable them to formalize a critical approach based on their pre-existing knowledge and experience as Internet users.

Makhanova, Z., Arynbayeva, R., & Pavlovskaya, O. (2023). **The linguocultural phenomenon of internet resources: the effectiveness of using podcasting in the russian language learning.** *Education and Information Technologies*, 28(12), 16333-16348. <https://doi.org/10.1007/s10639-023-11820-7>

The purpose of the research is to study the effectiveness of the methodological approach based on the use of podcasts in the study of Russian as a foreign language. The study involved 110 students studying Russian randomly selected from a representative sample. They were asked to listen and watch podcasts in and out of class twice a week for 4.5 months. At the end of the study a control test showed that the students' language proficiency had increased, their grammar, writing, listening, pronunciation, and speaking skills had significantly improved. A pre- and post-test was conducted in the form of an examination with the participation of teachers, and the results were compared with a Student's t-test to determine if there were statistically significant differences in academic achievement. After the pre-test, students received a podcast training intervention based on the author's method. The results obtained demonstrated a statistically significant increase in the qualification level of the Russian language of the participants. An unstructured follow-up survey was also conducted regarding student assessment of classes using podcasts. A variety of assessments and explanations of the results obtained were obtained, which can be used in pedagogical practice. It was found that podcasts teach students to work on their own speech, helping to overcome the language barrier and increasing motivation to learn Russian as a foreign language. Thus, the introduction of podcasts in the study of the Russian language can solve such methodological problems: the formation of the ability to understand foreign speech by ear, improving pronunciation, expanding vocabulary, fostering the grammatical skills.

Mascret, N., Marlin, K., Laisney, P., Castéra, J., & Brandt-Pomares, P. (2023). **Teachers' acceptance of an open-source, collaborative, free m-learning app: The predictive role of teachers' self-approach goals.** *Education and Information Technologies*, 28(12), 16373-16401. <https://doi.org/10.1007/s10639-023-11832-3>

Based on the Technology Acceptance Model (TAM), the aims of the present cross-sectional study were i) to investigate acceptance by teachers of an open-source, collaborative, free m-learning app, named Artefac, ii) to examine whether teachers' self-approach goals (i.e., the motivation to teach more effectively than before) may be a relevant external variable to include in the TAM, and iii) to investigate potential differences of acceptance between school subjects (humanities and social science teachers vs. science teachers), status (in-service teachers vs. pre-service teachers), and contexts (teachers in schools classified as difficult vs. teachers in schools not so classified).

A total of 419 French teachers (277 women, 142 men) took part in the present correlational survey. After reading a text with pictures presenting an open-source, collaborative, free m-learning app, named Artefac, the participants filled out a self-reported questionnaire about its acceptance before use, assessing perceived usefulness for teaching, perceived ease of use, perceived enjoyment, and intention to use. Teachers' self-approach goals were also assessed. One-sample t-tests and structural equation modeling were used to analyze the data. The results showed that Artefac was rather well accepted by teachers (with middle to strong effect sizes), whatever their school subject, their status, and their teaching context. The results also highlighted that teachers' self-approach goals positively predicted perceived enjoyment and perceived ease of use but did not predict perceived usefulness for teaching, indicating that the more teachers wanted to increase their teaching skills, the more they found Artefac easy to use and fun to use.

Mugruza-Vassallo, C. A. (2023). **A “fractal” expander-compressor-supplier formative research method on array processing.** *Education and Information Technologies*, 28(12), 16349-16372. <https://doi.org/10.1007/s10639-023-11837-y>

In the present research the typical triangle on formative research was extended to a double triangle for an overall career programme (here expander/ compressor) and funnel proposal was explored in a single course (as a “fractal” method). Array processing and ElectroEncephaloGram (EEG) techniques have been incorporated into a Digital Signal Processing (DSP) course and research projects. The present research question was: is it possible to insert array sensing on formative research in an undergraduate course of DSP? From over eight years, two semesters with different homework loads (homogeneous triangle vs expander-compressor-supplier distributions) were analysed in detail within the DSP evaluations and students chose between experimental applied analysis and a formative research project. Results showed that cognitive load was influenced positively in the expander-compressor-supplier distribution, showing that an increase of the efficiency undertook more undergraduate research on array processing and the decrease of the number of formative applied projects. Over a longer term (48 months) students undertook more undergraduate research works on array processing and DSP techniques.

Müller, W., & Leyer, M. (2023). **Understanding intention and use of digital elements in higher education teaching.** *Education and Information Technologies*, 28(12), 15571-15597. <https://doi.org/10.1007/s10639-023-11798-2>

Digital elements are being increasingly used in higher education teaching, but the intention and their actual use vary depending on the lecturers. We used the reasoned action approach to understand the beliefs and intentions behind the use of digital elements in this context. We conducted a quantitative survey in which university lecturers shared their intention concerning the use of digital learning elements and indicated their actual use. The results confirm the influence of attitude, perceived norms, and perceived behavioral control on the intention to use digital learning elements. However, we also identified an intention–behavior gap: Only one-time effort to become familiar with digital elements has a significant impact on actual usage. We conclude that, above all, teachers must first be given the opportunity to become familiar with digital learning elements to be able to use them effectively. Understanding why such an intention–behavior gap exists should be the aim of future studies.

Önder, A., & Akçapınar, G. (2023). **Investigating the effect of prompts on learners' academic help-seeking behaviours on the basis of learning analytics.** *Education and Information Technologies*, 28(12), 16909-16934. <https://doi.org/10.1007/s10639-023-11872-9>

The effective use of self-regulation strategies has been considered significant in online learning environments. It is known that learners must be supported in this context. Academic help-seeking (AHS), as one of the main self-regulated learning strategies, is associated with academic success. However, learners may avoid seeking help for cognitive, affective or social reasons. They might also be undecided about where to start when they need help. Therefore, external interventions are necessary to support learners in developing effective AHS skills. The purpose of this research was to examine the effect of prompts on fostering learners' online AHS behaviour using learning analytics approaches. The research was conducted in an experimental design and included two separate experimental studies. The prompts used in the first and second studies focused on different factors that disrupted effective AHS processes. Learning analytics indicators were used as a proxy to understand the participants' AHS behaviours in an online learning environment. The findings supported the idea that the prompts invited and guided students to relevant sources of help and fostered AHS behaviours in the online learning environment. Moreover, they contributed to the successful completion of learning tasks by up to 25%. The findings were discussed on the basis of the relevant literature, and suggestions for further research were provided.

Paul, C. D., Thomas, E. V., & Jimenez, E. (2023). **A survey of wireless technology use to facilitate social connectedness for individuals with intellectual and developmental disabilities.** *Education and Information Technologies*, 28(12), 15671-15686. <https://doi.org/10.1007/s10639-023-11794-6>

The purpose of the present study was to explore what wireless and wearable technologies individuals with intellectual and developmental disabilities (IDD) use to connect socially, how these technologies are used to facilitate social connectedness, what barriers or challenges exist when using technology to connect socially, and what supports or accessibility features exist to support this goal. An online survey was sent to individuals with IDD, families of individuals with IDD, and service providers who work with this population. Our survey of 51 individuals with IDD, 27 family members, and 20 disability service providers showed that all stakeholders perceived wireless technology as important for supporting social connectedness among individuals with IDD. Across groups, respondents reported that social connectedness among individuals with IDD was most often supported through the use of cell phones and tablets. Respondents identified support from family members and other stakeholders as important facilitators that may enhance the use of wireless technology for social connectedness among individuals with IDD. The most common barriers to the use of wireless technology for social connectedness for individuals with IDD were financial barriers. Together, these findings yield important implications for individuals with IDD, family members, providers, tech developers, and researchers.

Polyzi, P., & Moussiades, L. (2023). **An artificial vocabulary learning assistant.** *Education and Information Technologies*, 28(12), 16431-16455. <https://doi.org/10.1007/s10639-023-11810-9>

This article presents an online application developed to improve vocabulary learning through games, quizzes and interaction with a chatbot. The application was tested

experimentally on a sample of twenty proficiency-level students divided into two groups and tested on English vocabulary learning in two stages. In the first stage, the first group of students was the control group, who studied a vocabulary section from the book. The second group was the experimental group, which studied using the proposed application. In the second stage, the two groups were reversed and asked to learn the vocabulary of the second unit. According to experiment results, using the particular application improved students' performance, as, in both tests, students of the experimental group outperformed those of the control group. In addition, the analysis of a questionnaire answered by all students confirmed that most prefer this application over traditional learning methods as they consider it quite enjoyable and easy while agreeing that it helped them learn vocabulary. The application is available on the website: <http://users.sch.gr/polizpan>.

Saltos-Rivas, R., Novoa-Hernández, P., & Rodríguez, R. S. (2023). **Understanding university teachers' digital competencies: a systematic mapping study.** *Education and Information Technologies*, 28(12), 16771-16822. <https://doi.org/10.1007/s10639-023-11669-w>

Being digitally competent is an imperative requirement for the 21st century university teacher, a fact recognized by both the literature and policymakers. Although this topic has been addressed in different reviews and critical studies recently, none of them have systematically and explicitly addressed the factors that explain, or are explained by, the digital competencies of university teachers. Examples of these factors include, among others, demographic, professional and psychological aspects of university teachers, as well as very specific digital competencies. The present study seeks to close this gap through a systematic mapping of the literature published until 2021 in journals indexed by Scopus and Web of Science (WOS). Based on the selection of 53 primary studies, we characterized the literature and summarized the main results reported so far. The analysis allowed us to conclude the following: 1) there is a growing number of contributions aimed at understanding the acquisition of digital competencies, especially from external factors; 2) European, and more specifically Spanish, university teachers from multiple disciplines are the most studied population; 3) most studies adopted quantitative approaches to explain but not prove causality; 4) there is a great heterogeneity of relationships and results that explain the digital competencies of university professors. The implications of these results are discussed with a view to identifying the gaps that provide scope for future research.

Seckel, M. J., Salinas, C., Font, V., & Sala-Sebastià, G. (2023). **Guidelines to develop computational thinking using the Bee-bot robot from the literature.** *Education and Information Technologies*, 28(12), 16127-16151. <https://doi.org/10.1007/s10639-023-11843-0>

The recognition that the development of Computational Thinking (CT) has been achieved in the educational systems of different countries implies, in some cases, the challenge of integrating its development into mathematics lessons. Although various proposals address the development of CT in the early years of schooling, educational robotics emerges as an alternative. The Bee-Bot robot has been recognized as an appropriate resource for the development of this type of thinking at an early age. For carrying out this qualitative study 25 articles were selected, based on a systematic research literature review, and analyzed to provide didactic orientation for the integration of CT in mathematics lessons with the use of the Bee-Bot robot (or similar). For this purpose, a thematic analysis method was applied to the selected research articles,

focusing on the didactic explanations and suggestions for using educational robots to develop computational thinking. The themes used to analyze the data are according to the six dimensions (epistemic, cognitive, interactional, mediational, affective and ecological) of the didactic suitability proposed by the Ontosemiotic approach. The analysis allowed us to classify twelve didactic orientations according to the dimensions. Four of the twelve orientations refer to the epistemic dimension; three to the cognitive dimension; two are related to the interactional dimension; one to the mediational dimension, one to the affective dimension and another to the ecological dimension.

Sercemeli, M., & Baydas Onlu, O. (2023). **Prediction of students' learning outcomes by various variables in gamified online accounting courses.** *Education and Information Technologies*, 28(12), 16979-17007. <https://doi.org/10.1007/s10639-023-11873-8>

The study aims to examine student emotions and behavior in a Gamified Learning Environment (GLE) in detail. In the study, in order to reveal the behavior (dynamics) and feelings (emotions) that emerge within the framework of the mechanics applied in the GLE process, it is within the scope of the main objectives of the study to determine how perceived learning, academic achievement and GLE scores, which we accept as learning outcomes of the process, are predicted by various variables. For this aim, a scale was applied. In the study, non-experimental correlational and comparative designs were used together. The participant group of the study consisted of forty students enrolled in the Accounting 2 course at the Faculty of Economics and Administrative Sciences. The Kahoot system was used as a tool for the GLE. According to the results of the study, the 'expected outcome' and 'engagement' variables predict 'perceived learning'. It was also revealed that the 'expected outcome' variable predicts academic achievement. A low-level correlation was found between the students' participation level and their scores in the GLE. A moderate correlation was found between their participation level and the GLE scores before the midterm. Contrary to this, no corelation was found between these variables after the midterm. It was found that students with a high perception of engagement could solve quiz questions faster in a GLE. Among the contributions of the GLE, it was mainly stated that the application was practical, fun, and reinforcing. Among the limitations of the GLE, it was stated that there was an inability to see the questions, as well as a limited answer time.

Shim, K. J., Menkhoff, T., Teo, L. Y. Q., & Ong, C. S. Q. (2023). **Assessing the effectiveness of a chatbot workshop as experiential teaching and learning tool to engage undergraduate students.** *Education and Information Technologies*, 28(12), 16065-16088. <https://doi.org/10.1007/s10639-023-11795-5>

In this paper, we empirically examine and assess the effectiveness of a chatbot workshop as experiential teaching and learning tool to engage undergraduate students enrolled in an elective course "Doing Business with A.I." in the Lee Kong Chian School of Business (LKCSB) at Singapore Management University. The chatbot workshop provides non-STEM students with an opportunity to acquire basic skills to build a chatbot prototype using the 'Dialogflow' program. The workshop and the experiential learning activity are designed to impart conversation and user-centric design know how and know why to students. A key didactical aspect which informs the design and flow of the chatbot workshop is that novice learners with no or very little knowledge about A.I. recognize and create the important linkage between knowledge inputs and outputs of conversational agents powered by natural language processing (NLP) so that user queries can be effectively addressed. According to the study results, 90.7% of all surveyed students (n = 43) were

satisfied with the experiential learning chatbot workshop; 81.4% of the respondents felt engaged while 81.3% of the participants reported moderate to high levels of competencies (81.3%) as result of the hands-on workshop. Almost all students surveyed (97.7%) felt that the experiential chatbot workshop had met the expected learning outcomes. Besides presenting empirical data that underscore the pedagogical usefulness of conducting an experiential Chatbot workshop in basic A.I. classes with special reference to NLP, we are trying to corroborate a conceptual model developed from learning theories and technology mediated learning (TML) models aimed at measuring the effects of a chatbot practicum on students' engagement and motivation as potential drivers of successfully acquiring basic NLP skills and learner satisfaction. The paper provides useful practical information for instructors interested in deploying a practical chatbot workshop as effective TML tool in a tertiary educational context aimed at making learners 'future-ready'.

Sipone, S., Abella, V., Rojo, M., & Moura, J. L. (2023). **Sustainable mobility learning: Technological acceptance model for gamified experience with ClassCraft in primary school.** *Education and Information Technologies*, 28(12), 16177-16200. <https://doi.org/10.1007/s10639-023-11851-0>

The concept of sustainable mobility is related to the fulfilment of certain conditions that consider environmental, economic and social factors when making decisions on transport activity. The recognition of the role of education as a key factor for sustainable development and sustainable mobility has been growing. Therefore, the development of training schemes aimed at sustainable mobility education as a tool for a better future for the generations to come is of fundamental importance. This study analyses the factors affecting the adoption of the ClassCraft platform in activities related to sustainable mobility. The proposed experience involved children aged 10–11 years old, a total of 75 pupils. This experience was the basis for analyzing the pupils' perception of the gamification-based methodology. A mixed method has been used, combining qualitative results from a Focus Group (FG) with 6 students, and quantitative results through a questionnaire based on the Technology Acceptance Model (TAM) with all the 75 students. The results reflect that all students consider this methodology as an opportunity for a change in the school experience to make classroom activities more enjoyable. Our research contributes to the application of a mixed methods approach that addresses an educational challenge, considering the voice of the children when applying new teaching-learning strategies.

Smail, B., Aliane, H., & Abdeldjalil, O. (2023). **Using an explicit query and a topic model for scientific article recommendation.** *Education and Information Technologies*, 28(12), 15657-15670. <https://doi.org/10.1007/s10639-023-11817-2>

The search for relevant scientific articles is a crucial step in any research project. However, the vast number of articles published and available online in digital databases (Google Scholar, Semantic Scholar, etc.) can make this task tedious and negatively impact a researcher's productivity. This article proposes a new method of recommending scientific articles that takes advantage of content-based filtering. The challenge is to target relevant information that meets a researcher's needs, regardless of their research domain. Our recommendation method is based on semantic exploration using latent factors. Our goal is to achieve an optimal topic model that will serve as the basis for the recommendation process. Our experiences confirm our performance expectations, showing relevance and objectivity in the results.

Soliman, A. (2023). **An unsupervised linguistic-based model for automatic glossary term extraction from a single PDF textbook.** *Education and Information Technologies*, 28(12), 16089-16125. <https://doi.org/10.1007/s10639-023-11818-1>

Term extraction from textbooks is the cornerstone of many different intelligent natural language processing systems, especially those that support learners and educators in the education system. This paper proposes a novel unsupervised domain-independent model that automatically extracts relevant and domain-related key terms from a single PDF textbook, without relying on a statistical technique or external knowledge base. It only relies on the basic linguistic techniques of the natural language processing: pattern recognition, sentence tokenization, part-of-speech tagging, and chunking. The model takes a PDF textbook as an input and produces a list of key terms as an output. Furthermore, the model proposes a novel classification of sentences from which the concept of defining sentences is proposed. The defining sentences are the main textual units that the model revolves around to identify the key terms. The architecture of the proposed work consists of 21 processes distributed across three phases. The first phase consists of five processes for extracting text from a PDF textbook and cleaning it for the next phases. The second phase consists of eight processes for identifying the defining sentences and extracting them from all the textbook's sentences. The last phase consists of eight processes for identifying and extracting the key terms from every defining sentence. The proposed work was evaluated by two experiments in which two PDF textbooks from different fields are used. The experimental evaluation showed that the results were promising.

Soltiyeva, A., Oliveira, W., Madina, A., Adilkhan, S., Urmanov, M., & Hamari, J. (2023). **My Lovely Granny's Farm: An immersive virtual reality training system for children with autism spectrum disorder.** *Education and Information Technologies*, 28(12), 16887-16907. <https://doi.org/10.1007/s10639-023-11862-x>

One of the biggest difficulties faced by children with Autism Spectrum Disorder during their learning process and general life, is communication and social interaction. In recent years, researchers and practitioners have invested in different approaches to improving aspects of their communication and learning. However, there is still no consolidated approach and the community is still looking for new approaches that can meet this need. Addressing this challenge, in this article we propose a novelty approach (i.e., an Adaptive Immersive Virtual Reality Training System), aiming to enrich social interaction and communication skills for children with Autism Spectrum Disorder. In this adaptive system (called My Lovely Granny's Farm), the behavior of the virtual trainer changes depending on the mood and actions of the users (i.e., patients/learners). Additionally, we conducted an initial observational study by monitoring the behavior of children with autism in a virtual environment. In the initial study, the system was offered to users with a high degree of interactivity so that they might practice various social situations in a safe and controlled environment. The results demonstrate that the use of the system can allow patients who needed treatment to receive therapy without leaving home. Our approach is the first experience of treating children with autism in Kazakhstan and can contribute to improving the communication and social interaction of children with Autism Spectrum Disorder. We contribute to the community of educational technologies and mental health by providing a system that can improve communication among children with autism and providing insights on how to design this kind of system.

Tang, J. T., Nine, W. T., & Wang, Y. C. (2023). **Preschoolers' Mathematics Game Preferences and Learning Performance through Designing a Degree of Freedom for a Tablet Game.** *Education and Information Technologies*, 28(12), 16311-16331. <https://doi.org/10.1007/s10639-023-11865-8>

Children always have a natural inclination to play, so the purpose of game-based learning is to establish a way for children to acquire knowledge while playing. This study is to discover the relationship between children's play preferences and learning performances toward a mathematics mobile game we designed. The tablet game we designed, « Lily's Closet », is a mathematics game that guides children aged 3-8 to learn « classification ». To explore the preferences and learning performances of the games we designed for the preschool children, we put « Lili's Closet » on a children's tablet named Kizpad with over 200 games. We classify and analyze players' behavior data by Data Mining in our designed game to explore children's play behaviors and preferences. We sampled 6,924 children from Taiwan, aged 3-8 years old. In the results, we found that there is a significant difference in the number of ages and achievements in the game. The maturity of the child's age is positively correlated with the achievement of the game, but it is negatively correlated with the number of times of willing to play. As a result, we suggest that to assist learning, we should give children different levels of games according to their ages. The research hopes to resonate with readers and jointly explore the relationship between mobile games.

Tao, J., Xu, Y., & Gao, X. A. (2024). **Teacher emotions and agency enactment in online teaching.** *Teaching and Teacher Education*, 137, 104389. <https://doi.org/10.1016/j.tate.2023.104389>

This semester-long study examines teachers' responses to online teaching with a focus on the interplay between teacher emotions and agency enactment in a Chinese university. Analysis of the data from three-round interviews with 12 teachers revealed highly complex emotional trajectories, which were dominated by outcome emotions and characterised by the co-existence of positive and negative emotions. The multiple facets of teacher emotions (i.e., valence, activation, object focus), together with the underlying appraisals, were closely connected to agency enactment. In turn, agency enactment transformed teachers' emotional experiences, which was affected by (dis)enabling agent-context relations at multiple levels.

Turan, Z., & Karabey, S. C. (2023). **The use of immersive technologies in distance education: A systematic review.** *Education and Information Technologies*, 28(12), 16041-16064. <https://doi.org/10.1007/s10639-023-11849-8>

This study aims to conduct a systematic review that includes studies on the use of immersive technologies in distance education. For this purpose, 132 studies detected by searching Web of Science, Eric, Taylor & Francis and Education Full Text (EBSCO) databases were examined. The studies were analysed using the content analysis method. As a result of the analyses, it was observed that the first study investigating the subject was conducted in 2002, and the number of related studies increased over the years. In addition, these studies were primarily conducted quantitatively, were mainly journal articles, and originated mostly from China and the USA. Moreover, the sample groups of these studies consisted mostly of university students. Therefore, they mainly used academic performance and motivation variables. Furthermore, these studies were conducted primarily in the science and medical education disciplines. When the studies were evaluated in terms of publication journals, it was determined that they were

published mostly in "Education Science" and "Computers & Education" journals. They were also included in the proceedings published within the scope of various conferences. When the application platforms in the studies were examined, it was determined that the UNITY and ARTUTOR platforms were mostly used. The findings of the studies revealed that the increase in academic performance and motivation was one of the most reported advantages of such technologies. On the other hand, the problems caused while using these technologies and the internet were the most reported difficulties in the studies. Finally, the review presented suggestions for future studies.

Tzafilkou, K., Perifanou, M., & Economides, A. A. (2023). **Assessing teachers' digital competence in primary and secondary education: Applying a new instrument to integrate pedagogical and professional elements for digital education.** *Education and Information Technologies*, 28(12), 16017-16040. <https://doi.org/10.1007/s10639-023-11848-9>

Teachers' digital competence (DC) is an important condition for the effective application of technology in education. Although several DC tools have been designed, adjustments to digital education and pedagogical or professional components are still scarce. Therefore, this study aims at developing a new instrument for assessing teachers' DC regarding their pedagogical and professional activities in the context of digital school and digital education. The study also examines the teachers' total DC scores and explores the differences between teacher profiles on a sample of 845 teachers in primary and secondary education in Greece. The final instrument comprises 20 items allocated in six components: 1) Teaching preparation; 2) Teaching delivery & students' support; 3) Teaching evaluation & revision; 4) Professional development; 5) School's development; and 6) Innovating education. The PLS-SEM analysis indicated the validity and reliability of the model in respect to its factorial structure, internal consistency, convergence validity, and model fitness. The results revealed DC inefficiency among teachers in Greece. Primary school teachers reported significantly lower scores in Professional development and Teaching delivery & students support. Female teachers reported significantly lower scores in Innovating education and School's development, but they reported higher scores in Professional development. The contribution and practical implications are discussed in the paper.

Wang, W., Liu, H., Wu, Y. J., & Goh, M. (2023). **Disconfirmation effect on online reviews and learner satisfaction determinants in MOOCs.** *Education and Information Technologies*, 28(12), 15497-15521. <https://doi.org/10.1007/s10639-023-11824-3>

In Massive Open Online Courses (MOOCs), learners can post both text comments and overall ratings regarding the courses. There is growing interest in assessing the consistency of online reviews and the determinants of learner satisfaction. This study analyses the disconfirmation effect between textual review topics and the determinants of learner satisfaction in MOOCs. The MOOCs are categorised under three disciplines - Social Science, Technical Science, and Humanities & Natural Science. A crawler was employed to collect the corpus, extracting 93,679 reviews of 5,214 online courses from a Chinese university MOOC platform (icourse163.org). Textual analytics was used in the topic extraction. The empirical results suggest a strong disconfirmation effect between textual reviews and the determinants of learner satisfaction, i.e., not all textual review topics affect the overall learner satisfaction. Compared with positive reviews, negative (and neutral) reviews have a stronger disconfirmation effect. Further, the antecedents of learner attention are course-discipline specific. The disconfirmation effect is course-

discipline dependent, with the most prominent for Technical Science courses, and the least for Humanities & Natural Science courses. This study provides a framework to guide platform managers and course instructors in better course delivery and enhancing overall learner satisfaction.

Wang, X., Hassan, A. B., Pyng, H. S., & Ye, H. (2023). **Development and empirical study of international student satisfaction model of online course learning interaction in chinese universities.** *Education and Information Technologies*, 28(12), 16951-16977. <https://doi.org/10.1007/s10639-023-11752-2>

COVID-19 has disrupted education internationalisation around the world, making online learning a necessary means of learning. This study proposes an International Student Satisfaction Index Model (ISSM) on the interaction of online international courses in Chinese universities, aiming to investigate the potential factors that affect international students' online learning interaction. Based on the large-scale online course practice in Chinese universities during the pandemic, this study adopted a stratified random sampling method to select 320 international students participating in online courses as a research sample. The model proposed in this study includes four antecedent variables, one target variable, and one outcome variable. This study is quantitative, using SPSS26.0 and AMOS 21.0 to analyse the collected empirical data, and the results verify the nine research hypotheses proposed and the applicability of the online course international students' satisfaction index model (ISSM) proposed. The research results provide strong theoretical and practical support for international students' satisfaction with online course learning interaction, which is conducive to the reform of online courses and improving international students' retention rate in the online course.

Wu, J., Fan, M., Sheng, L., & Sun, G. (2023). **Exploring the design space of virtual tutors for children with autism spectrum disorder.** *Education and Information Technologies*, 28(12), 16531-16560. <https://doi.org/10.1007/s10639-023-11838-x>

Children with autism spectrum disorder (ASD) require long-term interventions with professional tutors. In this paper, we explore the design space of virtual tutors in digital learning systems that may facilitate effective ASD interventions. We conducted a classroom observational study to examine how children with ASD learn and interact with tutors, organized a design workshop with the children to understand their visual preferences for virtual tutors, and held a focus group with tutors and individual interviews with parents to investigate their teaching methods, techniques, and challenges at school and at home. We identified three types of interactions and five types of learning behaviors in children with ASD. We also found tutors and parents followed a structured training approach and often used personalized rewards to mediate the intervention. Based on previous research and our empirical results, we proposed 12 design considerations for designing virtual tutors' visual, audio, kinesthetic, and interaction features. We also presented a design case for developing a virtual tutor in a language learning app to help children with ASD learn social communication skills. We conclude with a discussion of the advantages and challenges of designing and employing virtual tutors in educational contexts for children with ASD.

Xu, W., Xing, Q.-W., Zhu, J.-D., Liu, X., & Jin, P.-N. (2023). **Effectiveness of an extended-reality interactive learning system in a dance training course.** *Education and Information Technologies*, 28(12), 16637-16667. <https://doi.org/10.1007/s10639-023-11883-6>

In regular dance teaching, teachers find it difficult to pay attention to and meet the specific needs of each student. Extended-reality (XR) has the potential to help students get more information to dance learning. This study developed an XR interactive learning system to assist teachers in dance teaching, and explored the impact of XR on the process and results of dance skills. To assess the effectiveness of XR in dance education, a quasi-experiment was designed. Students majoring in preschool education in vocational high school in Hangzhou, China were recruited as research participants. 54 female students were divided into two groups with the same teaching pace, each with 27 students. The experimental group was taught dance lessons using a developed XR interactive learning system, while the control group was taught dance lessons using traditional methods. The experiment lasted for eight weeks and consisted of 16 lessons. Finally, the results indicate that XR has the potential to improve students' learning performance and facilitate learning interactions in dance learning; to provide real-time personalized feedback to students and improve autonomous learning. Moreover, XR has the potential to enhance learning experience by reducing the cognitive load of students in dance learning. The results of this study is expected to help those considering the use of XR to supplement dance instruction.

Yalçın, G., Kocaöz, O. E., & Arslantas, T. K. (2023). **Effectiveness of animation-based video modeling on daily living skills teaching to individuals with intellectual disabilities.** *Education and Information Technologies*, 28(12), 16233-16254. <https://doi.org/10.1007/s10639-023-11863-w>

The aim of the study was to investigate the effectiveness of an animation-based teaching package on the acquisition of three daily living skills based on the performance of three middle school students with mild or moderate intellectual disability. An animation-based teaching package was designed to include explicit instructional procedures and was developed and tested by the researchers within the scope of the study in order to meet the specific needs of the target group. A multiple probe across behaviors design was applied for this single-subject research in order to investigate the effect of an animation-based daily life skills teaching package on the learning of culinary skills by three middle school students with ID. The culinary skills were sandwich preparation, brewing tea, and pouring tea. The participants in the study showed overall improvement in their task performance following the intervention. The results revealed animation-based video modeling to be an effective method in improving the acquisition of daily living skills. Animation-based teaching may be used as a means to teach effective daily living skills to students with ID.

Zaki, N., Turaev, S., Shuaib, K., Krishnan, A., & Mohamed, E. (2023). **Automating the mapping of course learning outcomes to program learning outcomes using natural language processing for accurate educational program evaluation.** *Education and Information Technologies*, 28(12), 16723-16742. <https://doi.org/10.1007/s10639-023-11877-4>

Quality control and assurance plays a fundamental role within higher education contexts. One means by which quality control can be performed is by mapping the course learning outcomes (CLOs) to the program learning outcomes (PLO). This paper describes a system by which this mapping process can be automated and validated. The proposed AI-based system automates the mapping process through the use of natural language processing. The framework underwent testing using two actual datasets from two educational programs, and the findings were promising. A testament

to the potential of the suggested framework was the precision of the mapping detected (83.1% and 88.1% for the two programs, respectively) compared to the mapping performed by the domain experts. A web-based tool was created to help teachers and administrators execute automatic mappings (<https://dsaluaeu.github.io/mapper.html>). The data and software used in this research project can be found at the following URL: <https://github.com/nzaki02/CLO-PLO>.

Zhang, X., Chen, S., & Wang, X. (2023). **How can technology leverage university teaching & learning innovation? A longitudinal case study of diffusion of technology innovation from the knowledge creation perspective.** *Education and Information Technologies*, 28(12), 15543-15569. <https://doi.org/10.1007/s10639-023-11780-y>

This paper expands the innovation diffusion framework by adding a conceptual and empirical exploration of knowledge creation into understanding university technology-enhanced teaching and learning innovation. Institutional innovation research has largely focused on people and products while neglecting the underlying knowledge creation process for innovation that substantiates and sustains the diffusion of innovation across stages. Guided by a combined framework of organisational knowledge creation theory with the diffusion of technology-enhanced teaching & learning (T&L) innovation, this 4-year longitudinal qualitative study focused on a Chinese case of Tsinghua University, which has pioneered the adoption of digital teaching and learning, and generating exemplary sustainable whole-institutional teaching and learning innovation. We explored how technology leverages the interactions between technologies, adopters, and leadership within a university to build capacities for digital T&L innovation by tracing the technology innovation trajectory of Tsinghua University. The case study identified four stages of knowledge creation related to technology adoption and innovation. Of these stages, knowledge externalisation processes were found to be critical for leveraging the co-creation of knowledge for institutional innovation in the university context. Additionally, the study showed that the middle-up-down leadership strategy and middle managements' knowledge management ability facilitated the sustainable transition from individual and group exploration to organisational innovation. The implications for strategic technology adoption and sustainable teaching and learning innovation in the university contexts are also discussed.

Zheng, L., Kinshuk, Fan, Y., & Long, M. (2023). **The impacts of the comprehensive learning analytics approach on learning performance in online collaborative learning.** *Education and Information Technologies*, 28(12), 16863-16886. <https://doi.org/10.1007/s10639-023-11886-3>

Online collaborative learning has been an effective pedagogy in the field of education. However, productive collaborative learning cannot occur spontaneously. Learners often have difficulties in collaborative knowledge building, group performance, coregulated behaviors, learning engagement, and social interaction. To promote productive collaborative learning, this study aims to propose and validate a comprehensive learning analytics approach in an online collaborative learning context. The comprehensive learning analytics can automatically construct knowledge graphs, analyze metacognitive learning engagement and social interaction and provide personalized feedback. A total of 90 college students participated in this study, and they were assigned to the experimental group and control group. The students in the experimental group conducted online collaborative learning with the comprehensive learning analytics approach, while the students in the control group conducted traditional online

collaborative learning without any specific approach. The results indicated that the comprehensive learning analytics approach significantly improved collaborative knowledge building, group performance, coregulated behaviors, metacognitive learning engagement, and social interaction compared with traditional online collaborative learning. In this paper, the results of the study together with the implications are discussed.

Orientation scolaire et professionnelle

Clemens, M. A., & Chand, S. (2023). **Labour Mobility With Vocational Skill: Australian Demand and Pacific Supply.** *Australian Economic Review*, 56(4), 462-486. <https://doi.org/10.1111/1467-8462.12522>

Can new channels for mid-skill labour mobility simultaneously enhance the welfare of Australia and the Pacific Region? Answering this question requires forecasting Australian demand for vocationally-skilled migrants over the next generation, and the potential for Pacific supply of those migrants. We project demand for such mid-skill migrants over the next three decades by combining data on trends in the demand for basic tasks with data on trends in native investment in education commensurate with those tasks. We estimate that the Australian economy growing at historical rates through the year 2050 will demand approximately 1.6–2.1 million foreign workers with Technical and Vocational Education and Training. A large share of these could be supplied from the Pacific Islands with sufficient investment in training, with direct cooperation from Australian employers, and targeted access to the Australian labour market.

Goller, D., & Wolter, S. C. (2023). **Reaching for gold! The impact of a positive reputation shock on career choice** (Economics of Education Working Paper Series N° 0208). Consulté à l'adresse University of Zurich, Department of Business Administration (IBW) website: <https://econpapers.repec.org/paper/isoedcat/0208.htm>

We analyze the causal influence a positive reputation shock for a particular occupation may have on career choice. The measure of the positive reputation shock is the unpredictable event that a young adult from one's own country wins a (gold) medal in a particular occupation at the World Skills - the world championship of vocational skills. In an occupation with a gold medal won, searches for apprenticeship vacancies increase significantly by around 7 percent compared to occupations that do not win a competition. In occupations where only a silver or bronze medal is awarded, the effect is also positive and statistically significant, but less pronounced. More importantly, the increase in searches for apprenticeship vacancies in the current year has also led to around 2.5 percent more contracts being signed in the winning occupation, and there are indications that these apprenticeships have a better match between employers and employees (trainees).

Sgarzi, M., Delay, B., Stephanus, C., Vero, J., Bosse, N., Dupray, A., ... Kogut-Kubiak, F. (2023). **About career transitions.** Consulté à l'adresse https://pmb.cereq.fr/doc_num.php?explnum_id=10550

In a fast-changing global context impacted by major societal shift (climate, digital, demographic) and turmoil (pandemics, international political instability), economies are transforming, skills required on the labour market are evolving and professions are changing. It is in these conditions that career transitions and professional reorientation

take place. Change is part of people's lives, affecting both the private and professional spheres, driven by the need to secure one's own situation in the face of future uncertainties, or to improve working and employment conditions and/or meet personal aspirations. In France, public policies are increasingly focused on supporting careers and transitions. In a variety of ways, they are seeking to anticipate change and cope with the increasingly frequent shocks that our economies are facing and that have repercussions on people's lives.

Smyth, E., & Privalko, I. (2023). **The long road to secondary school: background, home learning environment, and transition difficulties in Scotland**. *Research Papers in Education*, 38(6), 847-864. <https://doi.org/10.1080/02671522.2022.2065520>

This paper explores the association between children's difficulty in moving to secondary school and their family background. School transition difficulty is associated with a range of poor outcomes in young people, but studies have rarely taken a fully longitudinal perspective or looked in detail at inequalities in transition processes. This perspective can unpack the long-term processes behind any inequalities in such difficulties. We use longitudinal data from the Growing Up in Scotland survey to model school transition difficulty at age 12 using ordinary least squares regression models. We adopt a multidimensional approach to social background, taking account of social class, parental education, and household income. All three dimensions, especially income, are associated with school transition difficulty. This social gradient is not explained by differences in the home learning environment, school engagement at primary level or cognitive development in early to middle childhood. Results show the limits of agency-based measures, like school engagement and home learning, in explaining inequality and children's disadvantage in school. Results also show the importance of adopting a multidimensional approach to family background when analysing inequality in education, regardless of the outcome.

Teague Tsopgny, A. (2023). **Relation élève-enseignant·e et choix d'orientation en mathématiques selon le genre : analyse des effets médiateurs**. *Revue des sciences de l'éducation*, 49(1). <https://doi.org/10.7202/110784ar>

L'objectif de ce travail est d'étudier l'effet des composantes de la relation élève-enseignant·e sur le choix d'études en mathématiques selon le genre et les mécanismes par lesquels ces composantes agissent sur ce choix. Une collecte des données par questionnaire a été menée auprès de 405 élèves, parmi lesquel·le·s les deux sexes étaient représentés, en classe de seconde C au Lycée Général-Leclerc de Yaoundé. Les résultats confirment en grande partie nos hypothèses de recherche. Les perceptions associées aux relations chaleureuses et au soutien de l'enseignant·e de mathématiques déterminent le choix des mathématiques, indépendamment du sexe de l'élève. Le sentiment d'efficacité personnelle et l'anxiété en mathématiques sont les médiateurs de ces liens.

Zajac, T., Tomaszewski, W., Perales, F., & Xiang, N. (2023). **Disparité des trajectoires professionnelles des diplômés australiens en fonction de leur origine sociale : étude longitudinale à partir de données administratives couplées couvrant l'ensemble de la population**. *Revue internationale du Travail*, 162(4), 615-643. <https://doi.org/10.1111/rlrf.12290>

Résumé S'il est de plus en plus établi que les études supérieures améliorent les perspectives professionnelles, l'inégalité de leur rendement suscite des inquiétudes

croissantes. Les auteurs utilisent un nouveau jeu de données administratives couplées couvrant l'ensemble des étudiants diplômés d'une université australienne entre 2005 et 2011 pour comparer, sur dix ans, la trajectoire professionnelle de publics défavorisés à l'aune de différents critères (position socio-économique, origine ethnique, lieu de résidence, migration, incapacité) à celle de leurs homologues favorisés. Ils constatent une grande hétérogénéité des trajectoires en termes de revenu et de perception de prestations sociales. Ces résultats ont d'importantes implications pour les politiques visant à améliorer l'équité sociale sur le marché du travail.

Politique de l'éducation et système éducatif

Ben Hamouda, L. (2023a, décembre 6). **PISA 2022 : La chute.** Consulté 6 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/06/pisa-2022-la-chute-2/>

Cette fois, c'est une vraie chute de niveau qu'enregistre la nouvelle évaluation internationale Pisa organisée par l'OCDE. Elle concerne les jeunes âgés de 15 ans. Si presque tous les pays sont touchés par des conséquences négatives du covid, les élèves français chutent beaucoup plus que les autres. Et, pour la première fois, l'OCDE pointe directement...

Ben Hamouda, L. (2023b, décembre 6). **PISA 2022 : la France, encore et toujours, championne des inégalités.** Consulté 6 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/06/pisa-2022-la-france-encore-et-toujours-championne-des-inegalites-3/>

Que nous apprend PISA 2022 sur les inégalités sociales ? « La France est toujours l'un des pays de l'OCDE où le lien entre le statut socio-économique des élèves et la performance qu'ils obtiennent au PISA est le plus fort », écrit l'OCDE qui tempère en soulignant qu'il n'y a pas d'aggravation « notable sur la période 2012-2022 ». PISA...

Ben Hamouda, L. (2023c, décembre 6). **Pisa 2022 : Le rapport à l'Ecole se dégrade.** Consulté 6 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/06/pisa-2022-le-rapport-a-lecole-se-degrade-2/>

Les très mauvais résultats de Pisa 2022 reflètent aussi une dégradation du rapport à l'Ecole. De nombreux enseignants nous en avaient parlé. L'OCDE l'établit. L'indiscipline est plus forte dans l'Ecole française que dans les autres pays. Les outils numériques n'arrangent pas les choses.pire encore : l'OCDE confirme un éloignement de certains parents par rapport...

Ben Hamouda, L. (2023d, décembre 6). **PISA 2022 : une baisse du niveau en sciences.** Consulté 6 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/06/pisa-2022-une-baisse-du-niveau-en-sciences/>

Le score français en culture scientifique diminue de 6 points en 4 ans. Avec un score à 487, la France se classe juste au-dessus de la moyenne des pays de l'OCDE. L'enquête PISA 2022 montre surtout que les écarts se creusent davantage entre les bons élèves et les moins performants. S'il fallait des preuves, le...

Bernigole, V., Fernandez, A., Loi, M., & Salles, F. (2023). **PISA 2022 : la France ne fait pas exception à la baisse généralisée des performances en culture mathématique dans l'OCDE.** Note d'information, (23.48), 1-4. <https://doi.org/10.48464/ni-23-48>

En mai 2022, environ 8 000 élèves de 15 ans scolarisés dans 335 collèges et lycées français ont participé aux épreuves de l'enquête PISA, ainsi que leurs homologues de 80 autres pays ou « économies partenaires ».

Bessone, M. (2023). **L'institution universitaire et le racisme institutionnel.** Le Télémaque, 64(2), 51-63. <https://doi.org/10.3917/tele.064.0051>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du Télémaque.

Bret, A., Durand de Monestrol, H., Hick, M., Salles, F., Fernandez, A., & Loi, M. (2023). **PISA 2022 : culture scientifique, compréhension de l'écrit et vie de l'élève.** Note d'information, (23.49). Consulté à l'adresse <https://www.education.gouv.fr/pisa-2022-culture-scientifique-comprehension-de-l-ecrit-et-vie-de-l-eleve-380208>

En mai 2022, environ 8 000 élèves de 15 ans scolarisés dans 335 collèges et lycées français ont participé aux épreuves de l'enquête PISA. La culture scientifique et la compréhension de l'écrit ont été évaluées.

Brown, C. S., Biefeld, S. D., & Bulin, J. (2023). **High school policies about sexual harassment: What's on the books and what students think.** Journal of Social Issues, 79(4), 1411-1430. <https://doi.org/10.1111/josi.12505>

Sexual harassment (SH) in schools is unwanted and unwelcome behavior of a sexual nature that, when severe, offensive, and pervasive, creates a hostile environment that is prohibited under Title IX of the Education Amendments of 1972. In the current mixed methods study, using analyses of school policies and reports, and student survey and qualitative data, we examined (a) whether public high schools' policies about SH were in compliance with Title IX guidance, (b) whether SH policies were related to alumni's knowledge and attitudes about their schools' SH policies, and (c) whether SH policies were related to alumni's experiences with and reporting of SH. Results indicated that, of the 172 school districts within one state, only one-fourth of the school districts had SH policies in which SH was clearly defined and in which there were noted consequences for perpetrating SH. Despite students experiencing SH, very few students ever reported SH to an adult at school. However, of the small number of students who reported SH to an adult at school, 87.5% went to a school with an explicit SH policy. Many students stated that they did not report SH because they did not trust adults to handle it fairly or effectively.

Brun, Y., Croguennec, Y., & Jolivet, S. (2023). **6,340 millions d'élèves sont scolarisés dans le premier degré à la rentrée 2023.** Ministère de l'Education Nationale et de la Jeunesse, (23.50), 1-4. Consulté à l'adresse <https://www.education.gouv.fr/6340-millions-d-eleves-sont-scolarisés-dans-le-premier-degré-la-rentree-2023-380235>

À la rentrée 2023, 6,340 millions d'élèves sont scolarisés dans les écoles publiques et privées sous contrat du premier degré, soit un effectif en recul de 82 900 élèves par rapport à la rentrée précédente (- 1,3 %). La baisse est de même ampleur dans le

préélémentaire (- 1,3 %, - 29 300 élèves) et l'élémentaire (- 1,3 %, - 54 000 élèves) et concerne presque tous les niveaux. Ces évolutions sont avant tout le reflet de la baisse des naissances.

Chernoff, K. (2023). **An overview of systematic reviews: International mindedness as a component of the IB Diploma Programme's expansion.** *Journal of Research in International Education*, 22(3), 278-290. <https://doi.org/10.1177/14752409231216651>

International mindedness (IM) is foundational to the International Baccalaureate Diploma Programme (IBDP) and in theory, meets the challenges of a diversified demographic. The implementation of IM may vary depending on where the IBDP is situated. Although a core concept in the IBDP, research suggests that IM may be difficult to implement. Systematic reviews included in this study offer empirical research on ways in which IM might meet the needs of a diversified population, although findings suggest there may be challenges with IM curriculum implementation. The purpose of this overview of reviews is to explore the role of IM as a component in the growth of the IBDP worldwide. Research is reviewed with respect to the reasons for IM's global relevance; the international needs, national concerns, and local tensions that exist with IM implementation; and the importance of a broader understanding of interculturalism and multilingualism within IM.

Dauphin, L., Dieusaert, P., Juzdzewski, L., & Miconnet, N. (2023). **5,657 millions d'élèves sont scolarisés dans le second degré à la rentrée 2023.** Note d'Information, (23.51), 1-4. <https://doi.org/10.48464/ni-23-51>

À la rentrée 2023, les établissements publics et privés sous contrat du second degré du ministère de l'Éducation nationale et de la Jeunesse (MENJ) accueillent 5,657 millions d'élèves, soit un effectif global légèrement supérieur à celui de la rentrée 2022 (+ 0,1 %).

Diagne, S. B. (2023). **Réflexions sur la racialisation du monde.** *Le Télémaque*, 64(2), 7-10. <https://doi.org/10.3917/tele.064.0007>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du Télémaque.

Diebolt, C., & Altinok, N. (2023, décembre 12). **Enquête PISA : derrière la baisse de niveau, une hausse des inégalités scolaires ?** Consulté 13 décembre 2023, à l'adresse The Conversation website: <http://theconversation.com/enquete-pisa-derriere-la-baisse-de-niveau-une-hausse-des-inegalites-scolaires-219242>

Au-delà de la baisse de performances scolaires dans les pays européens, l'enquête internationale PISA révèle qu'un nombre non négligeable d'élèves peinent à atteindre le seuil minimum de compétences.

Doray, P., Laplante, B., Kamanz, P. C., & Pilote, A. (2023). **Enseignement supérieur et inégalités sociales: Entre politiques publiques et parcours éducatifs.** Consulté à l'adresse <https://www.puq.ca/catalogue/livres/enseignement-superieur-inegalites-sociales-3991.html>

Le Québec, comme l'ensemble des provinces canadiennes, a fortement investi dans l'enseignement postsecondaire depuis le début des années 1960. Les cheminements

scolaires et la structure du système éducatif en ont été profondément transformés. De nombreuses personnes, en provenance de différentes fractions sociales et d'âges variés, ont davantage investi l'école, particulièrement au niveau des études supérieures. Les progrès en matière de démocratisation réalisés à ce jour sont indéniables. Cependant, des processus de reproduction sociale persistent et produisent toujours des inégalités sociales. Si, depuis le milieu des années 1980, les politiques éducatives ont donné lieu à de nouvelles réformes davantage axées sur sa néolibéralisation, la question des inégalités revient aussi à l'ordre du jour. Les contributions réunies dans cet ouvrage visent à mieux comprendre la situation récente des inégalités scolaires et de l'expérience étudiante. Le point commun tient dans l'approche longitudinale, permettant d'analyser les liens entre les changements historiques et les parcours éducatifs. Cette approche jette un éclairage inédit sur le développement de l'enseignement supérieur, les choix politiques et leurs effets sur les inégalités et la diversité des expériences scolaires. En ce sens, tous les acteurs et actrices de l'enseignement supérieur sont interpellés ; la lecture des contributions éclairera leur expérience étudiante, enseignante ou gestionnaire.

Dube, B., & Moyo, N. (2023). **A decolonial reading of the history curriculum: towards undoing historicide for curricular justice for the Zimbabwean learner.** *Research Papers in Education*, 38(6), 865-885. <https://doi.org/10.1080/02671522.2022.2065521>

This study undertakes a decolonial reading of the Zimbabwean history curriculum as an exemplar of how knowledge and pedagogy could be reframed as the basis for curricular justice in a global imaginary that is predicated on the epistemic hegemony of the Global North. The study which is framed as a conceptual research article introduces and argues for undoing historicide as a heuristic within the broader scope of the epistemic decolonial turn. The Zimbabwean history curriculum, as a unit of analysis, is referenced to exemplify entrapment within the Cartesian paradigm of knowing, despite the country's political independence. The argument developed is that history curricula that do not interrogate the geography and biography of knowledge entrench the hegemonic narrative of the coloniality of power and by extension colonial historiography. The paper suggests that the way out of the epistemic quandary that pervades the Zimbabwean history curriculum entails re-envisioning curricular practices in ways that ensure the emergence of a pluriverse in which we reclaim, restitute and legitimate our knowledges and histories, and affirm our ontological densities as equal to those of the Global North.

Ferry, M., de Talancé, M., & Niño-Zarazúa, M. (2022). **Less debt, more schooling? Evidence from cross-country micro data** [Post-Print]. Consulté à l'adresse HAL website: <https://econpapers.repec.org/paper/haljournl/hal-04258128.htm>

Soaring levels of public debt in low-income countries are fuelling concerns about their ability to achieve the Sustainable Development Goals, such as free access to primary education. In the late 1990s and 2000s, international financial institutions introduced a series of debt relief initiatives aimed to restore debt sustainability among highly indebted countries. This study examines the impact of these initiatives on primary school attendance. We exploit the temporal variation in the implementation of these policies, in combination with individual-level data from 177 Demographic and Health Surveys covering more than 1.5 million school-age children from 44 low-income countries to implement difference-in-differences and spatial difference-in-discontinuity estimators. Results suggest that debt relief initiatives, by freeing up additional public resources, have significantly contributed to increasing primary school attendance in heavily indebted countries. Impact heterogeneity analysis also shows that debt relief has been effective

at reducing wealth-based, intergenerational, religious, ethnic and spatial inequalities in education. Our results provide robust evidence to assert that debt relief, in combination with other financing sources, can contribute to improving educational outcomes in highly indebted poor countries.

Fialaire, B. **Projet de loi de finances pour 2024 : Enseignement technique agricole.** Avis n° 133 (2023-2024), tome III, fascicule 2 (2023). <https://www.senat.fr/rap/a23-133-32/a23-133-32.html>

Global Education Monitoring Report Team & South-East Asian Ministers of Education Organization. (2023). **Global education monitoring report 2023, Southeast Asia: technology in education: a tool on whose terms?** (p. 143). Consulté à l'adresse UNESCO website: <https://unesdoc.unesco.org/ark:/48223/pf0000387214>

Graf, L., Marques, M., Sorensen, T. B., & Dumay, X. (2023). **The emergence of European boundary-spanning policy regimes: analysing intersectoral policy coordination in education and employment.** Journal of Education and Work, 0(0), 1-13. <https://doi.org/10.1080/13639080.2023.2275778>

While much attention has been paid to European policy arrangements in individual policy fields, European intersectoral policy coordination has been mostly an overlooked phenomenon, especially within the sectors of education and employment. Thus, in the introductory paper for this Special Issue, we offer a contemporary discussion of European intersectoral policy coordination. We firstly review the literature on intersectoral policy coordination, and secondly look at the application of concepts related to intersectoral policy coordination to supranational arrangements, especially the European Union. We then employ the concept of boundary-spanning policy regime and the related 'I' framework (issues, ideas, interests, and institutions) to discuss the individual pieces' contributions. This serves to explore the strength of the intersectoral perspective when analysing European policy coordination in education and employment. We conclude with a discussion of the strengths and limitations of this approach and offer a research agenda to study supranational intersectoral policy coordination (in education and employment).

Gremion, L. (2023). **Sur l'envers de l'inclusion, des histoires scolaires entre avantages et désavantages.** La nouvelle revue - Éducation et société inclusives, 97(1), 115-132. <https://doi.org/10.3917/nresi.097.0115>

C'est en observant les pratiques « institutantes » (Mehan, 1997) que peuvent être décryptées et comprises les résistances à l'inclusion scolaire et les raisons qui contribuent non seulement à ce que certains groupes d'élèves cumulent des désavantages, mais au maintien des inégalités sociales. Cet article met en évidence, le rôle décisif, mais escamoté, des structures et des pratiques scolaires dans la production de besoins particuliers, soit les processus qui conduisent de façon régulière des élèves sans pathologies ni besoins particuliers dans les marges spécialisées de l'école. En posant la focale sur ces pratiques que l'école ne conteste pas, mais qui sont soustraites aux regards des non-initiés, il montre comment, sur l'envers du mouvement d'inclusion, un cumul de désavantages, peut, progressivement, faire basculer des trajectoires scolaires hors du cursus ordinaire.

Grizez, É. (2023). **À l'école primaire catholique: Une éducation bien ordonnée.** Consulté à l'adresse <https://www.puf.com/lecole-primaire-catholique>

Qu'apprend-on aux enfants dans une école catholique ? Comment la socialisation s'opère-t-elle ? Quels sont les principaux agents et canaux de cette socialisation ? En France, l'enseignement catholique représente 96 % des élèves scolarisés dans des établissements privés sous contrat. Ce secteur prend en charge 17,6 % des élèves du primaire et du secondaire, et accueille deux enfants sur cinq au cours de leur scolarité. Largement fréquenté par les enfants des classes supérieures, ce système d'enseignement constitue l'un des principaux canaux de formation des élites. Pourtant, les travaux sociologiques consacrés aux écoles privées catholiques sont très peu nombreux, et rarement centrés sur le processus de socialisation des élèves. L'ouvrage propose d'étudier la formation des enfants dans l'enseignement catholique primaire à partir du cas d'une école parisienne privilégiée. En s'appuyant sur une enquête ethnographique, il expose le dispositif éducatif déployé par les acteurs de cette école, et ce que les enfants font dans et de ce dispositif. Il se focalise sur leur rapport à l'école, aux autres et à l'appréhension de l'ordre social, et montre que les enfants font l'acquisition précoce de dispositions scolairement et socialement valorisées.

Grospperrin, J. **Projet de loi de finances pour 2024 : Enseignement scolaire.** Avis n° 133 (2023-2024), tome III, fascicule 1 (2023). <https://www.senat.fr/rap/a23-133-31/a23-133-31.html>

Hajisoteriou, C., & Sorkos, G. (2023). **Students as informal leaders in deliberate acts of inclusion.** *Research Papers in Education*, 38(6), 924-943. <https://doi.org/10.1080/02671522.2022.2065525>

This article focuses on the importance of highlighting students' role as informal leaders and their efforts to take on active roles in decision-making processes. Students' involvement in such roles entails an imperative process for the development of school inclusion. Contemporary literature has repeatedly focused on the multiple roles student voices play in, and the ways they impact on, the processes of school change and improvement. However, the ways in which students themselves interpret their roles as informal leaders, through the initiatives they take on, have not been explored, especially in environments characterised by cultural pluralism. Our research examines the ways in which thirty-six students from four Greek secondary schools with a highly-diverse cultural profile undertake deliberate acts to develop into equal co-producers of a new pedagogical decision-making agenda reinforcing inclusion. The results of our research bear multiple implications for both the levels of educational policy and school practices.

Hamouda, L. B. (2023a, décembre 5). **Claude Lelièvre : Rappels historiques pour situer les résultats du PISA nouveau.** Consulté 13 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/05/claudie-lelievre-rappels-historiques-pour-situer-les-resultats-du-pisa-nouveau/>

À quelques heures de l'annonce des résultats du Programme International pour le suivi des acquis des élèves (PISA), Claude Lelièvre revient sur les résultats des précédentes éditions. Et s'ils étaient d'une « honnêteté moyenne », ils ont révélé l'incapacité du système français à résorber les inégalités sociales. Contrairement à ce qui est parfois suggéré voire affirmé,...

Hamouda, L. B. (2023b, décembre 14). **Daniel Bart : Le pisa 2022 et les discours sur l'École.** Consulté 18 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/14/daniel-bart-le-pisa-2022-et-les-discours-sur-lecole/>

Pour Daniel Bart, l'enquête PISA pose problème, et cela à plusieurs égards. « L'approche du PISA nous semble effectivement conduire à "porter des jugements" sur l'École, mais moins "en toute connaissance de cause" qu'à des "jugements" hâtifs et peu nuancés sur des fonctionnements scolaires pourtant complexes » écrit le chercheur spécialiste de la question de l'évaluation des...

Hamouda, L. B. (2023c, décembre 14). **Les inégalités, la France en tête de palmarès.** Consulté 18 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/14/pour-reduire-les-inegalites-scolaires-sattaquer-aux-inegalites-sociales-qui-les-produisent/>

Mathieu Ichou est chercheur à l'Ined – Institut National d'Études Démographiques. Il travaille sur la sociologie de l'immigration, de l'éducation et de la stratification sociale. À la lumière de son expertise, il analyse les résultats de l'enquête PISA en matière d'inégalités. Encore une fois, les résultats de l'enquête PISA montrent que la France est...

Hamouda, L. B. (2023d, décembre 14). **PPPE : Le futur de la formation initiale ?** Consulté 18 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/14/pppe-le-futur-de-la-formation-initiale/>

Le Parcours Préparatoire au Professorat des Ecoles, ouvert depuis la rentrée 2021, préfigure-t-il les modalités futures de la formation initiale des enseignantes et enseignants ? Le dispositif, encore jeune et méconnu, prépare à une licence en 3 ans qui est menée alternativement au lycée, à l'université et en stages, et qui débouche sur l'entrée en...

Klimecká, E. (2023). **Advantages and Disadvantages of Being 'Gifted': Perceptions of the Label by Gifted Pupils.** Research Papers in Education, 38(6), 902-923. <https://doi.org/10.1080/02671522.2022.2065523>

In addition to the opportunities afforded to them, the development of care for gifted pupils is also associated with the problematic handling of the 'gifted' label. These associations could affect several aspects of her/his life. The aim of this qualitative study was to discover the positive and negative consequences of the labelling of gifted pupils and to find their coping strategies, which would eliminate the negative consequences of labelling. Two hundred and eight intellectually gifted pupils aged ten to fifteen participated in the research. They were pupils of regular, inclusive elementary schools from the Czech Republic. The source of data was a questionnaire with open-ended questions. The positive aspects of labelling mainly concerned the academic and personal spheres, for instance, feeling good about oneself and extensive opportunities with regard to further education. Negative consequences affected the personal (problems resulting from giftedness) and academic (perfectionism, high expectations) areas, but above all, the social sphere. We discovered that gifted pupils are singled out from their peer groups, used for school work, and even bullied. The gifted pupils developed several coping strategies to deal with the negative consequences of labelling, such as helping others, conforming and denying their giftedness.

Lelièvre, C. (2023, décembre 7). **Le brevet, futur examen d'entrée au lycée ?** Consulté 13 décembre 2023, à l'adresse The Conversation website: <http://theconversation.com/le-brevet-futur-examen-dentree-au-lycee-219345>

Début décembre, lors de ses annonces autour d'un « choc des savoirs », le ministre de l'Éducation s'est prononcé pour une réforme profonde du diplôme national du brevet, passé en fin de collège.

Mangez, E., Draelants, H., Dumay, X., & Verhoeven, M. (2023). **L'école face à la complexité: Désinstitutionnalisation, globalisation, accélération** (1er édition). Consulté à l'adresse <https://www.deboecksuperieur.com/ouvrage/9782807350908-l-ecole-face-la-complexite>

Une étude sur la façon dont l'école d'aujourd'hui doit se réinventer et sur la manière de mettre en oeuvre et d'accompagner au mieux ces changements. L'école fait face à de multiples incertitudes. Ses repères traditionnels se sont estompés. Quelles missions poursuivre en priorité ? Quels sont les contenus dignes d'être enseignés, les valeurs à défendre, les compétences à développer ? Qu'est-on en droit d'attendre d'un élève, d'un enseignant ? Les réponses possibles se multiplient, mais plus aucune ne va de soi. L'accumulation sans précédent de données et de connaissances ne résorbe en rien l'indétermination qui règne. Ce livre rend compte d'un programme de recherche visant à saisir les effets de cette complexité accrue sur l'école et l'éducation. Il décrit des phénomènes émergents : des projets éducatifs en rupture avec la forme scolaire, des contenus sans matières, des formes organisationnelles qui ne ressemblent plus à des écoles, des activités éducatives sans enseignants, des réformes sans gouvernement. Le livre s'intéresse aussi à la manière dont les acteurs traditionnels du monde scolaire font face à ce monde incertain : comment enseignants et élèves reconstituent-ils des univers de sens au sein des établissements scolaires ? Comment arbitrent-ils entre les multiples référents possibles ? La diversification des finalités éducatives, des normes et des valeurs nourrit une dynamique de fragmentation du système éducatif qui n'est pas sans poser question en termes de justice sociale et de capacité de l'école à continuer à jouer son rôle de ciment culturel des sociétés modernes. Destiné aux étudiants et chercheurs en sociologie et en sciences de l'éducation, mais aussi aux personnes soucieuses de l'école et de ses évolutions.

Mediavilla, M., Mancebón, M.-J., Pires, L., & Gómez-Sancho, J.-M. (2023). **Bilingual school choice and socio-economic segregation: an analysis for Spain based on PISA 2015.** Research Papers in Education, 38(6), 944-965. <https://doi.org/10.1080/02671522.2023.2188247>

In the academic year of 2004–2005, the Spanish region of Madrid began to implement a bilingual educational programme (MBP hereinafter) in state schools. One of the objectives of this programme was to make the study of a foreign language (English) accessible to students from economically disadvantaged families who cannot afford private foreign language classes. Our study aims to evaluate whether students from a disadvantaged socio-economic background really do have the same probability of participating in the MBP as their more privileged peers. The analysis use the PISA 2015 database which corresponds to the representative sample of the Community of Madrid in Spain, with added administrative information supplied by the Madrid Regional Ministry of Education concerning the identification of bilingual and non-bilingual schools. Using these data, we estimate a logit model directed at identifying which factors explain the choice by students of whether to attend a bilingual state school. The results obtained

reveal that the probability of attending a bilingual school is higher for students belonging to socio-economically and culturally better-off households. This suggests that the MBP could be fostering segregation within the state education sector in Madrid.

Millon-Fauré, K., Assude, T., Feuilladieu, S., & Tambone, J. (2023). **La scolarisation bilingue d'élèves sourds en collège : qu'en disent des parents d'élèves sourds et entendants ?** La nouvelle revue - Éducation et société inclusives, 97(1), 73-88. <https://doi.org/10.3917/nresi.097.0073>

Nous observons depuis six ans maintenant, avec un double regard didactique et sociologique, la mise en place et le fonctionnement d'une Unité localisée pour l'inclusion scolaire (Ulis) qui accueille des élèves sourds dans un parcours bilingue français écrit-Langue des signes française. Nous nous intéressons dans cet article aux témoignages des parents d'élèves sourds et entendants scolarisés dans ces classes afin d'étudier la manière dont ils perçoivent et s'approprient les dispositifs proposés par l'institution scolaire. Il s'agit de leur donner la parole par le biais d'entretiens semi-directifs, pour comprendre leur expérience vécue. Nous comparerons ces récits aux témoignages de leurs enfants, témoignages que nous avions analysés dans une recherche précédente (Feuilladieu, Assude, Tambone et Millon-Fauré, 2021).

Newbury, D., Mesa, C., Puglisi, M., Nash, M., Nag, S., Hulme, C., & Snowling, M. (2023). **Challenges for implementation in diverse settings: reflections on two randomised controlled trials of educational interventions in South American communities.** Research Papers in Education, 38(6), 966-986. <https://doi.org/10.1080/02671522.2022.2065526>

Research in the UK suggests that multi-componential interventions focusing on language and pre-literacy skills can improve children's reading and language skills. However, simple translations of such programmes may not produce equivalent effects in diverse communities. The reasons for this are multi-faceted and include factors beyond the rationale and content of the intervention programmes themselves. Understanding these factors is critical for creating programmes that will generalise across settings. In this review, we reflect upon challenges encountered in two reading and language intervention programmes in South America to identify community and cultural contextual factors that can influence the implementation and scalability of educational programmes. We use our findings to develop an education-specific framework to guide the development and implementation of high-quality evidence-based approaches to language and literacy intervention. Our model guides implementation practices in diverse contexts and stresses the importance of the evidence-base and communication.

Nizet, I., Maghnouj, S., & Klimova, V. (2023). **Addressing learning needs in the Asia-Pacific region: teachers' guide on diagnostic assessment.** Consulté à l'adresse Unesco website: <https://unesdoc.unesco.org/ark:/48223/pf0000387897?posInSet=8&queryId=N-85712c18-33b1-43f1-b2fa-56fd7668a6b7>

OCDE. (2023a). **Policy pointers for equitable, effective and personalised upper secondary transitions.** <https://doi.org/10.1787/ac6c2095-en>

An effective transition into upper secondary education supports learners to identify how their talents and strengths can be supported by different learning pathways. By contrast, weak transitions can lead to learners entering programmes that do not promote their aspirations or deepen their interests, putting their engagement and motivation at risk. At a systemic level, when transition systems do not function effectively, they can amplify

inequities, and jeopardise the formation of an appropriate skills mix for an economy. This Education Spotlight explores how countries manage transitions into upper secondary education and proposes policy pointers to guide transitions that support each learner to identify and pursue pathways that reflect and harness their personal talents and interests. It is based on the key findings from the OECD Education working paper Managing student transitions into upper secondary pathways.

OCDE. (2023b, décembre 5). **Résultats du PISA 2022**. Consulté 13 décembre 2023, à l'adresse OCDE website: <https://www.oecd.org/publication/resultats-du-pisa-2022/>
Préparer les élèves à un monde en pleine mutation

OECD. (2023a). **PISA 2022 Results (Volume I): The State of Learning and Equity in Education**. Consulté à l'adresse https://www.oecd-ilibrary.org/fr/education/pisa-2022-results-volume-i_53f23881-en

This is one of five volumes that present the results of the eighth round of assessment, PISA 2022. Volume I, The State of Learning and Equity in Education, describes students' performance in mathematics, reading and science; examines gender...

OECD. (2023b). **PISA 2022 Results (Volume II): Learning During – and From – Disruption**. Consulté à l'adresse https://www.oecd-ilibrary.org/fr/education/pisa-2022-results-volume-ii_a97db61c-en

This is one of five volumes that present the results of the eighth round of assessment, PISA 2022 – which was conducted during the COVID-19 global pandemic. Volume II, Learning During – and From – Disruption, focuses on resilience in education and...

Paccaud, O. **Projet de loi de finances pour 2024: Enseignement scolaire**. Rapport général n° 128 (2023-2024), tome III, annexe 14 (2023). <https://www.senat.fr/rap/I23-128-314/I23-128-314.html>

Park, A., Maine, E., Fini, R., Rasmussen, E., Di Minin, A., Dooley, L., ... Zhou, Y. (Joseph). (2024). **Science-based innovation via university spin-offs: the influence of intangible assets**. *R&D Management*, 54(1), 178-198. <https://doi.org/10.1111/radm.12646>

University spin-offs (USOs) have attracted significant attention from scholars and policymakers as an important mechanism for science-based innovation. The debate on how USOs generate innovation outcomes has often focused on tangible assets, while the role of intangible assets has been less explored and remains loosely defined. Yet emerging research suggests that intangible assets, especially in the early stages of a USO's lifecycle, have a critical influence on its survival and future success, highlighting a need for a better understanding of how intangible assets enable science-based innovation through USOs. Drawing from several streams of literature, we define intangible assets in the context of science-based innovation through USOs: an intangible asset is a resource that is non-physical, non-financial, has long life, and has potential to provide future benefits to the owner. Based on this working definition, we conduct a systematic literature review of the leading innovation management journals and inductively derive a framework outlining the antecedents, processes, and outcomes of science-based innovation through USOs, focusing on the influence of intangible assets. The framework identifies the categories of resources which can enhance or hinder science-based innovation through USOs. Such categorization reveals fruitful directions for future research such as a deeper examination of societal outcomes. We conclude by offering

recommendations for scholars, practitioners, and policymakers to better leverage intangible assets to enhance science-based innovation.

Probert, S. (2023). **International Education in Asia: The Changing Market**. *Journal of Research in International Education*, 22(3), 185-200.
<https://doi.org/10.1177/14752409231212185>

Given the rapid rise in recent years of British international education for local, rather than expatriate, students in Asia, this paper considers this fast-growing sector in the context of the history of British-style and English language education in Asia. Specifically using a post-colonialist framework as a means of critique of the notion of a British-style 'international education', it considers the challenges this new wave of international schools faces in terms of ensuring their curriculum and values are embedded in a local context. Using Asia alongside the West, as a reference point for curriculum planning and intercultural understanding, this paper then considers ways in which this new wave of schools can engage meaningfully with local as well as western contexts, reframing notions of 'global citizenship' in the process.

Projet de loi de finances pour 2024 : Recherche et enseignement supérieur. , Pub. L. No. Rapport général n° 128 (2023-2024), tome III, annexe 24 (2023).

Rosello, J. A. A., Campaña, C. P., & Gascon, M. G. (2023). **Students' Issues and Challenges in the Use of the Learning Management System in Davao City**. *Asian Journal of Education and Social Studies*, 49, 529-539. <https://doi.org/10.9734/ajess/2023/v49i31177>

This research focused on the issues and challenges in the use of the learning management system in Davao City. The significance of this study is to be aware of the narratives experienced by the students in implementing technological ideas in the institutions. The purpose of the study was To identify the different challenges in using learning management systems and online payment platforms in the "new normal." In order to gather data for the study, qualitative methodologies through an interview with the students. The approach involves analyzing and identifying the themes, which are thought to be more effective and valid. This study conducted an interview with 20 students and identified four (4) themes to help this research achieve the results.

Schneider, C. (2023). **Rien pour nous, sans nous Vicissitudes de l'éducation inclusive, de la Première Voix, de l'accessibilité et de la reconnaissance du droit à la participation : l'exemple de la Nouvelle-Écosse au Canada**. *La nouvelle revue - Éducation et société inclusives*, 97(1), 105-114. <https://doi.org/10.3917/nresi.097.0105>

Malgré l'évolution internationale vers des systèmes scolaires davantage inclusifs, il n'y a pas eu simultanément une amélioration de l'accessibilité ou de la participation des élèves en situation de handicap. Le prégnance du concept du capacisme, en usage dans les systèmes éducatifs, révèle que leurs structures (physiques mais surtout mentales), par exemple en Nouvelle-Écosse au Canada, ont une accessibilité limitée. La reconnaissance du droit à la participation et de l'agentivité de l'élève en situation de handicap se retrouvent ainsi au cœur du débat inclusif et poussent vers des nouvelles orientations, amplifiées récemment par l'expérience vécue de la pandémie globale. Le mouvement des personnes en situation de handicap insiste sur l'importance de la Première Voix (First Voice) pour reconnaître le vécu de la personne en situation de handicap dans la construction de ces orientations.

Séraphin, G., & Mathon-Cécillon, T. (2023, décembre 5). **Pourquoi tant d'enfants non scolarisés à Mayotte ?** Consulté 6 décembre 2023, à l'adresse The Conversation website: <http://theconversation.com/pourquoi-tant-denfants-non-scolarisés-a-mayotte-218748>
Les enfants non scolarisés sont de plus en plus nombreux à Mayotte. Une étude estime qu'ils seraient entre 5 379 et 9 575, ce qui interroge les politiques d'éducation.

Serir, Z., & Gremion, F. (2023). **Visible et invisible. De l'inclusion scolaire à la reconnaissance.** *La nouvelle revue - Éducation et société inclusives*, 97(1), 223-236. <https://doi.org/10.3917/nresi.097.0223>

Certains dispositifs inclusifs (EASNIE, 2016 ; Gillig, 2016) visent à mettre en place des mesures de compensation pour les élèves en situation de handicap et ceci afin de leur permettre de participer pleinement à l'éducation (Meier-Popa et Ayer, 2020). Cependant, derrière cette démarche, il se pose la question de la reconnaissance de l'enfant, c'est-à-dire reconnaître sa différence qui fait partie intégrante de son identité plurielle (Sen, 2006) et de sa singularité. La réflexion sur l'inclusion scolaire soulève dès lors des questions philosophiques et morales. Il est essentiel pour les auteurs de remettre en question de manière critique les conséquences d'une visibilisation induite par un enseignement non séparatiste. L'inclusion scolaire suppose-t-elle que les enfants ayant des besoins éducatifs particuliers soient visibles et qu'ils existent sur le chemin de leur reconnaissance potentielle ? Ou l'enseignement non séparatiste ne se réduit-il pas au déplacement physique d'enfants toujours invisibles et donc non reconnus vers un lieu et un espace considérés comme ordinaires ?

Shanks, R. (2023, février 15). **L'uniforme peut-il vraiment favoriser l'égalité entre les élèves ?** Consulté 18 décembre 2023, à l'adresse The Conversation website: <http://theconversation.com/luniforme-peut-il-vraiment-favoriser-legalite-entre-les-eleves-199140>

Faut-il imposer un uniforme aux élèves ? Si la question fait débat en France, la tradition est bien ancrée dans les écoles outre-Manche et leur expérience permet d'en évaluer les bénéfices supposés.

Sorensen, T. B., & Dumay, X. (2023). **The European Sectoral Social Dialogue in Education and the strengthening of the European Union's policy regime in education and employment.** *Journal of Education and Work*, 0(0), 1-21. <https://doi.org/10.1080/13639080.2023.2275767>

This paper traces the development of the European Sectoral Social Dialogue in Education since its launch in 2010 and situates it within the context of European Union (EU) governance. The paper adopts a public policy perspective and Ashley Jochim and Peter May's framework for analysing boundary-spanning policy regimes. Based on critical discourse analysis of social dialogue documents and interviews, we argue that the European Sectoral Social Dialogue in Education, as a distinctive institution, has been profoundly shaped by EU's boundary-spanning policy regime of education and employment and at the same time has contributed to its reinforcement. In particular, we demonstrate that the sectoral social dialogue committee since its creation has been embedded in wider institutional arrangements, that it seeks to mobilise education employers and workers on a large scale across Europe, and that it aligns with central issue framings and ideas of EU's boundary-spanning policy regime of education and employment. Thereby, the paper contributes to understanding how institutions, by

mobilising interests and channelling attention towards specific issues and ideas, play a central role in structuring and legitimising contemporary EU governance.

Spencer, J. (2023). **Working together: why language policies of international schools must evolve to incorporate collaborative strategies between EAL and the mainstream.** *Journal of Research in International Education*, 22(3), 222-239.
<https://doi.org/10.1177/14752409231213844>

This article arises from a research study that aimed to contribute to a better understanding of the essential nature of collaborative relationships between English as an Additional Language (EAL) and mainstream subject teachers at an international secondary school in Ukraine. The research focuses on how EAL teachers support EAL learners in the mainstream classroom through collaborative practices. The article draws on qualitative data from interviews and field notes with Language & Literature, Science and EAL teachers. The interviews investigated how EAL and mainstream collaboration help support EAL learners in the mainstream classroom, and which co-planning strategies most effectively encourage collaboration, as well as EAL and mainstream teachers' views and experiences about co-planning and working collaboratively. Arising from these data, discussion focuses on the disconnect between collaboration in theory and in practice. The article concludes that although effective collaborative strategies often exist, school language policies need to include scheduled collaborative planning time between EAL and the mainstream, and that professional development for mainstream teachers should be led by EAL teachers in order to foster more balanced content and language classroom teaching.

Steenwegen, J., Clycq, N., & Vanhoof, J. (2023). **The what and why of supplementary schooling in Flanders: purposes and underlying motives as perceived by initiators.** *Research Papers in Education*, 38(6), 1029-1051.
<https://doi.org/10.1080/02671522.2022.2065524>

Supplementary schooling can play an important role in the educational trajectory of minoritised youth. Yet, our knowledge of the communities' motives for organising education and the purposes the schools pursue remains limited. Existing literature tends to understand supplementary schools either as resisting ongoing inequity in mainstream society or as transmitting the heritage language. We argue that it is valuable to transcend this fragmented view by taking a more comprehensive approach to the diversity of purposes of supplementary schools and by revealing how purposes respond to various motives. Methodologically, semi-structured in-depth interviews with initiators of 12 supplementary schools in Flanders took place to learn about the pursued purposes and the motives underlying them. Rather than the fragmented view often presented in the literature, the initiators show a strong sensitivity to the variety of needs and are deeply invested to support and strengthen youth in navigating the different educational and socio-cultural contexts they are part of. These findings shed light on the variety of educational needs and desires of minoritised communities in continental Europa, highlighting opportunities to tackle enduring inequalities experienced by minoritised youth in mainstream school

Williams, R. P., & Richardson, J. W. (2023). **How International School Administrators Build Trust.** *Journal of Research in International Education*, 22(3), 240-255.
<https://doi.org/10.1177/14752409231215042>

This single-site case study focuses on how administrators in a Vietnamese international school build trust among expatriate teachers to foster informal teacher leadership. A theoretical framework based on Bourdieu's (1986) social capital theory was used to design the research instruments and analyze the data. Participants took part in semi-structured interviews. Findings suggest that when administrators trust teachers as professionals and listen to their perspective, teachers reciprocate trust back to administrators. Findings also suggest that administrators' handling of crises generates trust, but constant communication and transparency of information are key. The study highlights the importance of crisis management skills for administrators in international schools as these types of schools tend to be relatively isolated from the host country. The study also highlights the importance of trust for informal teacher leadership as trust was a prerequisite for collaboration. The findings also suggest that administrators play a critical role in building trust. However, administrators' role is indirect rather than direct. In addition to building trusting cultures, findings suggest that administrators have other means for fostering informal teacher leadership, which should be explored in future research.

Zoubir, Z. (2023). **Éducation, société et race en France : une perspective historique et épistémologique sur la controverse autour du racisme d'État.** Le Télémaque, 64(2), 65-77. <https://doi.org/10.3917/tele.064.0065>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du Télémaque.

Pratiques enseignantes

Amoudi, G., & Tbaishat, D. (2023). **Interactive notebooks for achieving learning outcomes in a graduate course: a pedagogical approach.** Education and Information Technologies, 28(12), 16669-16704. <https://doi.org/10.1007/s10639-023-11854-x>

Social network analysis involves delicate and sophisticated mathematical concepts which are abstract and challenging to acquire by traditional methods. Many studies show that female students perform poorly in computer science-related courses compared to male students. To address these issues, this research investigates the impact of employing a web-based interactive programming tool, Jupyter notebooks, on supporting deeper conceptual understanding and, therefore, better attainment levels of the course learning outcomes in a female setting. The work also highlights the overall experience and enjoyment this tool brought to the classroom. Document analysis and questionnaire were used as data collection methods. A mixed approach was applied, mid-term exam documents were investigated qualitatively, and the questionnaire was analyzed quantitatively. Our results showed that most students correctly perceived the learning outcomes and knowledge introduced within the Jupyter environment. Moreover, the interactive nature of Jupyter enhanced engagement and brought enjoyment to the learning experience.

Barbier, E., & Colognesi, S. (2023). **Les pratiques préconisées en formation pour faire la classe interviennent-elles dans les planifications des futurs enseignants de français ?** Canadian Journal of Education/Revue canadienne de l'éducation. <https://doi.org/10.53967/cje-rce.5601>

Planning teaching/learning activities is one of the essential tasks of "doing the classroom". In order to carry out this task, teacher education students are expected to use the practices proposed in training and recommended by research. We sought to identify the extent to which students mobilize these practices in their planning of teaching/learning activities. To do this, all the plans made by 18 future French teachers for their last four-week placement were collected. The results of the content analysis show the importance of practices such as the management of content to be taught, the communication of objectives, the use of existing teaching resources, the management of difficulties and the links between subjects. Furthermore, it appears that the future teachers participating in our study anticipate little, if at all, their feedback, the time of involvement of students in the evaluation process and metacognition. These observations are challenges for initial teacher education.

Ben Boubaker, M., & Dor, T. (2023). **Nommer la race : une pédagogie du conflit au lycée.** *Le Télémaque*, 64(2), 121-133. <https://doi.org/10.3917/tele.064.0121>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du Télémaque.

Besse-Patin, B., Bouillon, F., & Rozenholc-Escobar, C. (2021). **Faire école dehors ?** *Géographie et cultures*, (119), 1-167. <https://doi.org/10.4000/gc.19070>

De nombreux ouvrages grand public ont pointé, au cours des dernières années, la «déconnexion» des enfants d'avec la nature. Avec le premier confinement dû à la pandémie de Covid-19, les pédagogies de plein air ont fait l'objet d'une médiatisation renouvelée, faisant écho à une sensibilité croissante de nombreux actrices et acteurs de l'éducation. C'est à cette actualité d'une école qui voudrait «sortir des murs», ainsi qu'à ses présupposés philosophiques, pédagogiques et politiques, que s'intéresse ce numéro. Comment les écoles du dehors actuelles rencontrent-elles l'histoire longue des pédagogies du plein air ? Qui sont les acteurs et les réseaux qui promeuvent aujourd'hui l'éducation relative à l'environnement ? Concrètement, que veut dire faire classe dehors : quels sont les espaces investis, avec quelles conséquences sur le fonctionnement des écoles, et quels effets sur les publics – enfants et enseignant·es – concernés ? Comment, enfin, se rejouent les frontières du dedans et du dehors, voire les frontières mêmes de l'école, au sein de tels projets et pratiques ? Telles sont quelques-unes des questions abordées au sein de ce dossier résolument multidisciplinaire, à travers six articles ancrés dans plusieurs contextes nationaux. Le dossier comporte également deux témoignages et un entretien, permettant d'approfondir la dimension historique de «l'école dehors» et le sens que lui donnent les enseignant·es la mettant en œuvre aujourd'hui.

Booms, A., Brau-Antony, S., & Emprin, F. (2023). **Bifurcations didactiques lors de l'inclusion d'un élève équipé d'un matériel pédagogique adapté.** *La nouvelle revue - Éducation et société inclusives*, 97(1), 203-221. <https://doi.org/10.3917/nresi.097.0203>

L'inclusion d'élèves présentant des troubles des apprentissages, comme les troubles de l'acquisition des coordinations, est souvent associée à la dotation d'une aide technique informatique : le matériel pédagogique adapté. Cet article présente les résultats d'une recherche en contexte de classe sur l'usage de ces matériels et des difficultés associées

à leur déploiement en contexte scolaire. Nous avons mobilisé une approche didactique pour identifier la relation entre les pratiques des enseignants, ces matériels et les apprentissages effectifs des élèves en contexte inclusif. Les principaux résultats montrent que la relation entre l'usage du matériel pédagogique adapté et la mise en accessibilité des apprentissages est complexe et que, sous certaines conditions, le recours à cette aide technique peut même empêcher les apprentissages.

Brunel, M., & Foliot, C. (2021). **Le reverse mentoring au service de la formation à l'enseignement de la littérature pour le cours de français : faire de la formation initiale un outil de formation des enseignants tuteurs ?** Recherche & formation, 98(3), 59-74. Consulté à l'adresse <https://www.cairn.info/revue-recherche-et-formation-2021-3-page-59.htm>

Les recherches en didactique peinent à irriguer les pratiques d'enseignement. Cette enquête interroge la professionnalisation des tuteurs en charge de la formation initiale sur le terrain d'apprentissage. Convoquant deux domaines de recherche, didactique de la littérature et sciences de l'éducation et de la formation, l'étude mobilise une méthodologie centrée sur le suivi de binômes tuteurs-tutorés en établissement scolaire. Le but est d'identifier comment la préoccupation de la formation de la personne-élève fait l'objet de transactions dans le cadre du dispositif de formation tuteur-tutoré.

Chen, C.-Q., Wang, C.-Y., Shan, X.-F., Zhan, L., & Chen, S.-J. (2024). **An empirical investigation of reasons influencing pre-service teachers acceptance and rejection of immersive virtual reality usage.** Teaching and Teacher Education, 137, 104391. <https://doi.org/10.1016/j.tate.2023.104391>

During the deployment of the new technology, the behavioral intentions (BI) of pre-service teachers will play a significant role in its effectiveness. This study using the extended TAM model to explored pre-service teachers' BI to adopt Immersive Virtual Reality (IVR) in education. The participants of this study were 210 pre-service teachers who completed a self-reported questionnaire after experiencing IVR environment. Results indicated that subjective norms such as endorsement, recommendation, and sharing from mentors and peers had a significant impact on preservice teachers' intention to use IVR compared to other IVR acceptance studies.

Colay, É. (2021). **Effets d'une recherche collaborative basée sur un « dispositif d'écriture de type monographique ».** Recherche & formation, 98(3), 21-32. Consulté à l'adresse <https://www.cairn.info/revue-recherche-et-formation-2021-3-page-21.htm>

Pendant une « recherche avec » centrée sur la relation pédagogique en cours d'espagnol, basée sur un dispositif inspiré des groupes d'écriture monographique et ancrée dans l'approche clinique d'orientation psychanalytique, une sorte d'homologie entre l'expérience au sein du groupe et les pratiques avec les groupes-classes a pu être repérée. Un travail sur l'accueil des singularités dans les classes semble s'être effectué tandis que s'élaborait l'émergence des singularités dans le groupe, grâce à une énonciation subjectivée réassurant les participants dans leur posture enseignante pour s'ouvrir à l'imprévu.

Crouguennec, F. (2023). **Résolution de situations-problèmes au primaire : un défi de différenciation pédagogique et de didactique.** Revue des sciences de l'éducation, 49(1). <https://doi.org/10.7202/1107845ar>

Cet article présente les résultats des analyses d'entretiens auprès de quatre enseignantes montréalaises du primaire, à qui nous avons demandé comment elles prévoyaient l'enseignement-apprentissage d'une situation-problème mathématique. À travers le modèle de résolution de problèmes de Verschaffel et coll. (2000) et les indicateurs de la différenciation pédagogique de Tomlinson (1999), nous décrivons les adaptations prévues selon les élèves. Globalement, les résultats indiquent que les enseignantes tiennent compte des besoins des élèves et des obstacles propres aux situations-problèmes et s'y adaptent. Cependant, les explications abondantes lors du moment de la découverte de la situation semblent nuire à l'autonomie des élèves.

Doo, M. Y. (2023). **An investigation of the social influence processes of flipped class students: An application of the extension of the technology acceptance model.** *Education and Information Technologies*, 28(12), 16593-16613. <https://doi.org/10.1007/s10639-023-11878-3>

Universities are increasingly incorporating flipped learning as an effective instructional approach. Given the popularity of flipped learning, numerous studies have examined the psychological aspects of students and learning achievement in flipped learning classes. However, little research has examined the social influence processes of students in flipped class. This study investigated the effects of social influence processes (i.e., subjective norm, image, and voluntariness) on students' perceived usefulness of and intention to register for flipped learning using the extension of technology acceptance model (TAM2). A total of 306 undergraduates who took flipped classes participated in this research. The primary research findings indicated that subjective norm influenced perceived usefulness and intention to register for flipped classes. However, image did not influence perceived usefulness or intention to register for flipped classes. Voluntariness affected perceived usefulness and influenced intention to register for flipped classes through perceived usefulness.

García Castro, A. (2023). **À la recherche d'un temps libre : une expérience de lecture avec les enfants dans un quartier de Buenos Aires.** *Le Télémaque*, 64(2), 11-23. <https://doi.org/10.3917/tele.064.0011>

Situé dans un quartier de Buenos Aires, le Patio des livres est un atelier de lecture adressé en priorité à des enfants qui ne sont pas déjà des lecteurs. À travers l'exploration du monde des livres, et au gré des conversations qui peuvent se produire, il est le lieu d'une réflexion avec les enfants sur des sujets variés et aussi un espace où des liens se forgent en lisant.

Geçer, E., Bagci, H., & Atar, C. (2023). **"Nothing replaces meeting my students at class": Analysing academics' views regarding distance education.** *Education and Information Technologies*, 28(12), 16615-16636. <https://doi.org/10.1007/s10639-023-11887-2>

Distance education, also called distance learning, e-learning, and online learning, is a practice of teaching and learning in which teachers and learners are not in a closed class or room in person, but where education takes place through various new-media technologies and all parties (student-teacher, teacher-teacher, student-student) are able to communicate, interact and exchange information and emotions. Being on the agenda of educational science for a long time now and gaining further importance during COVID-19 lockdowns, both advantages (e.g., reducing social anxiety, and a flexible schedule) and disadvantages (lack of social interactivity, and miscommunication) of distance education are highly debated in the related literature.

Therefore, this study, through a qualitative method (i.e., a case study design and semi-structured interviews), aims to analyse the opinions and experiences of academics regarding distance education and its applications. The participants consist of 36 lecturers working at 16 different Turkish universities selected by the purposeful sampling method (i.e., typical case sampling). The results suggest that the participants still have doubts about online distance education, and they mention both ups (ease of connection, and cost-effectiveness) and downs (lack of self-motivation, socialization, and the sense of isolation) of it. Nonetheless, none of the academics thinks distance education will replace an in-person learning environment in the near future. Thus, this study presents a general illustration of distance education activities through the views of Turkish academics and gives recommendations for future digital/distance/online learning activities and functionalities.

Gobert, S. (2023). **Secondarisation et connaissance utile**. *Revue française de pédagogie*, 219(2), 7-28. Consulté à l'adresse <https://www.cairn.info/revue-francaise-de-pedagogie-2023-2-page-7.htm>

L'article expose une mise en relation de deux perspectives qui s'intéressent au rôle des signes et du langage dans la construction du rapport des élèves aux enjeux didactiques et à leurs apprentissages. Une des perspectives est celle développée en sciences du langage par les chercheuses Martine Jaubert et Maryse Rebière autour du processus de secondarisation. L'autre perspective est l'approche pragmatiste et sémiotique développée en didactique des mathématiques par le chercheur François Conne, fondée sur une définition du savoir comme connaissance utile. Je montre sur le plan paradigmatic, et sur le plan expérimental à partir d'une étude de cas, que les deux approches, bien que spécifiques et différentes, rendent compte d'un phénomène cognitif et didactique de même ordre. La conclusion ouvre alors sur une relecture de méthodes et de schémas interprétatifs en didactique et suggère de nouvelles mises en relation.

Gou, P. (2023). **Teaching english using mobile applications to improve academic performance and language proficiency of college students**. *Education and Information Technologies*, 28(12), 16935-16949. <https://doi.org/10.1007/s10639-023-11864-9>

The purpose of the study is to determine the effectiveness of mobile applications in conjunction with the students' online collaboration in the educational environment of Chinese colleges (the context of learning English). The students were selected from all those who study English in their educational programs. At the first stage, they passed a test on the level of language knowledge and among 423 students 140 were selected who had a level of B2 and below. Then they were divided into control and experimental groups. Each had 70 people. The experimental group was trained using the following mobile applications: Busuu, Lingoda, LinguaLeo, BBC Learning English. The results showed that the participants in the experimental group scored higher on the final test (74.71) than the control group participants (65.9). It suggests that mobile learning technologies can improve student achievement. The preliminary test determined the level of knowledge of the experimental group students in this way: 85% of students know English at the B2 level, 14% - B1, and 1% - A2. These figures improved significantly in the second test: the number of students who reached the C2 level was 7%, C1-79%, and 14% of all students remained with the B2 level. For the control group students, these indicators remained unchanged. Most of the students found this format of education suitable and interesting for online collaboration. These results may be useful for teaching practice, because they

provide evidence base with the experimental research for the introduction of mobile technologies in the modern educational process. It solves the problem of using the certain mobile applications (Busuu, Lingoda, LinguaLeo, BBC Learning English) that have not been explored before.

Guillén-Gámez, F. D., Ruiz-Palmero, J., & García, M. G. (2023). **Digital competence of teachers in the use of ICT for research work: development of an instrument from a PLS-SEM approach.** *Education and Information Technologies*, 28(12), 16509-16529. <https://doi.org/10.1007/s10639-023-11895-2>

All spheres of our life are being affected using technology, particularly its integration in the research processes carried out by teachers. The success of the integration of specific digital resources in research work can be affected by several factors, such as: digital skills for finding information, managing it, analyzing it, and communicating results; digital flow; anxiety in the use of ICT; digital ethics; quality of digital resources; and finally, the behavioral intention to integrate ICT. The purpose of this study is to examine the factors that influence the integration of ICT in the research process of the Higher Education teacher, and the relation between them. An online survey was used to collect data, and 1740 participants. This study used a causal model through partial least squares structural equations modeling (PLS-SEM). With this, the hypotheses established between the integration of ICT and its possible incident factors were verified. The findings revealed a significant influence path from factor integration to digital skills, ethics, flow digital, and behavior intention. Although, resource quality and ICT anxiety had significant effects on the causal model, they did not have a large impact on teachers' integration of digital resources. The total of these factors corresponded to 48.20% of the variance in the integration of the researcher of the specific digital resources to be used in the research process. These results confirm that this model is effective in explaining the technological integration of teachers to use ICT in research work.

Herscu-Kluska, R., & Pe'er, S. (2024). **The effect of documentary-based assignments on teachers' perceptions of older adults and aging: A case study.** *Teaching and Teacher Education*, 137, 104388. <https://doi.org/10.1016/j.tate.2023.104388>

This study presents the effect of visual media-based assignments on teachers' perceptions of older adults and aging. These assignments were part of an online Lifelong Learning course developed and followed by research. A qualitative research method was used for analyzing 18 M.Ed. student teachers' writing assignments after watching documentaries about older adults. The findings show that documentaries have diverse effects on teachers' perceptions, from expanding their perspectives on aging and older adults to generating more positive perceptions. These results underscore the need to develop teacher-education courses on aging and to recognize the potential of documentaries as educational tools.

Huang, L., Doleck, T., Chen, B., Huang, X., Tan, C., Lajoie, S. P., & Wang, M. (2023). **Multimodal learning analytics for assessing teachers' self-regulated learning in planning technology-integrated lessons in a computer-based environment.** *Education and Information Technologies*, 28(12), 15823-15843. <https://doi.org/10.1007/s10639-023-11804-7>

Teachers' self-regulated learning (SRL) plays a crucial role in developing technological pedagogical content knowledge (TPACK), a complex professional skill. It is crucial to identify teachers' SRL activities that may lead to favorable TPACK. Previous studies have

focused on the analysis of individual data sources from self-reported surveys or log files, which are insufficient to capture all SRL activities in the TPACK context. While multimodal learning analytics (MMLA) has the potential to improve SRL measurement, it remains unknown how multimodal data collected from different sources can be combined to identify salient features of SRL activities and examine how TPACK outcomes can be predicted by SRL activities identified from multimodal data. This study combined multimodal data from computer logs and think-aloud data to analyze teachers' SRL activities in designing a technology-integrated lesson. We identified the salient features of SRL from the combined data and explored how identified SRL activities might predict TPACK outcomes reflected in teacher-generated lesson plans. The results of random forest regression analysis show that three SRL activities from the logs and two from the think-aloud data formed the best combination that explained a significant proportion of variances in TPACK performance. The impact of MMLA in SRL measurement and the implication of this study are discussed.

Jeon, J., & Lee, S. (2023). **Large language models in education: A focus on the complementary relationship between human teachers and ChatGPT.** *Education and Information Technologies*, 28(12), 15873-15892. <https://doi.org/10.1007/s10639-023-11834-1>

Artificial Intelligence (AI) is developing in a manner that blurs the boundaries between specific areas of application and expands its capability to be used in a wide range of applications. The public release of ChatGPT, a generative AI chatbot powered by a large language model (LLM), represents a significant step forward in this direction. Accordingly, professionals predict that this technology will affect education, including the role of teachers. However, despite some assumptions regarding its influence on education, how teachers may actually use the technology and the nature of its relationship with teachers remain under-investigated. Thus, in this study, the relationship between ChatGPT and teachers was explored with a particular focus on identifying the complementary roles of each in education. Eleven language teachers were asked to use ChatGPT for their instruction during a period of two weeks. They then participated in individual interviews regarding their experiences and provided interaction logs produced during their use of the technology. Through qualitative analysis of the data, four ChatGPT roles (interlocutor, content provider, teaching assistant, and evaluator) and three teacher roles (orchestrating different resources with quality pedagogical decisions, making students active investigators, and raising AI ethical awareness) were identified. Based on the findings, an in-depth discussion of teacher-AI collaboration is presented, highlighting the importance of teachers' pedagogical expertise when using AI tools. Implications regarding the future use of LLM-powered chatbots in education are also provided.

Kersten, B., & Struys, É. (2023). **Échos d'une école inclusive.** Consulté à l'adresse <https://www.atzeo.com/produit/echos-ecole-inclusive/>

Leddy, S., & Miller, L. (2023). **Teaching Where You Are.** Consulté à l'adresse <https://staging-torontopress.kinsta.cloud/9781487554019/teaching-where-you-are>

Teaching Where You Are offers a guide for non-Indigenous educators to work in good ways with Indigenous students and provides resources across curricular areas...

Mascret, N., Marlin, K., Laisney, P., Castéra, J., & Brandt-Pomares, P. (2023). **Teachers' acceptance of an open-source, collaborative, free m-learning app: The predictive role of teachers' self-approach goals.** *Education and Information Technologies*, 28(12), 16373-16401. <https://doi.org/10.1007/s10639-023-11832-3>

Based on the Technology Acceptance Model (TAM), the aims of the present cross-sectional study were i) to investigate acceptance by teachers of an open-source, collaborative, free m-learning app, named Artefac, ii) to examine whether teachers' self-approach goals (i.e., the motivation to teach more effectively than before) may be a relevant external variable to include in the TAM, and iii) to investigate potential differences of acceptance between school subjects (humanities and social science teachers vs. science teachers), status (in-service teachers vs. pre-service teachers), and contexts (teachers in schools classified as difficult vs. teachers in schools not so classified). A total of 419 French teachers (277 women, 142 men) took part in the present correlational survey. After reading a text with pictures presenting an open-source, collaborative, free m-learning app, named Artefac, the participants filled out a self-reported questionnaire about its acceptance before use, assessing perceived usefulness for teaching, perceived ease of use, perceived enjoyment, and intention to use. Teachers' self-approach goals were also assessed. One-sample t-tests and structural equation modeling were used to analyze the data. The results showed that Artefac was rather well accepted by teachers (with middle to strong effect sizes), whatever their school subject, their status, and their teaching context. The results also highlighted that teachers' self-approach goals positively predicted perceived enjoyment and perceived ease of use but did not predict perceived usefulness for teaching, indicating that the more teachers wanted to increase their teaching skills, the more they found Artefac easy to use and fun to use.

Mohebi Amin, A., Rabiei, M., Yazdi Amirkhiz, S. Y., & Shomoossi, N. (2024). **We are still to learn from our learners: A hidden curriculum developed during the covid-19 pandemic.**

Teaching and Teacher Education, 137, 104390. <https://doi.org/10.1016/j.tate.2023.104390>

The present study was conducted to explore various aspects of the hidden curriculum in virtual instruction during the Covid-19 pandemic. Participants were 30 undergraduate students of educational sciences in a major state university in Iran. In this qualitative phenomenological study, data were collected via semi-structured interviews, and analyzed according to Strauss and Corbin's outline by open and axial coding. Nine major themes emerged: academic burnout, decreased academic resilience, self-directed learning, the prominence of the content, power distance between faculty and students, academic procrastination, academic dishonesty, educational inequality, and academic help seeking. Results showed that virtual instruction during the Covid-19 pandemic had created a hidden curriculum, impacting students' performance in academic and motivational areas. Students had also developed diverse attitudes towards education, their own learning, and teachers' practice.

Monette, J. (2022). **La création d'une relation pédagogique en contexte de mise à distance de la formation : stratégies pédagogiques et numériques** (Mémoire accepté, Université du Québec). Consulté à l'adresse <https://archipel.uqam.ca/16709/>

L'objectif général de la recherche est de déterminer les différentes stratégies pédagogiques et numériques qui favorisent la création d'une relation pédagogique à distance en enseignement supérieur. Les concepts clés de la relation pédagogique qui ont été retenus pour la recherche sont le climat de classe, la présence et la qualité

relationnelle de Cosmopoulos (1999). Ce type de recherche se caractérise par le fait qu'elle découle de la vie quotidienne et cherche à fournir une image précise d'un phénomène commun dans l'objectif d'éventuellement agir sur ce dernier. La vision de la réalité est construite par les acteurs faisant partie de la situation puisque c'est la dynamique du phénomène de la relation pédagogique à distance qui est étudiée. La nature même du savoir est donc intimement lié au contexte dans lequel il se produit. Afin d'expliquer le phénomène et de comprendre les sous-entendus, l'expérience de l'enseignant qui offre des cours à distance devient alors primordiale. À cet effet, un questionnaire et des entrevues semi-dirigées ont été conduits pour relever les principales stratégies pédagogiques utilisées pour favoriser la relation pédagogique dans un contexte de mise à distance de la formation.

Müller, W., & Leyer, M. (2023). **Understanding intention and use of digital elements in higher education teaching.** *Education and Information Technologies*, 28(12), 15571-15597. <https://doi.org/10.1007/s10639-023-11798-2>

Digital elements are being increasingly used in higher education teaching, but the intention and their actual use vary depending on the lecturers. We used the reasoned action approach to understand the beliefs and intentions behind the use of digital elements in this context. We conducted a quantitative survey in which university lecturers shared their intention concerning the use of digital learning elements and indicated their actual use. The results confirm the influence of attitude, perceived norms, and perceived behavioral control on the intention to use digital learning elements. However, we also identified an intention-behavior gap: Only one-time effort to become familiar with digital elements has a significant impact on actual usage. We conclude that, above all, teachers must first be given the opportunity to become familiar with digital learning elements to be able to use them effectively. Understanding why such an intention-behavior gap exists should be the aim of future studies.

Nalbantoğlu, Ü. Y., & Bümen, N. T. (2024). **Changes in the curriculum adaptation skills of teachers as a result of professional development support: A Turkish case study.** *Teaching and Teacher Education*, 137, 104386. <https://doi.org/10.1016/j.tate.2023.104386>

Despite the growing popularity of research on teachers' curriculum adaptation, how to improve their ability to adapt curriculum productively remains unexplored. This paper presents a multi-case study to reveal changes in the productivity of curriculum adaptation patterns through long-term professional development (PD) support. The findings indicate that PD support enhanced the productive adaptation of teachers in all patterns and that adaptive decisions became systematic and deliberative at the 14-week follow-up. Moreover, extending and omitting demand high levels of pedagogical design capacity, which requires further support for teachers. Lastly, the study discusses the implications on the growth and adaptation of teachers.

Nizet, I., Maghnouj, S., & Klimova, V. (2023). **Addressing learning needs in the Asia-Pacific region: teachers' guide on diagnostic assessment.** Consulté à l'adresse Unesco website: <https://unesdoc.unesco.org/ark:/48223/pf0000387897?posInSet=8&queryId=N-85712c18-33b1-43f1-b2fa-56fd7668a6b7>

Nyambek-Mebenga, F. (2023). **Éduquer contre le racisme sans dire la race : d'une pédagogie colorblind à une pédagogie antiraciste critique.** *Le Télémaque*, 64(2), 79-92. <https://doi.org/10.3917/tele.064.0079>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du Télémaque.

Osuna, J. M., & Munson, J. (2024). **Exploring what teachers notice about students' interactional dynamics during collaborative mathematics problem-solving and their connections to instructional practice.** *Teaching and Teacher Education*, 137, 104380. <https://doi.org/10.1016/j.tate.2023.104380>

This paper reports on an exploratory teacher professional development study, in which we examine what teachers noticed about student interactional dynamics during collaborative mathematical activity, as well as how teachers reflected on what they notice in relation to their own instructional practice. Analysis of video records of teachers' discussions show that teachers noticed and made sense of students' interactional dynamics during collaborative mathematics problem-solving. Teachers noticed: (1) how challenging collaboration is for students; (2) the utility of social negotiations; (3) affordances of student intellectual authority; and (4) the mechanics of collaboration. Teachers also made connections to their teaching practice. Across the academic year, teachers used three processes to connect what they've noticed to practice; they: (1) re-interpreted prior experiences, (2) mapped the terrain of collaborative work, and (3) identified value for future action.

Passavant, V., & Passavant, É. (2021). **Jouer au jeu sans jouer le jeu. Apports et limites du jeu dans l'apprentissage des étudiantes infirmières.** *Recherche & formation*, 98(3), 7-19. Consulté à l'adresse <https://www.cairn.info/revue-recherche-et-formation-2021-3-page-7.htm>

Les étudiantes en soins infirmiers de troisième année ont des difficultés à assimiler le rôle propre infirmier dans la prise en charge des effets secondaires des chimiothérapies anticancéreuses. Plutôt que le cours magistral habituel, nous avons expérimenté un jeu, afin de favoriser l'over learning, la mobilisation et le transfert de connaissances. Les étudiantes ont apprécié cet enseignement plus horizontal, proche de ce qui est vécu en stage, mais les résultats à l'évaluation demeurent faibles. Introduire le jeu dans l'apprentissage permet de créer une dynamique positive, mais ne suffit pas à améliorer les méthodes de travail et à transformer le rapport au savoir des étudiantes en difficulté.

Patall, E. A., Vite, A., Lee, D. J., & Zambrano, J. (2024). **Teacher support for students' psychological needs and student engagement: Differences across school levels based on a national teacher survey.** *Teaching and Teacher Education*, 137, 104400. <https://doi.org/10.1016/j.tate.2023.104400>

Student engagement typically declines across development. Corresponding school level declines in teachers' use of need supportive practices is suspected to contribute. However, research has rarely examined this supposition. Using survey data collected in 2022 from a national sample of 954 full-time U.S. public-school teachers, results from structural equation modeling analyses suggested that secondary teachers reported using need supportive practices less than elementary teachers, which partly explained school level differences in teachers' perceptions of students' engagement. Relationships were consistent across teachers serving students of varying racial, income, and linguistic

backgrounds. Results suggest that motivation support programs should target the secondary level.

Pérez, J.-M., & Suau, G. (2023). **Pratiques inclusives et développement du pouvoir d'agir des enseignants chercheurs.** *La nouvelle revue - Éducation et société inclusives*, 97(1), 59-71. <https://doi.org/10.3917/nresi.097.0059>

Les recherches actuelles qui se développent dans le champ des disability studies à l'université, et ayant pour objet d'analyser les pratiques et les discours des Enseignants chercheurs (EC) dans l'enseignement supérieur français (Perez et Suau, 2020 ; Kennel, Guillot, Caublot et Rohmer, 2021 ; Suau et Lambert, 2022) sont encore peu nombreuses. Cet article se propose de rendre compte de l'expression de la singularité du sujet EC dans la visée de favoriser une accessibilisation de l'environnement universitaire. Plus précisément, il s'agit de rendre compte, à partir des discours recueillis, non seulement des rapports d'assujettissement, des rapports d'affranchissement et de transgression à l'égard des normes, qui se faisant permettent – ou font obstacles – à une accessibilité aux savoirs pour les Étudiants reconnus par l'institution comme handicapé (ERIH), mais aussi de se demander si les pratiques transgressives ne sont pas finalement à la source de pratiques inclusives et d'un développement du pouvoir d'agir des enseignants du supérieur.

Portex, M., Darnon, C., & Núñez-Requeiro, F. (2023). **Prévenir le décrochage scolaire : Perceptions et pratiques des enseignants.** Consulté à l'adresse Ecolhuma website: <https://hal.science/hal-04305170>

Saltos-Rivas, R., Novoa-Hernández, P., & Rodríguez, R. S. (2023). **Understanding university teachers' digital competencies: a systematic mapping study.** *Education and Information Technologies*, 28(12), 16771-16822. <https://doi.org/10.1007/s10639-023-11669-w>

Being digitally competent is an imperative requirement for the 21st century university teacher, a fact recognized by both the literature and policymakers. Although this topic has been addressed in different reviews and critical studies recently, none of them have systematically and explicitly addressed the factors that explain, or are explained by, the digital competencies of university teachers. Examples of these factors include, among others, demographic, professional and psychological aspects of university teachers, as well as very specific digital competencies. The present study seeks to close this gap through a systematic mapping of the literature published until 2021 in journals indexed by Scopus and Web of Science (WOS). Based on the selection of 53 primary studies, we characterized the literature and summarized the main results reported so far. The analysis allowed us to conclude the following: 1) there is a growing number of contributions aimed at understanding the acquisition of digital competencies, especially from external factors; 2) European, and more specifically Spanish, university teachers from multiple disciplines are the most studied population; 3) most studies adopted quantitative approaches to explain but not prove causality; 4) there is a great heterogeneity of relationships and results that explain the digital competencies of university professors. The implications of these results are discussed with a view to identifying the gaps that provide scope for future research.

Sancho Sora, C. (2021). **Former pour transformer la profession enseignante : le cas d'une formation en établissement.** *Recherche & formation*, 98(3), 47-58. Consulté à l'adresse <https://www.cairn.info/revue-recherche-et-formation-2021-3-page-47.htm>

Cet article, qui étudie la réception d'une formation en établissement dont les contenus sont présentés comme innovants, vise à mieux comprendre ce que l'Institution nomme parfois la résistance des enseignants au changement. Au-delà des contenus qui semblent, à première vue, adaptés aux problèmes rencontrés par l'établissement, nous étudions les modalités de leur mise en œuvre pour tenter d'expliquer les tensions suscitées par cette action de formation. Celles-ci apparaissent comme le résultat d'une construction collective à laquelle participent les orchestrateurs de la formation.

Sharley, V. (2023). **Responding to Child Neglect in Schools: factors which scaffold safeguarding practice for staff in mainstream education in Wales.** *Research Papers in Education*, 38(6), 1008-1028. <https://doi.org/10.1080/02671522.2022.2089211>

Child neglect is a problem that presents many challenges to learning and teaching in schools. Children are unable to learn if their basic needs are not met. Neglect is the second most common reason for a child to be on a child protection plan in Wales. Given the universal nature of their provision within the community, and the prevalence of neglect, schools are well-placed to notice and intervene early and provide support to children that promotes their health and wellbeing. In fact, staff in schools have the opportunity to observe children's behaviours, and their interactions with other pupils and family members up to five days a week over an extended period of time. However, little is known about the specific ways in which staff in schools respond to neglect and what factors help them to provide effective school-based support to families. This paper presents findings from thirty interviews with staff in six mainstream primary and secondary schools in Wales. Findings identify three factors that support neglect-practice within the school-setting (i) a whole-school proactive approach to child neglect; (ii) a positive learning and development environment for staff members; and (iii) relationships between staff and the child(ren)'s family.

Smith, B., Morris, S. P., & Armitage, H. (2023). **Using pupils' grade obtained in national examinations as an outcome measure in evaluations: some considerations for the design of randomised controlled trials.** *Research Papers in Education*, 38(6), 886-901. <https://doi.org/10.1080/02671522.2022.2065522>

It is not uncommon for randomised trials in education to have the performance of sample members in national examinations as their primary outcome. In many cases, examination results are available as summary measures only. Taking the example of GCSE examination results in England, this paper shows that using summary measures of an underlying score or mark, such as exam grade, complicates the design of trials and can lead to underpowered studies. Simple simulations are used to explore the consequences of powering trials to detect a difference assuming grade or summary measures are the only outcome metric available, where the effects of an intervention are primarily captured in the unknown mark or score distribution. The analysis draws on data that relate the entire distribution of marks in English language and mathematics examinations to grades. Recommendations are made in order to address this problem.

Tao, J., Xu, Y., & Gao, X. A. (2024). **Teacher emotions and agency enactment in online teaching.** *Teaching and Teacher Education*, 137, 104389. <https://doi.org/10.1016/j.tate.2023.104389>

This semester-long study examines teachers' responses to online teaching with a focus on the interplay between teacher emotions and agency enactment in a Chinese university. Analysis of the data from three-round interviews with 12 teachers revealed

highly complex emotional trajectories, which were dominated by outcome emotions and characterised by the co-existence of positive and negative emotions. The multiple facets of teacher emotions (i.e., valence, activation, object focus), together with the underlying appraisals, were closely connected to agency enactment. In turn, agency enactment transformed teachers' emotional experiences, which was affected by (dis)enabling agent-context relations at multiple levels.

Teague Tsopgny, A. (2023). **Relation élève-enseignant·e et choix d'orientation en mathématiques selon le genre : analyse des effets médiateurs.** Revue des sciences de l'éducation, 49(1). <https://doi.org/10.7202/1107844ar>

L'objectif de ce travail est d'étudier l'effet des composantes de la relation élève-enseignant·e sur le choix d'études en mathématiques selon le genre et les mécanismes par lesquels ces composantes agissent sur ce choix. Une collecte des données par questionnaire a été menée auprès de 405 élèves, parmi lesquel·le·s les deux sexes étaient représentés, en classe de seconde C au Lycée Général-Leclerc de Yaoundé. Les résultats confirment en grande partie nos hypothèses de recherche. Les perceptions associées aux relations chaleureuses et au soutien de l'enseignant·e de mathématiques déterminent le choix des mathématiques, indépendamment du sexe de l'élève. Le sentiment d'efficacité personnelle et l'anxiété en mathématiques sont les médiateurs de ces liens.

Thiery, N. (2023). **Représenter la diversité phénotypique dans les albums de fiction pour la jeunesse : pour quelles approches d'une éducation antidiscriminatoire ?** Le Télémaque, 64(2), 93-106. <https://doi.org/10.3917/tele.064.0093>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du Télémaque.

Thomas, V., & Carpentier, G. (2023). **Dispositifs didactiques utilisés par les tuteur·rice·s des centres d'aide en français des cégeps.** Revue des sciences de l'éducation, 49(1). <https://doi.org/10.7202/1107842ar>

Le tutorat est l'un des services les plus fréquemment offerts dans les cégeps du Québec. Les élèves qui veulent s'améliorer en écriture peuvent se tourner vers les centres d'aide en français pour obtenir du tutorat. En 2021, nous avons sondé 101 tuteur·rice·s de 12 cégeps francophones pour mieux connaître les dispositifs utilisés. Nous avons aussi mené des entrevues individuelles auprès de quatre tutrices et deux tuteurs. Les analyses quantitatives et qualitatives révèlent que les tuteur·rice·s privilégient les dispositifs didactiques de grammaire (exercices et corrections de textes), puisque leur principal mandat est d'aider les tutoré·e·s à réduire leur nombre de fautes. Or, des tutoré·e·s pourraient bénéficier de plus de soutien pour planifier et écrire leurs textes.

Tzafirkou, K., Perifanou, M., & Economides, A. A. (2023). **Assessing teachers' digital competence in primary and secondary education: Applying a new instrument to integrate pedagogical and professional elements for digital education.** Education and Information Technologies, 28(12), 16017-16040. <https://doi.org/10.1007/s10639-023-11848-9>

Teachers' digital competence (DC) is an important condition for the effective application of technology in education. Although several DC tools have been designed, adjustments to digital education and pedagogical or professional components are still scarce. Therefore, this study aims at developing a new instrument for assessing teachers' DC regarding their pedagogical and professional activities in the context of digital school and digital education. The study also examines the teachers' total DC scores and explores the differences between teacher profiles on a sample of 845 teachers in primary and secondary education in Greece. The final instrument comprises 20 items allocated in six components: 1) Teaching preparation; 2) Teaching delivery & students' support; 3) Teaching evaluation & revision; 4) Professional development; 5) School's development; and 6) Innovating education. The PLS-SEM analysis indicated the validity and reliability of the model in respect to its factorial structure, internal consistency, convergence validity, and model fitness. The results revealed DC inefficiency among teachers in Greece. Primary school teachers reported significantly lower scores in Professional development and Teaching delivery & students support. Female teachers reported significantly lower scores in Innovating education and School's development, but they reported higher scores in Professional development. The contribution and practical implications are discussed in the paper.

Viriot-Goeldel, C. (2023). **La réponse à l'intervention, un référentiel dans la lutte contre les difficultés de lecture.** Revue française de pédagogie, 219(2), 91-127. Consulté à l'adresse <https://www.cairn.info/revue-francaise-de-pedagogie-2023-2-page-91.htm>

S'appuyant sur la littérature scientifique nord-américaine, la présente note de synthèse retrace la genèse et l'évolution du référentiel de la réponse à l'intervention (RAI) outre-Atlantique. Elle examine les aspects organisationnels et didactiques de sa mise en œuvre dans le domaine de l'apprentissage de la lecture, révélant des caractéristiques d'une aide efficace aux élèves en difficulté. Au-delà des réussites ponctuelles de certains dispositifs d'aide, elle souligne également les défis auxquels la recherche scientifique est confrontée pour évaluer l'efficacité globale de cette approche. En mettant en lumière certaines conditions de son efficacité, elle met aussi en évidence la nécessité de contextualiser les résultats et de tenir compte de la diversité des mises en œuvre et des obstacles liés à son déploiement.

Wang, C., Huang, X., Chi-Kin Lee, J., & Xu, P. (2024). **Teachers' informal workplace learning profiles: Outcomes and antecedents.** *Teaching and Teacher Education*, 137, 104407. <https://doi.org/10.1016/j.tate.2023.104407>

Informal workplace learning (IWL) significantly shapes teachers' beliefs and performance. However, empirical investigations of teachers' IWL, especially derived from a person-centered approach, remain scarce. We conducted two studies to extend teachers' IWL research by examining whether discernable profiles can be identified and whether these profiles differ in relation to teachers' in-role and extra-role outcomes and antecedents. Latent profile analysis of 7,792 primary school teachers from China yielded four IWL profiles: Low IWL, Moderate IWL, High IWL, and Colleague-interaction-oriented IWL. The varying relationships of each profile with outcomes and antecedents were also comprehensively examined, generating valuable implications for teacher learning improvement.

Relation formation-emploi

Balas, S. (2023). **Les référentiels des certifications professionnelles : entre intelligence formative et intelligence gestionnaire.** Formation emploi, 164(4), 129-148. <https://doi.org/10.4000/formationemploi.11990>

Les certifications professionnelles, en France, sont rédigées sous forme de référentiels dont l'un des enjeux est de produire une description fidèle des principales caractéristiques du travail exercé dans le métier visé par le diplôme. La conception de ces référentiels cristallise certaines contradictions entre deux types d'usagers : les formateurs et les gestionnaires en entreprise. Dans ce travail, nous cherchons à montrer, en nous appuyant sur deux exemples (les secteurs de l'informatique et de la protection sociale), que si les référentiels sont construits à partir d'une analyse du travail et rendent compte de sa complexité, alors ils permettent de concilier enjeux formatifs et gestionnaires.

Bentolila, S., Cabrales, A., & Jansen, M. (2023). **Does Dual Vocational Education and Training Pay Off?** (CESifo Working Paper Series N° 10762). Consulté à l'adresse CESifo website: https://econpapers.repec.org/paper/cesceswps/_f10762.htm

This paper analyzes the causal impact of dual vocational education and training (VET) on the labor market insertion of youth. Using matched education and social security records, we estimate the causal impact of a major reform that introduced a new dual track, which combines firm- and school-based training, on the labor market outcomes of the first three dual VET cohorts in the Spanish region of Madrid. The control group is composed of individuals who graduated in the same fields and years in school-based VET. Selection into dual VET is dealt with using a distance-based instrumental variable. Dual VET is found to generate sizable improvements in employment and earnings, but no significant impact on job quality. The results are not driven by pre-reform differences in the quality of the schools that adopted dual VET and the higher retention rate of dual VET graduates only partly explains the dual premium.

Berera, F., Costa de Beauregard, A., Waquet-Airy, L., Hanotaux, P., & Vilboeuf, L. (2023). **Tensions sur les effectifs et compétences dans l'industrie et dispositifs de formation associés.** Consulté à l'adresse IGÉSR website: <https://www.ih2ef.gouv.fr/tensions-sur-les-effectifs-et-competences-dans-lindustrie-et-dispositifs-de-formation-associes>

Ce rapport commun de l'IGF, de l'IGÉSR et de l'IGAS analyse les besoins en emplois et compétences industrielles dans un contexte marqué par une politique de réindustrialisation portée par France 2030 et les projets liés aux transformations environnementales, énergétiques et numériques.

Caillaud, P. (2023). **Postface : Le référentiel : cet obscur objet du droit.** Formation emploi, 164(4), 149-158. <https://doi.org/10.4000/formationemploi.12191>

CEREQ. (2023). **Mieux connaître les liens formation - emploi - travail : un collectif scientifique au service de l'action publique** (p. 149) [Bilan-Programme 2023 > 2024].

Consulté à l'adresse Céreq website: <https://www.cereq.fr/sites/default/files/2023-12/C%C3%A9req%20-%20Bilan%20Programme%202023%202024.pdf>

Denouël, J., & Granjon, F. (2023). **La médiation numérique à l'épreuve de ses référentiels.** Formation emploi, 164(4), 43-63. Consulté à l'adresse <https://www.cairn.info/revue-formation-emploi-2023-4-page-43.htm>

Nous souhaitons ici explorer les relations entre travail et référentiels à partir du champ professionnel de la médiation numérique et d'un type de référentiel (les référentiels emploi activités et compétences – RéAC) qui, l'un et l'autre, ont été peu étudiés jusqu'ici. Dans ce cadre, nous examinerons plus spécifiquement les rapports entre certification, métier et professionnalisation d'une communauté de travailleurs. L'analyse porte sur l'évolution des quatre RéAC de la médiation numérique et, ce faisant, sur les dynamiques professionnelles internes (from within) et externes (from above) qui concourent à l'infléchissement du contenu des référentiels de ce champ. Ces référentiels peuvent être alors considérés comme des soutiens à la professionnalisation et des vecteurs de déprofessionnalisation.

Deville, J. (2023). **Utiliser ou contourner les référentiels en Validation des Acquis de l'Expérience à l'université : une pratique incertaine.** Formation emploi, 164(4), 65-84. <https://doi.org/10.4000/formationemploi.12153>

Cet article propose une exploration des pratiques de la Validation des Acquis de l'Expérience (VAE) à l'université, en France, sous l'angle des usages ou non des référentiels dans l'accompagnement et les pratiques des jurys. Il s'appuie principalement sur une enquête par entretiens auprès de conseillères VAE et d'enseignants-chercheurs. Les données convergent avec la littérature quant à la nécessaire interprétation des référentiels, dont une lecture normative n'est guère adaptée aux trajectoires singulières des candidats. Mais elles révèlent aussi qu'une partie de la difficulté des conseillers et enseignants réside dans une perception biaisée de ces outils.

Jolly, C., Moncel, N., & Ullmann, A.-L. (2023). **Nouveaux métiers et certification : l'impossible équation ?** Formation emploi, 164(4), 111-127. <https://doi.org/10.4000/formationemploi.12069>

La réforme de la formation professionnelle de 2018 s'est accompagnée d'une refonte des procédures d'enregistrement des certifications inscrites au Répertoire National des Certifications Professionnelles (RNCP), qui ouvre une démarche dérogatoire pour un enregistrement plus rapide de certifications liées à des « métiers en émergence ou en forte évolution ». À partir d'une analyse des dossiers de candidature à cette procédure dérogatoire, cet article questionne la pertinence d'une telle initiative au regard de la difficulté à stabiliser la notion qui la fonde. En effet, les métiers sont par nature sans cesse en évolution, par recomposition et réagencement permanent des activités et des contextes professionnels. Par ailleurs, l'article discute la conception de la formation comme remède aux tensions sur le marché du travail. C'est finalement l'ambiguïté du rôle dévolu à la certification par cette procédure dérogatoire qui est soulevée : ne sert-elle pas aussi une régulation de l'offre de formation et de son financement ?

Métral, J.-F., Olry, P., & Rossand, C. (2023). **Le rôle régulateur du travail collectif dans la conception des référentiels.** Formation emploi, 164(4), 13-41. <https://doi.org/10.4000/formationemploi.12015>

Dans un cadre réglé qui produit les documents référentiels appropriables par les acteurs des systèmes de formation, cet article interroge la manière dont ils sont conçus. Par quels chemins et pratiques combinent-ils et intègrent-ils le regard porté sur le travail avec les autres enjeux et contraintes liés à la certification et à la formation professionnelle ? Cet

article révèle le travail de conception tel qu'il se déroule, se distribue, se négocie dans la chaîne de participation et de collaboration de différents types d'acteurs (institutionnels, inspecteurs, professionnels du secteur, enseignants), et comment s'y négocie la place donnée au travail. Il s'appuie sur l'analyse de la conception des diplômes de l'enseignement technique agricole.

Ulmann, A.-L., & Balas, S. (2023). **Introduction. Les référentiels : du travail aux usages.** Formation emploi, 164(4), 7-12. Consulté à l'adresse <https://www.cairn.info/revue-formation-emploi-2023-4-page-7.htm>

Réussite scolaire

Ben Hamouda, L. (2023a, décembre 6). **PISA 2022 : La chute.** Consulté 6 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/06/pisa-2022-la-chute-2/>

Cette fois, c'est une vraie chute de niveau qu'enregistre la nouvelle évaluation internationale Pisa organisée par l'OCDE. Elle concerne les jeunes âgés de 15 ans. Si presque tous les pays sont touchés par des conséquences négatives du covid, les élèves français chutent beaucoup plus que les autres. Et, pour la première fois, l'OCDE pointe directement...

Ben Hamouda, L. (2023b, décembre 6). **PISA 2022 : la France, encore et toujours, championne des inégalités.** Consulté 6 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/06/pisa-2022-la-france-encore-et-toujours-championne-des-inegalites-3/>

Que nous apprend PISA 2022 sur les inégalités sociales ? « La France est toujours l'un des pays de l'OCDE où le lien entre le statut socio-économique des élèves et la performance qu'ils obtiennent au PISA est le plus fort », écrit l'OCDE qui tempère en soulignant qu'il n'y a pas d'aggravation « notable sur la période 2012-2022 ». PISA...

Ben Hamouda, L. (2023c, décembre 6). **PISA 2022 : une baisse du niveau en sciences.** Consulté 6 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/06/pisa-2022-une-baisse-du-niveau-en-sciences/>

Le score français en culture scientifique diminue de 6 points en 4 ans. Avec un score à 487, la France se classe juste au-dessus de la moyenne des pays de l'OCDE. L'enquête PISA 2022 montre surtout que les écarts se creusent davantage entre les bons élèves et les moins performants. S'il fallait des preuves, le...

Bernigole, V., Fernandez, A., Loi, M., & Salles, F. (2023). **PISA 2022 : la France ne fait pas exception à la baisse généralisée des performances en culture mathématique dans l'OCDE.** Note d'information, (23.48), 1-4. <https://doi.org/10.48464/ni-23-48>

En mai 2022, environ 8 000 élèves de 15 ans scolarisés dans 335 collèges et lycées français ont participé aux épreuves de l'enquête PISA, ainsi que leurs homologues de 80 autres pays ou « économies partenaires ».

Bocangel, S. H. (2023). **Les ethnothéories de la réussite éducative : Une étude ethnographique de la niche de développement dans la région de Cusco au Pérou**

(Phdthesis, Université Lumière - Lyon II). Consulté à l'adresse <https://theses.hal.science/tel-04319292>

L'objectif de cette recherche est d'aborder la manière dont les ethnothéories de la réussite éducative se constituent en fonction des contextes socio-économiques et culturels dans lesquels sont priorisés certaines pratiques éducatives et l'apprentissage de compétences adaptées au développement de l'enfant. L'originalité de notre démarche a consisté à explorer et confronter les points de vue des enfants, des parents et des enseignants dans différents contextes socioculturels du Pérou (région de Cusco) afin de mieux comprendre les représentations sociales de la réussite éducative. Le concept d'ethnothéorie trouve son origine dans le modèle théorique de l'écologie culturelle, la niche de développement (Harkness & Super, 1986) qui le définit comme les représentations mentales de l'éducation faisant partie d'une construction sociale pour le développement de l'enfant dans un écosystème complexe (Conus & Ogay, 2014). Afin de comprendre ces représentations, nous avons utilisé une méthodologie multidisciplinaire qui nous a permis d'accéder aux discours des acteurs sociaux, ainsi qu'aux pratiques éducatives et aux contextes de la vie quotidienne. Prenons en compte que la définition de la réussite éducative dans cette recherche n'englobe pas une dimension purement scolaire, mais aussi l'expression plus large du terme, le sens même de l'éducation et ses objectifs. Cette méthode inclut la triangulation des méthodologies et des données. Nous avons donc utilisé différentes méthodes d'enquête : un questionnaire écrit et des dessins d'enfants, des entretiens approfondis semi-structurés, l'observation participante et l'enregistrement vidéo des séances de classe à l'école. Pour la triangulation des données, nous avons pris en compte la comparaison des ethnothéories des trois acteurs ; enfants, parents et enseignants, ainsi que ces ethnothéories dans les différentes zones d'étude. Le groupe cible était constitué d'enfants âgés de 9 et 10 ans en quatrième année d'école primaire (CM1) de trois écoles situées dans des zones préalablement sélectionnées et présentant des caractéristiques socio-économiques et culturelles différentes. Pour cette sélection, l'analyse de l'Évaluation Nationale des Élèves (ECE) au Pérou a été essentielle car elle nous a permis de définir trois districts pour l'étude : Wanchaq (zone urbaine), Saylla (zone urbaine marginale), Huancarani (zone rurale). En plus de ces trois lieux, nous avons complété notre étude dans une école de la communauté rurale indigène de Chuachua à Q'eros, située dans la province de Paucartambo (province de la région de Cusco). Nos résultats montrent que les ethnothéories de la réussite éducative expriment le système de valeurs de la société en ce qui concerne la socialisation souhaitée à la maison et l'éducation scolaire des enfants. Il y a donc une polarisation des ethnothéories en fonction du contexte urbain, périurbain et rural. Plus une famille est proche de la zone urbaine, plus ses ethnothéories sont adaptées au programme scolaire, car elles contiennent le même paradigme culturel. Ceci explique l'inadéquation de l'école au contexte culturel rural. Dans le même ordre d'idées, le développement socio-économique et culturel joue un rôle important dans la détermination des compétences et des objectifs éducatifs : plus les enfants vivent près de la zone urbaine, plus ils cherchent à acquérir des compétences d'autonomie et d'individualisme et d'ouverture à une société occidentale. Plus les enfants vivent près de la zone rurale, plus ils développent solidarité, communautarisme et la persistance de la culture indigène. En témoigne la diglossie entre le castillan et les langues indigènes, en particulier le quechua pour notre étude. En effet, plus on se rapproche des zones urbaines, moins le quechua est appris et valorisé, alors que dans les zones rurales éloignées, le quechua reste la langue dominante, même dans le cadre de l'école.

Bret, A., Durand de Monestrol, H., Hick, M., Salles, F., Fernandez, A., & Loi, M. (2023). **PISA 2022 : culture scientifique, compréhension de l'écrit et vie de l'élève.** Note d'information, (23.49). Consulté à l'adresse <https://www.education.gouv.fr/pisa-2022-culture-scientifique-comprehension-de-l-ecrit-et-vie-de-l-eleve-380208>

En mai 2022, environ 8 000 élèves de 15 ans scolarisés dans 335 collèges et lycées français ont participé aux épreuves de l'enquête PISA. La culture scientifique et la compréhension de l'écrit ont été évaluées.

Gou, P. (2023). **Teaching english using mobile applications to improve academic performance and language proficiency of college students.** *Education and Information Technologies*, 28(12), 16935-16949. <https://doi.org/10.1007/s10639-023-11864-9>

The purpose of the study is to determine the effectiveness of mobile applications in conjunction with the students' online collaboration in the educational environment of Chinese colleges (the context of learning English). The students were selected from all those who study English in their educational programs. At the first stage, they passed a test on the level of language knowledge and among 423 students 140 were selected who had a level of B2 and below. Then they were divided into control and experimental groups. Each had 70 people. The experimental group was trained using the following mobile applications: Busuu, Lingoda, LinguaLeo, BBC Learning English. The results showed that the participants in the experimental group scored higher on the final test (74.71) than the control group participants (65.9). It suggests that mobile learning technologies can improve student achievement. The preliminary test determined the level of knowledge of the experimental group students in this way: 85% of students know English at the B2 level, 14% - B1, and 1% - A2. These figures improved significantly in the second test: the number of students who reached the C2 level was 7%, C1-79%, and 14% of all students remained with the B2 level. For the control group students, these indicators remained unchanged. Most of the students found this format of education suitable and interesting for online collaboration. These results may be useful for teaching practice, because they provide evidence base with the experimental research for the introduction of mobile technologies in the modern educational process. It solves the problem of using the certain mobile applications (Busuu, Lingoda, LinguaLeo, BBC Learning English) that have not been explored before.

Hamouda, L. B. (2023a, décembre 5). **Claude Lelièvre : Rappels historiques pour situer les résultats du PISA nouveau.** Consulté 13 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/05/clause-lelievre-rappels-historiques-pour-situer-les-resultats-du-pisa-nouveau/>

À quelques heures de l'annonce des résultats du Programme International pour le suivi des acquis des élèves (PISA), Claude Lelièvre revient sur les résultats des précédentes éditions. Et s'ils étaient d'une « honnêteté moyenne », ils ont révélé l'incapacité du système français à résorber les inégalités sociales. Contrairement à ce qui est parfois suggéré voire affirmé,...

Hamouda, L. B. (2023b, décembre 14). **Daniel Bart : Le pisa 2022 et les discours sur l'École.** Consulté 18 décembre 2023, à l'adresse Le Café pédagogique website: <https://www.cafepedagogique.net/2023/12/14/daniel-bart-le-pisa-2022-et-les-discours-sur-lecole/>

Pour Daniel Bart, l'enquête PISA pose problème, et cela à plusieurs égards. « L'approche du PISA nous semble effectivement conduire à "porter des jugements" sur l'École, mais moins "en toute connaissance de cause" qu'à des "jugements" hâtifs et peu nuancés sur des fonctionnements scolaires pourtant complexes » écrit le chercheur spécialiste de la question de l'évaluation des...

James-Brabham, E., Loveridge, T., Sella, F., Wakeling, P., Carroll, D. J., & Blakey, E. (2023). **How do socioeconomic attainment gaps in early mathematical ability arise?** *Child Development*, 94(6), 1550-1565. <https://doi.org/10.1111/cdev.13947>

Socioeconomic attainment gaps in mathematical ability are evident before children begin school, and widen over time. Little is known about why early attainment gaps emerge. Two cross-sectional correlational studies were conducted in 2018–2019 with socioeconomically diverse preschoolers, to explore four factors that might explain why attainment gaps arise: working memory, inhibitory control, verbal ability, and frequency of home mathematical activities (N = 304, 54% female; 84% White, 10% Asian, 1% black African, 1% Kurdish, 4% mixed ethnicity). Inhibitory control and verbal ability emerged as indirect factors in the relation between socioeconomic status and mathematical ability, but neither working memory nor home activities did. We discuss the implications this has for future research to understand, and work towards narrowing attainment gaps.

OCDE. (2023, décembre 5). **Résultats du PISA 2022.** Consulté 13 décembre 2023, à l'adresse OCDE website: <https://www.oecd.org/publication/resultats-du-pisa-2022/>
Préparer les élèves à un monde en pleine mutation

OECD. (2023a). **PISA 2022 Results (Volume I): The State of Learning and Equity in Education.** Consulté à l'adresse https://www.oecd-ilibrary.org/fr/education/pisa-2022-results-volume-i_53f23881-en

This is one of five volumes that present the results of the eighth round of assessment, PISA 2022. Volume I, The State of Learning and Equity in Education, describes students' performance in mathematics, reading and science; examines gender...

OECD. (2023b). **PISA 2022 Results (Volume II): Learning During – and From – Disruption.** Consulté à l'adresse https://www.oecd-ilibrary.org/fr/education/pisa-2022-results-volume-ii_a97db61c-en

This is one of five volumes that present the results of the eighth round of assessment, PISA 2022 – which was conducted during the COVID-19 global pandemic. Volume II, Learning During – and From – Disruption, focuses on resilience in education and...

Ormerod, A. J., Parisi, T., DeBlaere, C., & Sagrestano, L. M. (2023). **School climate tolerant of sexual harassment is indirectly related to academic disengagement through peer sexual harassment and feeling safe in high school girls.** *Journal of Social Issues*, 79(4), 1231-1250. <https://doi.org/10.1111/josi.12528>

Although illegal, sexual harassment is endemic in US schools, with students perceiving that school officials ignore complaints of harassment. Research findings have linked school climate tolerant of sexual harassment to peer sexual harassment (PSH) and school outcomes, yet there is a need to better understand these relationships. This cross-sectional study examined whether there was an indirect effect of school climate tolerant of sexual harassment on disengagement from school, individually and serially, through experiences of PSH victimization and feeling safe at school in a sample of 171

predominantly Black and White girls (14–19 years old) attending high school in the wider Memphis, Tennessee area. The findings supported that a climate tolerant of sexual harassment was indirectly related to school disengagement through PSH and feeling less safe. These findings add to the literature by demonstrating that a climate tolerant of sexual harassment, PSH victimization, and perceptions about personal safety are associated with harm to students' academic outcomes in the form of school and academic disengagement. Further, the current findings suggest that a national agenda for school safety needs to consider school climate tolerant of sexual harassment in order to be effective in responding to sexual harassment and supporting student engagement.

Portex, M., Darnon, C., & Núñez-Regueiro, F. (2023). **Prévenir le décrochage scolaire : Perceptions et pratiques des enseignants**. Consulté à l'adresse Ecolhuma website: <https://hal.science/hal-04305170>

Shear, B. R. (2023). **Gender Bias in Test Item Formats: Evidence from PISA 2009, 2012, and 2015 Math and Reading Tests**. *Journal of Educational Measurement*, 60(4), 676-696. <https://doi.org/10.1111/jedm.12372>

Large-scale standardized tests are regularly used to measure student achievement overall and for student subgroups. These uses assume tests provide comparable measures of outcomes across student subgroups, but prior research suggests score comparisons across gender groups may be complicated by the type of test items used. This paper presents evidence that among nationally representative samples of 15-year-olds in the United States participating in the 2009, 2012, and 2015 PISA math and reading tests, there are consistent item format by gender differences. On average, male students answer multiple-choice items correctly relatively more often and female students answer constructed-response items correctly relatively more often. These patterns were consistent across 34 additional participating PISA jurisdictions, although the size of the format differences varied and were larger on average in reading than math. The average magnitude of the format differences is not large enough to be flagged in routine differential item functioning analyses intended to detect test bias but is large enough to raise questions about the validity of inferences based on comparisons of scores across gender groups. Researchers and other test users should account for test item format, particularly when comparing scores across gender groups.

Tsakpinoglou, F., & Véronneau, M.-H. (2023). **La réussite des élèves en formation professionnelle au Québec: effets directs et modérateurs de la compétence émotionnelle**. *Revue des sciences de l'éducation*, 49(1). <https://doi.org/10.7202/1107843ar>

Cette étude examine le rôle de la compétence émotionnelle dans la réussite éducative des élèves en formation professionnelle au Québec. La compétence émotionnelle, les symptômes anxieux et dépressifs et la réussite éducative ont été mesurés par questionnaire chez 177 élèves pendant et après leur formation. Les compétences émotionnelles de base ont un lien direct avec la réussite éducative. Chez les élèves présentant de faibles symptômes anxieux ou dépressifs, une régulation émotionnelle élevée permettrait d'atteindre une réussite élevée, ce qui n'est pas le cas chez les élèves présentant des symptômes plus sévères. La priorisation des interventions auprès d'élèves à risque est discutée.

Valdés, M. T., Espadafor, M. C., & Keivabu, R. C. (2023). **Can a low emission zone improve academic performance? Evidence from a natural experiment in the city of Madrid** (MPIDR Working Paper N° WP-2023-048). Consulté à l'adresse Max Planck Institute for Demographic Research, Rostock, Germany website: <https://econpapers.repec.org/paper/demwpaper/wp-2023-048.htm>

-In late 2018, the government of Madrid instituted a low emission zone (LEZ) in the central district of the city, aiming primarily to alleviate traffic-related emissions and enhance air quality. Extensive research has documented the adverse effects of air pollution on academic performance. Consequently, the success of Madrid's LEZ in reducing traffic-related emissions could potentially translate into improved performance among students schooled in the designated area. Through a difference-in-differences design, we demonstrate the policy's effectiveness in improving air quality during the four years following its implementation. Subsequently, we show a noteworthy increase of 0.17 standard deviations in the average EvAU scores (high-stakes examinations for university admittance) of high schools within the LEZ, a crucial advantage for gaining entry into the most competitive university programs. Importantly, our findings reveal positive spillover effects in the surroundings of the LEZ area and a larger effect the longer and earlier the exposure to cleaner air. In sum, our study offers compelling empirical evidence of the beneficial educational impacts resulting from the implementation of a low emission zone successful in improving air quality.

Valeurs

Boullier, D., & Faye, M. (2023, décembre 13). **Avec ChatGPT, « les enseignants ne peuvent pas s'appuyer sur un système qui n'a aucune éthique »**. Le Monde.fr. Consulté à l'adresse https://www.lemonde.fr/campus/article/2023/12/13/avec-chatgpt-les-enseignants-innovent-le-couteau-sous-la-gorge_6205524_4401467.html

Dominique Boullier, professeur de sociologie émérite à Sciences Po Paris, craint, dans une interview au « Monde », que l'utilisation des intelligences artificielles génératives dépouille les étudiants de leur esprit critique.

Ding, J., & Zhao, J. (2023). **Marx et l'éducation morale : une philosophie humaniste et scientifique**. Le Télémaque, 64(2), 147-161. <https://doi.org/10.3917/tele.064.0147>

Les questions de racisme en éducation sont de plus en plus étudiées au sein de la recherche francophone. Ce numéro s'inscrit dans leur prolongement et fait écho à une actualité brûlante en France. Le positionnement de l'école vis-à-vis des élèves musulmans et/ou non blancs invite à réfléchir à la reproduction d'un racisme institutionnel en éducation, ce que se propose de faire ce numéro du Télémaque.

Maxwell, B., Gereluk, D., & Martin, C. (2023). **Le cadre éthique et légal de l'enseignement: Guide pour les professionnels de l'enseignement**. Consulté à l'adresse <https://www.puq.ca/catalogue/livres/cadre-ethique-legal-enseignement-4368.html>

Le cadre éthique et légal de l'enseignement propose une mine d'informations accessibles et concises au personnel enseignant à propos des cadres éthiques et légaux qui s'appliquent à leurs fonctions ainsi qu'à celles des directions d'établissement scolaire. La société exige de ces derniers qu'ils rencontrent certaines attentes en matière de conduite professionnelle, notamment par le truchement de codes de déontologie, de normes de pratique, de lois provinciales et territoriales, de politiques des conseils scolaires, de la Charte canadienne des droits et libertés et de la Charte des droits et

libertés de la personne du Québec. Les enseignantes et les enseignants doivent prendre en compte ces normes dans leur prise de décision quotidienne au travail. Présentant de multiples études de cas, des exercices de réflexion et des questions de discussion, ce livre encourage le lectorat à pratiquer et à développer les compétences professionnelles clés de la réflexion raisonnée, de l'argumentation et de l'analyse critique en s'engageant dans certains des problèmes et débats les plus importants auxquels la profession enseignante est confrontée au Québec et au Canada aujourd'hui. Ce guide offre aux étudiantes et aux étudiants en formation initiale à l'enseignement, au personnel enseignant en poste, à leurs formatrices et à leurs formateurs, et aux directions d'établissement scolaire les ressources nécessaires pour se frayer un chemin à travers les cadres éthiques et légaux complexes qui réglementent le quotidien de la pratique enseignante.

Merveilleux, D. (2023, décembre 4). **Ces jeunes diplômés heureux dans les « big corps » : « J'ai envie de gagner des sous, et je ne vais pas arrêter de faire ce que je fais pour aider la collectivité ».** Le Monde.fr. Consulté à l'adresse https://www.lemonde.fr/campus/article/2023/12/04/ces-jeunes-diplomes-heureux-dans-les-big-corpos-j-ai-envie-de-gagner-des-sous-et-je-ne-vais-pas-arreter-de-faire-ce-que-je-fais-pour-aider-la-collectivite_6203799_4401467.html

Bien que conscients des enjeux environnementaux, une large partie des jeunes diplômés des grandes écoles intègrent des multinationales, préférant faire passer leurs ambitions professionnelles avant leur utilité sociale et écologique.

Stuart, M. (2023). **Passage du programme Éthique et culture religieuse au programme Culture et citoyenneté québécoise : d'éthique ou de culture religieuse ?** (Masters, Université du Québec à Chicoutimi). Consulté à l'adresse <https://constellation.uqac.ca/id/eprint/9497/>

Au Québec, l'éducation tente de s'adapter aux nouvelles réalités. Ainsi, la déconfessionnalisation de l'État et l'augmentation de l'immigration amènent un changement de paradigme au niveau éducatif. Pour favoriser la reconnaissance de l'autre et la poursuite du bien commun, le programme Éthique et culture religieuse voit le jour. Essuyant beaucoup de critiques négatives, le gouvernement met sur pied une équipe de rédaction et des comités consultatifs dans le but de faire une refonte. Le programme Culture et citoyenneté québécoise est donc présentement en construction. D'une part, le programme Éthique et culture religieuse axe sur le développement des compétences Réfléchir à une question éthique, Manifester sa compréhension du religieux et Pratiquer le dialogue. L'élève aborde des thèmes qui amènent des conflits de valeurs et tente de résoudre les situations de façon à favoriser le bien de tous. De plus, il apprend à comprendre l'influence des cultures religieuses dans son environnement et dans les coutumes d'autrui. D'autre part, le programme Culture et citoyenneté québécoise permet l'analyse de diverses situations d'un point de vue éthique et sociologique. D'ailleurs, les compétences à développer sont Réfléchir sur des questions éthiques et Étudier une réalité culturelle. Cela permet de réfléchir et de développer une pensée critique sur divers thèmes. Bien que l'éducation sexuelle et l'éducation numérique font désormais partie du programme, il existe un écart entre les deux programmes en ce qui concerne une composante importante du développement personnel, social et spirituel de l'élève : la culture religieuse. Donc, ce mémoire propose une nouvelle avenue dans la façon d'aborder la culture religieuse pour favoriser une réflexion dans une perspective éthique : l'utilisation de la théorie des trois pôles de

Ricoeur. De plus, il est question de proposer des solutions à court et à moyen terme dans l'implantation du programme Culture et citoyenneté québécoise afin de répondre aux limitations reprochées à son prédécesseur.