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Acquisition de compétences


This study tested the mediating role of self-directed learning skills (SDL) between students’ conceptions of mathematics and their achievement in mathematics using a structural equation model. Data were collected using the “Conceptions of Mathematics Questionnaire” and the “Self-Rating Scale of Self-Directed Learning”, together with students’ achievement in mathematics. A sample of 440 first year university students at King Saud University participated in the study. The findings confirm the moderating role of students’ self-directed learning skills between their conceptions of mathematics and their achievement in mathematics. Students who have a highly fragmented conception of mathematics tended to have low SDL skills, and in turn low mathematics achievement (partial mediation), whereas students who have a highly cohesive conception of mathematics tended to have high self-directed learning skills, and in turn high mathematics achievement (full mediation). Mathematics educators should be aware that students' conceptions of mathematics may be influential, but not sufficient to predict achievement in mathematics. Equipping students with appropriate conceptions of mathematics and self-directed learning skills is key to enhancing their performance in mathematics.


When Sweden began to experience a steady decline in student achievement results in PISA and TIMMS, the Swedish National Agency of Education initiated a model of collaboration with Swedish universities aimed at providing support to schools with falling student achievement scores. In this article, we examine how such projects can work at the local school level. Our focus is mainly on how knowledge construction can be realized for teachers and principals; we reflect on whose knowledge is valued, and we explore what role research texts play in school improvement. Working within the frames of both social and cultural processes, we looked at how teachers and principals are provided opportunities to develop and define their own professional understanding of school improvement. We found that knowledge construction of school improvement, as both a political and cultural process, needed to be based on local needs. The guidance of a knowledgeable other in interpreting research literature on school improvement can support such knowledge construction only when the local needs and history are part of the process.


There has been a lot of interest to competence-based education in research and scholarship. How competence-based education has been developed and implemented varies across education systems in Europe. The European Commission defines digital competence as one of the eight key competence standards for lifelong learning. The European digital competence framework DigComp provides a comprehensive and exhaustive framework for citizens; it has the potential to be adapted
to the needs of specific target groups. Nevertheless, no current research has focused on the need for developing a common framework for primary and secondary education. To address this gap we present a digital competence framework for European primary and secondary students. DigComp and a set of European frameworks are analysed in this paper. Combining categorical analysis with the collaboration of teachers and experts in the field, we define performance criteria and components that contribute to competence by five categories, providing a framework to promote the acquisition and evaluation of digital competence. This framework can be implemented in any EU country, it incorporates the most recent theoretical advances in research on information and communication technologies.


The importance of creativity in education has been increasingly recognised by policymakers and, as contemporary research argues, the way curricula are organised and implemented impact on children’s creativity. Scotland has recently introduced a new curriculum, the ‘Curriculum for Excellence’ (CfE), but there has yet been no research on how the implementation of the CfE has impacted on childhood creativity. This paper uses qualitative data (field-notes and interview transcripts) – from a case study conducted in one Scottish primary school classroom with 1 teacher and 25 children aged 11–12 – to explore what cultural and structural issues influence childhood creativity. This paper is primarily based on teacher’s data and also includes data from seven children. The study found that the CfE can be implemented in both rigid and flexible ways and that structural barriers to creativity emerge when, amongst other causes, cultivation of skills within a tick-box system is perceived as more important than exploration and risk-taking, and when teachers are pressured to evidence the outcomes of their work. This paper concludes that the cultivation of creativity requires schools to build participatory frameworks which leave space for reflection and co-construction and which value diversity, equity and collaboration.


In this article, we investigate whether academic technology-based knowledge crosses university boundaries or remains trapped inside the ivory tower. To do so, we rely on a matched sample approach to compare the spillovers generated by academic and firm patents using measures that take into account knowledge spilling-in and knowledge spilling-out of academia. Although it is true that knowledge exchanges among universities may inflate the overall spillovers of university patents vis-à-vis firm patents, our results indicate that university patents generate more spillovers than a comparable sample of matched corporate patents, even when knowledge flows among universities are not regarded as spillovers. This suggests that, in our sample, firm technologies more frequently rely on academic patents than on technologies from other corporations. In addition, we find that the gap between university and industry spillovers differs across industries, with industries where patents are important for appropriating returns from R&D (i.e. more economically valuable), such as drugs, presenting a smaller gap than in industries with complex technologies (where firms have strong incentives to patent aggressively), such as computers. Finally, we show that industry patents generate
more spillovers locally and that academic knowledge spillovers are less geographically localized than those of corporate research.


Le rôle et les fonctions des managers évoluent, sous les effets combinés des mutations du travail et des organisations. Aux prises avec des modèles parfois contradictoires, ces derniers manquent de repères que pourrait leur apporter une formation mieux adaptée à leurs besoins. Les auteurs de ce Céreq Bref s’appuient sur leurs expériences en tant qu’enseignants et intervenants en entreprise pour analyser les caractéristiques du travail des managers et dégager des pistes pour concevoir des formations au plus près de leur travail réel.


Skills are central to the capacity of countries and people to thrive in a rapidly changing world. Recovering from the COVID-19 pandemic will require countries to co-ordinate interventions to help recent graduates find jobs, reactivate the skills of displaced workers and use skills effectively in workplaces. Megatrends such as globalisation, climate change, technological progress and demographic change will continue to reshape work and society. Countries should take action now to develop and use more effectively the skills required for the world of the future and at the same time make their skills systems more resilient and adaptable in the context of change and uncertainty. The OECD Skills Strategy provides countries with a strategic approach to assess their skills challenges and opportunities. The foundation of this approach is the OECD Skills Strategy framework allowing countries to explore how they can improve i) developing relevant skills, ii) using skills effectively, and iii) strengthening the governance of the skills system. This report applies the OECD Skills Strategy framework to Southeast Asia, providing an overview of the region’s skills challenges and opportunities in the context of COVID-19 and megatrends, and identifying good practices for improving skills outcomes. This report lays the foundation for a more fully elaborated Skills Strategy for Southeast Asia.


Previous studies have often demonstrated that educational television can have a positive effect on learning outcomes in low-income countries when delivered in controlled settings. However, existing research in low-resource contexts has scarcely considered the association between child outcomes and viewing in usual environments (ie, at their home, a friend’s home or a relative’s home). This lack of research is striking, as evidence from controlled settings might provide limited information on the effects of normal television exposure. This paper, therefore, investigates the relationship between normal exposure to a popular Tanzania-produced cartoon, Ubongo Kids and mathematics capability, as represented by plausible values derived from an item response theory model applied to children’s test responses. Cross-sectional investigation of a sample of 38 682 Tanzanian children suggested normal educational television exposure to be significantly associated with mathematics capability, when controlling for age, sex, school enrolment, Kiswahili attainment and household fixed effects. While cross-
sectional results are not necessarily causal, the findings in this paper broadly correspond with those from previous designs using repeated observations. What is more, considering association results alongside cost and viewerhip estimates suggests television-based interventions to be highly cost effective. Practitioner Notes What is already known about this topic National data for Tanzania suggests the country to have both low levels of mathematics proficiency and considerable access to television technology. Educational television-based interventions might, therefore, be worthy of consideration by educational policymakers, especially given that studies conducted in controlled settings indicate that television can deliver learning benefits. There is, however, little evidence concerning educational television exposure outside of controlled settings. Only one such study in a low-income context that concerned the association between learning outcomes and viewing among primary-age children has been identified. What this paper adds This paper addresses this dearth of research by investigating the association between normal exposure to a Tanzanian cartoon, Ubongo Kids and mathematics capability, as derived from an item response theory model applied to the test responses of 38,682 children. Cross-sectional findings suggest the association between normal television exposure and mathematics capability to be significant. Further, a cost-effectiveness comparison with alternate interventions in comparable contexts indicates that educational television is highly cost-effective. Implications for practice and/or policy The findings presented in this paper concerning educational television viewership in usual environments act to triangulate those from prior research conducted in controlled settings. As such, policymakers in low-income contexts now possess more convincing evidence on the potential influence of educational television interventions. Additionally, the cost-effectiveness comparison made suggests that educational television should be considered a viable option by policymakers seeking to address learning outcomes with limited resources.

Aspects économiques de l’éducation


Schools closed extensively during the COVID-19 pandemic and occur in other settings, such as teacher strikes and natural disasters. This paper provides some of the first experimental evidence on strategies to minimize learning loss when schools close. We run a randomized trial of low-technology interventions – SMS messages and phone calls – with parents to support their child. The combined treatment cost-effectively improves learning by 0.12 standard deviations. We develop remote assessment innovations, which show robust learning outcomes. Our findings have immediate policy relevance and long-run implications for the role of technology and parents as partial educational substitutes when schooling is disrupted.


Despite the common view that innovation requires academically educated workers, some countries that strongly emphasize vocational education and training (VET) in their
education systems - such as Switzerland and Germany - are highly competitive internationally in terms of innovation. These countries have dual VET programs, i.e., upper-secondary-level apprenticeship programs that combine about three-quarters of workplace training with about one-quarter of vocational schooling, and design them in such a way that their graduates (i.e., dual apprenticeship graduates) play crucial roles in innovation processes. Regular updates of VET curricula incorporate the latest technological developments into these curricula, thereby ensuring that dual apprenticeship graduates possess up-to-date, high-level skills in their chosen occupation. This process allows these graduates to contribute to innovation in firms. Moreover, these graduates acquire broad sets of technical and soft skills that enhance their job mobility and flexibility. Therefore, conventional wisdom notwithstanding, dual apprenticeship graduates in such countries not only have broad skill sets that accelerate innovation in firms, but also willingly participate in innovation because of their high flexibility and employability. Moreover, Switzerland and Germany have tertiary-level VET institutions that foster innovation. These are Universities of Applied Sciences (UASs), which teach and conduct applied research, thereby helping build a bridge between different types of knowledge (vocational and academic). UAS students have prior vocational knowledge through their dual apprenticeship and acquire applied research skills from UAS professors who usually have both work experience and a doctoral degree from an academic university. Thus UAS graduates combine sound occupational knowledge with applied research knowledge inspired by input from the academic research frontier and from practical research and development (R&D) in firms. Firms employ UAS graduates with their knowledge combination as an important input for R&D. Consequently, regions with a UAS have higher levels of innovation than regions without one. This effect is particularly strong for regions outside major innovation centers and for regions with larger percentages of smaller firms.


Entry in many occupations is regulated with the objective to screen out the least able producers and guarantee high quality of output. Unfortunately, the available empirical evidence suggests that in most cases these objectives are not achieved. In this paper we investigate entry into the legal profession in Italy and we document that such a failure is due to the combination of the incomplete anonymity of the entry exam and the intergenerational transmission of business opportunities. We use microdata covering the universe of law school graduates from 2007 to 2013 matched with their careers and earnings up to 5 years after graduation. Variation generated by the random assignment of the entry exam grading commissions allows us to identify the role of family ties in the selection process. We find that connected candidates, i.e. those with relatives already active in the profession, are more likely to pass the exam and eventually earn more, especially those who performed poorly in law school. When we simulate the process of occupational choice assuming family connections did not matter, we find that strong positive selection on ability would emerge.

This paper studies the impact of compulsory schooling on violent behaviour and victimization in school using individual-level administrative data matching education and criminal records from Queensland (Australia). Exploiting a legislative increase in the minimum dropout age in 2006, this study defines a series of regression-discontinuity specifications to show that compulsory schooling reduces crime but increases violent behaviour in school. While police records show that property and drugs offences decrease, education records indicate that violence and victimization in school increase. Thus, prior studies that fail to consider in-school behaviour may over-estimate the short-run crime-reducing impact of compulsory education.


In the four decades since 1980, US colleges and universities have seen the number of students from abroad quadruple. This rise in enrollment and degree attainment affects the global supply of highly educated workers, the flow of talent to the US labor market, and the financing of US higher education. Yet, the impacts are far from uniform, with significant differences evident by level of study and type of institution. The determinants of foreign flows to US colleges and universities reflect both changes in student demand from abroad and the variation in market circumstances of colleges and universities, with visa policies serving a mediating role. The consequences of these market mechanisms impact global talent development, the resources of colleges and universities, and labor markets in the United States and countries sending students.


We consider a signaling model of the job market in which workers, before choosing their level of education, have the opportunity to undertake an unobservable investment in activities aimed at saving on future education costs. Sufficiently high levels of investments allow a low productivity worker to cut the marginal costs of signaling below the high productivity worker’s. In contrast to standard results, we find that the equilibrium outcome will depend on the relative magnitude of workers’ average productivity. If average productivity exceeds a certain threshold the most plausible solution is a refined pooling equilibrium in which all workers attain the same level of over-education and are paid the same wage. Otherwise, the most plausible outcome is the standard least cost separating equilibrium in which only high ability workers are over-educated.


In response to the COVID-19 outbreak, the governments of most countries ordered the closure of schools, potentially exacerbating existing learning gaps. This paper evaluates the effectiveness of an intervention implemented in Italian middle schools that provides free individual tutoring online to disadvantaged students during lock-down. Tutors are university students who volunteer for 3 to 6 hours per week. They were randomly assigned...
to middle school students, from a list of potential beneficiaries compiled by school principals. Using original survey data collected from students, parents, teachers and tutors, we find that the program substantially increased students’ academic performance (by 0.26 SD on average) and that it significantly improved their socio-emotional skills, aspirations, and psychological well-being. Effects are stronger for children from lower socioeconomic status and, in the case of psychological well-being, for immigrant children.


Benchmarking is intended to help gauge where economies rank relative to others. However, historically educational benchmarking has often elected to use indicators based on their ease of availability, rather than a clear and defined link between inputs and learning outcomes. In this paper, we present a new approach to benchmarking. Developing and undertaking a systematic documentation of 171 indicators on basic and secondary educational inputs covering 69 economies, we analyze indicators that are significantly correlated with higher levels of learning outcomes. We find evidence that only six key inputs are associated with higher learning outcomes: gross enrollment in secondary school; targeted public information that reveals student gaps; strategic budgeting that provides programs for at-risk students; teacher quality that ensures wages are high and incentives are aligned with learning outcomes; information collection that enables timely, data-driven decision-making; and curriculum content that is matched to student skills. This work is seen as an important step for future benchmarking exercises in prioritizing investments in educational inputs that deliver improved educational outcomes independent of the economy and cultural context.


There are two well-established gender gaps in education. First, females tend to have higher educational attainment and achievement than males and this is particularly the case for children from less advantaged backgrounds. Second, there are large differences in the fields of specialization chosen by males and females in college and even prior to college and females disproportionately enter less highly paid fields. This review article begins with these stylized facts and then moves on to describe evidence for the role of various factors in affecting educational achievement by gender. Gender differences in non-cognitive traits, behaviour, and interests have been shown to relate to differences in educational outcomes; however, this evidence cannot generally be given a causal interpretation. In contrast, the literature has been creative in estimating causal impacts of a wide range of factors using experimental and quasi-experimental variation. While the approaches are compelling, the findings vary widely across studies and are often contradictory. This may partly reflect methodological differences across studies but also may result from substantial true heterogeneity across educational systems and time periods. The review concludes by evaluating what factors are most responsible for the two central gender gaps, whether there is a role for policy to reduce these gender
differences, and what the findings imply about the capacity for policy to tackle these gaps.


A transformative approach to addressing complex social-environmental problems warrants reexamining our most fundamental assumptions about sustainability and progress, including the entrenched imperative for limitless economic growth. Our global resource footprint has grown in lock-step with GDP since the industrial revolution, spawning the climate and ecological crises. Faith that technology will eventually decouple resource use from GDP growth is pervasive, despite there being practically no empirical evidence of decoupling in any country. We argue that complete long-term decoupling is, in fact, well-nigh impossible for fundamental physical, mathematical, logical, pragmatic and behavioural reasons. We suggest that a crucial first step toward a transformative education is to acknowledge this incompatibility, and provide examples of where and how our arguments may be incorporated in education. More broadly, we propose that foregrounding SDG 12 with a functional definition of sustainability, and educating and upskilling students to this end, must be a necessary minimum goal of any transformative approach to sustainability education. Our aim is to provide a conceptual scaffolding around which learning frameworks may be developed to make room for diverse alternative paths to truly sustainable social-ecological cultures.


We conduct a large and nationwide survey among German teachers to investigate the determinants of teachers’ adaption to an increased use of educational technology during the COVID-19 school closures. We find that higher levels of technical affinity and higher perceived learning effectiveness of distance teaching are positively associated with using at least one (new) educational technology solution while teachers’ age and the digital infrastructure of the school have no predictive power.


Previous studies have demonstrated that sluggish cognitive tempo (SCT) behaviors are empirically distinct from inattentive (IN) behaviors that are used to define attention-deficit/hyperactivity disorder. However, most studies used cross-sectional designs during middle childhood. Using parent and teacher ratings from the Family Life Project (N = 1,173), we investigated the factor structure, longitudinal measurement invariance, developmental trajectories, and predictors of developmental change in SCT and IN from age 3 years through Grade 5. SCT and IN were dissociable but correlated constructs that exhibited longitudinal invariance for both informants. Mean levels of SCT increased modestly with age, becoming more prominent between age 5 years and first grade, while IN was more stable. Lower parental education was associated with higher parent- and teacher-reported SCT, male sex was associated with higher teacher-reported IN,
and African American race was associated with higher teacher-reported IN but lower teacher-reported SCT. These findings support the validity of SCT starting in early childhood.


Several K-12 and university systems have adopted race-neutral affirmative action in place of race-based alternatives. This paper explores whether these plans are effective substitutes for racial quotas in Chicago Public Schools (CPS), which now employs a race-neutral, place-based affirmative action system at its selective exam high schools. The CPS plan is ineffective compared to plans that explicitly consider race: about three-quarters of the reduction in average entrance scores at the top schools could have been avoided with the same level of racial diversity. Moreover, the CPS plan is less effective at adding low-income students than was the previous system of racial quotas. We develop a theoretical framework that motivates quantifying the inefficiency of race-neutral policies based on the distortion in student preparedness they create for a given level of diversity and use it to evaluate several alternatives. The CPS plan can be improved in several ways, but no race-neutral policy restores minority representation to prior levels without substantially greater distortions, implying significant efficiency costs from prohibitions on the explicit use of race.


This paper analyses the effects of maternal school starting age and maternal age-at-birth on children’s short and long-term outcomes using Finnish register data. We exploit a school-starting-age rule for identification. Mothers who are born after the school entry cut-off give birth at higher age, but total fertility and earnings are unaffected. Being born after the cut-off reduces gestation and, hence, child birth weight. The effects on birth weight and gestation are rather small, however, suggesting that the long-run impacts are limited. Accordingly, we find no impacts on longer-term child outcomes, such as educational attainment and adolescent crime rates. Overall, we interpret this evidence as saying that there are no favorable effects of maternal age at birth on child outcomes.


Teachers are among the most important school-provided determinants of student success. Effective teachers improve students’ test scores as well as their attendance, behavior, and earnings as adults. However, students do not enjoy equal access to effective teachers. This article reviews some of the key challenges associated with teacher policy confronted by school leaders and education policymakers, and how the tools of applied economics can help address those challenges. The first challenge is that identifying effective teachers is difficult. Economists use value-added models to estimate teacher effectiveness, which works well in certain circumstances, but should be just one piece of a multi-measure strategy for identifying effective teachers. We also discuss how different policies, incentives, school characteristics, and professional-development
interventions can increase teacher effectiveness; this is important, as schools face the daunting challenge of hiring effective teachers, helping teachers to improve, and removing ineffective teachers from the classroom. Finally, we discuss the supply and mobility of teachers, including the consequences of teacher absenteeism, the distribution of initial teaching placements, and the characteristics and preferences of those who enter the profession.


Using discontinuities within the Swedish SAT system, we show that additional admission opportunities causally affect college choices. Students with high-educated parents change timing, colleges, and fields in ways that appear rational and informed. In contrast, very talented students with low-educated parents react to higher scores by increasing overall enrolment and graduation rates. Remarkably, most of this effect arises from increased participation in college programs and institutions that they could have attended even with a lower score. This suggests that students with low-educated parents face behavioral barriers even in a setting where colleges are tuition-free, student grants are universal and application systems are simple.


This paper examines the long run impacts of expanding the range of subjects in higher education admission examinations using a historical event, the reform of Japanese entrance examinations in 1979. Our results show that degree programs that are forced to increase the number of subjects increases the probability of graduates being appointed onto the board of directors of publicly traded companies despite reducing the measured average intellectual ability of students in the program. This suggests that by broadening the range of subjects, colleges can select students who can master a wide range of knowledge and transform them into future business leaders.


We leverage a natural experiment, where a large national automotive racing organization switched from leaded to unleaded fuel, to study how ambient lead exposure and nutrition impact learning in elementary school. The average race emitted more than 10 kilograms of lead — a quantity similar to the annual emissions of an airport or a median lead-emitting industrial facility in the United States. Increased levels and duration of exposure to lead negatively affect academic performance, shift the entire academic performance distribution, and negatively impact both younger and older children. We provide quasi-experimental evidence linking measured quantities of lead emissions to decreased test scores, information essential for policies addressing ambient lead and emission sources. Exposure to 10 additional kilograms of lead emissions reduces standardized test scores by 0.07 standard deviations. This corresponds to an average
income reduction of $9,000 per treated student in present value terms, an effect of similar magnitude as improving teacher value added by one standard deviation, reducing class size by 10 students, or increasing school spending per pupil by $2,500. The marginal impacts of lead are larger in impoverished, non-white counties, and among students with greater duration of exposure, even after controlling for total exposure. Factors correlated with better nutrition — most notably consumption of calcium-rich foods like milk — help mitigate the link between lead exposure and reduced educational outcomes. These results show that improved child nutrition can help combat the negative effects of lead, addressing several prominent social issues including racial test gaps, human capital formation across income groups, and disparities in regional environmental justice.


This paper is an introduction to a special issue of the Journal of Economic Inequality which contains a selection of articles published in the Journal which bring economic perspectives and methods to bear on dimensions of inequality highlighted in the Sustainable Development Goals. The papers show that the study of economic inequality has much to contribute to the global policy discourse which is underpinned by the SDGs.


Central exams are often hypothesized to favorably affect incentive structures in schools. Indeed, previous research provides vast evidence on the positive effects of central exams on student test scores. But critics warn that these effects may arise through the strategic behavior of students and teachers, which may not affect human capital accumulation in the long run. Exploiting variation in examination types across school systems and over time, we provide the first evidence that central exams positively affect adult skills. However, our estimates are small compared to the existing estimates for students, which may indicate some fade-out in the effect on skills over time.


This qualitative study examines the question, “How do parents teach their children about work?” The sample included 90 emerging adult “children” (between 18 and 30 years old), 17 parents, and eight grandparents. It spanned two generations in eleven families, and three generations in five families. Altogether the sample totaled (N = 115). Analyses revealed three major methods for teaching children about work: (1) implementing household chores and allowances, (2) facilitating paid employment, and (3) encouraging entrepreneurial experiences. Through each of these methods, children were taught valuable financial principles. Entrepreneurial experiences specifically taught children to work hard for money, to manage earned money via budgeting and saving, and to be independent. Implications for parents, educators, therapists, and policy makers are discussed.

This study estimates mean and distributional effects of early between-school ability tracking on student achievement. For identification, I exploit heterogeneity in tracking regimes between German federal states. After comprehensive primary school, about 40% of students are selected for the academic track and taught in separate schools in all states. The remaining students, however, are either taught comprehensively or further tracked into two different school forms depending on the state. I estimate the effects of this tracking on students’ mathematics and reading test scores with a difference-in-difference-in-differences estimator to eliminate unobserved heterogeneity in achievement levels and trends between states. I find substantial achievement gains from comprehensive versus tracked schooling at ages 10–12. These average effects are almost entirely driven by low-achievers. I do not find evidence for negative effects of comprehensive schooling on the achievement of higher performing students. My results show that decreasing the degree of tracking in early secondary school can reduce inequality while increasing the efficiency of educational production.


The share of women achieving tertiary education has increased rapidly over time and now exceeds that of men in most OECD countries. However, women are severely under-represented in maths-intensive science fields, which are generally referred to as STEM (science, technology, engineering, and maths). The under-representation of women in these subject areas has received a great deal of attention. This is because these fields are seen to be especially important for productivity and economic growth and are associated with occupations that have higher earnings. Subject of degree is an important part of the explanation for the gender wage gap. The aim of this paper is to review evidence on explanations for the STEM gap in tertiary education. This starts with statistics about background context and evidence on how well-prepared male and female students may be for studying STEM at a later stage. I then discuss what the literature has to say about the role of personal attributes: namely confidence, self-efficacy and competitiveness and the role of preferences and expectations. I go on to discuss features of the educational context thought to be important for influencing attributes and preferences (or mediating their effects): peers; teachers; role models; and curriculum. I then briefly discuss broader cultural influences. I use the literature reviewed to discuss policy implications.


This article investigates the relationships between ethnicity, class, and prospects of educational success. For this purpose, we compared the effects of family socio-economic characteristics on children’s educational attainment in four ethno-religious groups in Israel (Muslim, Christian, and Druze Palestinians; Jews). Information from the 1995 census on the households with at least one child born in the cohort of 1975-1985 is matched with Ministry of Education records on all those who achieved matriculation
certificates and academic degrees between 1995 and 2012. The results show that the educational outcomes of Christian and Druze children are less dependent on their family characteristics compared to Muslim and Jewish children. We suggest that the disadvantage of Palestinian schools in a Jewish-dominated state is offset by the tougher competition Jewish children from disadvantaged strata face in schools attended by those from affluent strata. Family background is more important for academic degrees than for the matriculation certificate. Furthermore, the education and occupation of mothers and fathers both have an equally important impact on child outcomes.


Disrupted schooling can heavily impact the amount of education pupils receive. Starting in early June of 2011 a huge social outburst of pupil protests, walk-outs, riots and school occupations called the Chilean Winter caused more than 8 million of lost school days. Within a matter of days, riots reached the national level with hundreds of thousands of pupils occupying schools, marching on the streets and demanding better education. Exploiting a police report on occupied schools in Santiago, I assess the effect of reduced school attendance in the context of schools occupations on pupils’ cognitive achievement. This paper investigates whether or not there is a causal relationship between the protests and school occupations and the standardised test performance of those pupils whose schools were occupied.


The quality of administrative or longitudinal data used in education research has always been an issue of concern since they are collected mainly for recording and reporting, rather than research. The advancement in computational techniques in statistics could help researchers navigates many of these concerns by identifying the statistical model that best fits this type of data for research. The paper provides a comprehensive review of the statistical methods important for estimating education production function to recognize this. The article also provides an extensive overview of empirical studies that used the techniques identified. We believe a systematic review of this nature provides an excellent resource for researchers and academicians in identifying critical statistical methods relevant to educational studies.


This paper investigates the role of human empowerment and state capacity in forging political institutions that are progressive and democratic. The education-democracy nexus has been thoroughly examined in the literature, but the empirical literature on the effect of the right kind and quality of education remains sparse. Generalised method of moments and probit methodology are employed for a sample of 105 countries over the period 1981 to 2015 to address these shortcomings. The results indicate that education is
a necessary condition for democracy, but by itself, not sufficient. The analyses show that education of the right kind and quality, one that fosters emancipative mindsets and critical-liberal orientations, is a strong driver of progressive or democratic political institutions in a society. Trade openness (as a sub-index of formal rules), that signals societies’ openness to outside influence, also seems to matter, but when a more encompassing measure of regime-independent formal rules is used, formal institutions become an insignificant determinant of liberal democracy. Other avenues that are explored include an investigation into the role of geography and spatial democracy in political institutions. The evidence suggests that geographical and biological factors do not matter, but that spatial democracy does. This study, furthermore, finds that the probability of a more democratic regime outcome increases with increased levels of human empowerment and trade openness. A parliamentary democracy is the most probable when a society has high levels of human empowerment and openness.


Bullying is a problem that affects children and teenagers around the world and its repercussions can endure throughout adult life. Its prevalence is, in part, a product of the lack of information and the paucity of studies which analyse the wide-ranging consequences for the individuals involved. The main objective of this research is to study the incidence of bullying on the academic performance of students in education centres in the Madrid Region. The databases used are those of Competency Tests carried out on all 10th grade students in Madrid during the year 2017. These external assessment tests evaluate Spanish language, English language, Mathematics, and Geography and History. Along with these tests, the students, their families, their teachers and head teachers complete comprehensive questionnaires. To analyse all these data, we carry out a multilevel methodological approach to identify the quantitative association of bullying with academic performance and to estimate the probability that performance is affected by the level of bullying that exists in the education centres. The results indicate that bullying has a negative impact on all the competencies evaluated, that the probability of a lower academic performance increases in environments where there is bullying and that bullying can affect students with low or high academic achievement in different ways, depending on what competency is evaluated.


This paper estimates the effect of home high-speed internet on national test scores of students at age 14. We combine comprehensive information on the telecom network, administrative student records, house prices and local amenities in England in a fuzzy spatial regression discontinuity design across invisible telephone exchange catchment areas. Using this strategy, we find that increasing broadband speed by 1 Mbit/s increases test scores by 1.37 percentile ranks in the years 2005-2008. This effect is sizeable, equivalent to 5% of a standard deviation in the national score distribution, and not driven by other technological mediating factors or school characteristics.
Poor economic performance of minority groups and large economic disparity between these groups and the majority group are major concerns in most countries. In many of these countries, the mother tongue of the latter group is the common language in national business and in inter-group communications. How much weights should be placed on common language education and on ethnic language education is a crucial issue in school education of minority students. This paper develops a model to examine the issue theoretically. It is shown that balanced education of the two languages is critical for skill development of individuals with limited wealth. It is also found that balanced dual education is desirable in terms of earnings net of educational expenditure and consumption, only when the country has favorable conditions (TFP is reasonably high and education is reasonably effective in skill development) and only for those with adequate wealth. Common-language-only education maximizes net earnings and consumption of those with little wealth, and, when the country’s conditions are not good, maximizes the economic outcomes of all. Policy implications of the results are discussed. The paper also examines implications of the asymmetric language positions of the groups for sectoral choices and within-group inequalities.


Spatial skills are important for student success in STEM disciplines at the K-12 educational level. Teachers’ spatial skills and feelings about completing spatial tasks influence their teaching as well as their students’ spatial learning. However, the relation between teachers’ spatial skills and their spatial anxiety is not well understood. Here we investigated if teachers’ spatial skills influence two kinds of small-scale spatial anxiety: (a) anxiety for tasks involving visual imagery and (b) anxiety for tasks involving mental manipulations. In addition, we investigated if teachers’ spatial skills in conjunction with their small-scale spatial anxiety influence the integration of spatial practices, such as gestures and diagrams, into their teaching. Eighty-two K-12 teachers completed two subscales of small-scale spatial anxiety, a measure of spatial skills, and a teaching activities questionnaire. Results indicate that teachers’ spatial skills are negatively associated with their spatial anxiety for mental manipulation tasks, and positively associated with their use of spatial practices. These findings highlight the need to account for teachers’ spatial skills when considering how to improve students’ spatial learning.


Cognitive neuroscience has gained significant insight into the mechanisms underlying the mental lexicon and their impact on second language vocabulary learning. However, relatively little effort has been put into understanding how these mechanisms may impact instructional practices. We attempt to bridge this gap. Towards that end, we first describe
three main properties of the mental lexicon: words have distinct form and meaning representations; these representations are organized in multilingual network structures organized by similarity; and the representations differ in strength. Next, we translate the properties into a visual framework that we use to reflect upon how this knowledge affects three important choices in vocabulary instruction: composing word lists, selecting an instruction method, and consolidating newly acquired words. Lastly, we discuss opportunities for both science and practice, highlighting the importance of improving the ecological validity of scientific models and theories, and of developing instructional methods grounded in cognitive science.


We examined interactions between baseline hypothalamic–pituitary–adrenal (HPA) axis and parasympathetic nervous system (PNS) activity in relation to executive functions (EF) in a sample (n = 1,005) of children in low wealth, nonurban communities at age 48 months. Salivary cortisol and respiratory sinus arrhythmia (RSA) represented baseline HPA axis and PNS activity, respectively. The interaction between RSA and cortisol predicted EF such that children with either lower RSA and lower cortisol, or higher RSA and higher cortisol had higher EF scores. These findings suggest a potential compensatory relation in which the PNS and HPA axis counterbalance each other to support cognition.


Developmental dyscalculia (DD) is a mathematical learning disability that occurs in around 5%-7% of the population. At present, there are only a handful of screening tools to identify children that might be at risk of developing DD. The present study evaluated the classification accuracy of one such tool: The Numeracy Screener, a 2-min test of symbolic (Arabic numerals) and nonsymbolic (dot arrays) discrimination ability. A sample of 222 children who demonstrated persistent deficits (n = 55), inconsistent deficits (n = 51), or typical performance (n = 116) on standardized tests of math achievement over multiple observations was tested. The Numeracy Screener correctly classified children in all three groups. Notably, the symbolic condition has greater sensitivity in discriminating children with persistent DD from the other two groups. Screening tools that assess early numeracy skills may be promising for identifying children at risk for developing severe mathematical difficulties.


Success in postsecondary education requires proficiency with academic online information seeking. Navigating the internet to find information is a complicated task that is vulnerable to lapses in attention. This study examined the relationships among Canadian graduate students’ self-reported behavioral inattention symptoms, awareness and regulation of attentional focus (meta-attention), and online academic information seeking abilities. One-hundred and thirteen (99 female) graduate students (83 master’s
level, 27 doctoral level) completed an online self-report questionnaire examining domain- and strategic-experience, behavioral inattention symptoms, meta-attention, and online information seeking ability. Results indicated that self-reported inattention symptoms, both components of meta-attention and domain experience each significantly predicted unique variance in online information seeking ability. Implications for research and intervention are discussed.


In the field of education, teachers are sentries for maintaining proper decorum, upholding school policies, and maintaining a social justice classroom, free of adversarial behaviors. While the premise of proper social and academic student engagement is expected, teachers are not always aware of or able to respond to inappropriate social interactions. This qualitative study using a narrative inquiry approach investigates and portrays the levels of awareness and decision-making processes teachers possess when addressing microaggression and microaggressive behaviors. Five public school teachers from varying grade levels in a culturally diverse school district participated in semi-structured, in-depth interviews for this study. Emergent themes included: (a) awareness and recognition of microaggression as related to bullying, (b) microaggression as denigrating behavior directed toward others, and (c) microaggression with the school discipline framework. Findings suggest that teachers often lack awareness of microaggression as a concept distinct from bullying. But when the distinction is evident, teachers understand how microaggression can be a precursor to bullying which, if proactively addressed within the school discipline framework, may result in preventing bullying incidents before they start. Teachers were interested in receiving targeted professional development and adjusting school discipline policy to consider microaggression a unique concept. Guidance is offered to support educators, schools, and districts as clear guidelines and policies are established pertaining to identifying and addressing microaggression within the school community, thereby ensuring social and behavioral awareness.


In accordance with the Self-Determination Theory, the interpersonal behavior of others can support or thwart the basic psychological needs and influence the well-being of students. Furthermore, several studies have shown that problematic internet use has a negative influence on the academic field. However, no studies have investigated the impact of need-supportive and need-thwarting interpersonal behaviors (using the SDT theoretical framework) on internet addiction, academic engagement, and academic achievement. For this reason, the main purpose of this study is to investigate the relationship between students' perceptions of others' behaviors that supported or thwarted their basic psychological needs, internet addiction, and academic engagement and the impact on academic achievement through two studies. In the first study, 889 students (age: M = 20.26, SD = 3.16), were used to investigate the dimensionality of the Italian version of the Interpersonal Behaviour Questionnaire (IBQ) and the reliability, convergent and concurrent validity. In the second study, 515 students (age: M = 20.26,
SD = 3.16) were tested to investigate the mediating role of problematic internet use on the relationship between students’ perceptions of others’ behaviors that supported or thwarted their basic psychological needs and academic engagement and the impact on academic achievement. The results of the first study suggested that the Italian version of the IBQ shows good psychometric characteristics in the Italian context. The results of the second study confirmed the mediating role of problematic internet use and academic engagement as mediators between students’ perceptions of need-thwarting interpersonal behaviors and academic achievement.


The latent factor structure of the German Wechsler Intelligence Scale for Children–Fifth edition (German WISC-V) was examined using complementary hierarchical exploratory factor analyses (EFAs) with Schmid and Leiman transformation and confirmatory factor analyses (CFAs) for all reported models from the German WISC-V Technical Manual and rival bifactor models using the standardization sample (N = 1,087) correlation matrix of the 15 primary and secondary subtests. EFA results did not support a fifth factor (Fluid Reasoning). A four-factor model with the dominant general intelligence (g) factor resembling the WISC-IV was supported by EFA. CFA results indicated the best representation was a bifactor model with four group factors, complementing EFA results. Present EFA and CFA results replicated other independent assessments of standardization and clinical samples of the United States and international versions of the WISC-V and indicated primary, if not exclusive, interpretation of the Full Scale IQ as an estimate of g.


Chinese parents are highly renowned for their enthusiasm in children’s education and for extremely high expectations for their children’s scholastic performance. Using the China Family Panel Studies from 2010 to 2014, this paper examines the effects of children’s academic performance on their parents’ life satisfaction in China. We find that a one-unit rise in the class ranking of the child increases the parent’s life satisfaction score by 3.4 percentage points. Conversely, parents’ excessive educational involvement can have an adverse impact on their life satisfaction. The significant positive relationship between children’s academic performance and parents’ life satisfaction was, though, apparent only for middle-income, urban and single-child families, and only in provinces that are highly influenced by Confucianism. Our study also provides a partial socio-economic insight into Chinese parents' obsession with their children's education, and offers some important implications for policy makers in China.


The purpose of the study was to reveal whether and how learner-centered instruction in comparison with traditional teacher-centered instruction might present unique effects on the learning behaviors and academic motivation of Chinese students. Meanwhile, it was also explored how the distinctive instructing features of Chinese teachers assuming the
learner-centered approaches in comparison with those teachers in the traditional classroom, might impact on the associations between learner-centered instruction and learning behaviors of Chinese students. Measures assessing the perceived instruction behaviors of teachers and students’ learning behaviors and academic motivation were administered to 394 high-school students in the experimental group and 368 high-school students in the control group. The results indicated that the implementation of learner-centered instruction brought certain changes on the instruction behaviors of Chinese teachers, which might have certain beneficial influences on students’ learning behaviors inside the classroom but failed to better support students to be autonomous and self-directed learners.


Science performance is highly affected by students’ reading comprehension. Recently, there has been a growing attention to the role of linguistic features for science performance, but findings are ambivalent, especially when looking into item word count. The aim of this study was to investigate the interaction of students’ reading comprehension and item word count of given science measures on performance, controlling for students’ cognitive abilities, gender, family language, and school track. The sample consisted of N = 2051 German students in grades 10 and 11. Students completed (scientific) literacy measures. We then applied a multilevel logistic regression to investigate the hypothesized interaction effect of reading comprehension and word count on students’ science performance. The results showed a significant interaction of students’ reading comprehension and word count on science performance, controlling for several covariates. Particularly students with high reading comprehension benefit from science items with increasing word count. Our findings empirically support previous research, showing that reading comprehension is crucial for science performance and enhances the interaction between reading comprehension and linguistic features of written text in science subjects. Finally, theoretical and practical implications and limitations of this study are discussed.


This study investigates if collaboration and the level of heterogeneity between collaborating partners’ problem-solving scripts can influence the extent to which pre-service teachers engage in evidence-based reasoning when analyzing and solving pedagogical problem cases. We operationalized evidence-based reasoning through its content and process dimensions: (a) to what extent pre-service teachers refer to scientific theories or evidence of learning and instruction (content level) and (b) to what extent they engage in epistemic processes of scientific reasoning (process level) when solving pedagogical problems. Seventy-six pre-service teachers analyzed and solved a problem about an underachieving student either individually or in dyads. Compared with individuals, dyads of pre-service teachers referred less to scientific content, but engaged more in hypothesizing and evidence evaluation and less in generating solutions. A greater dyadic heterogeneity indicated less engagement in generating solutions. Thus, collaboration may be a useful means for engaging preservice teachers in analyzing pedagogical problems in a more reflective and evidence-based manner, but pre-
service teachers may still need additional scaffolding to do it based on scientific theories and evidence. Furthermore, heterogeneous groups regarding the collaborating partners’ problem-solving scripts may require further instructional support to discuss potential solutions to the problem.


During the northern hemisphere Winter 2020 academic term, university students had to adjust to remote learning in response to the COVID-19 pandemic. This abrupt change provided a unique opportunity to examine students’ motivation, engagement and perceptions of success and cheating under two learning conditions, namely traditional and remote. We used a single survey to collect retrospective self-report data from a convenience sample of Canadian undergraduate students (n = 98) about their motivation, engagement and perceptions of success and cheating before COVID-19 and then in remote learning. Students’ achievement goals, engagement and perceptions of success all significantly decreased, while their perceptions of cheating increased. Moreover, we used regression analyses to examine associations amongst achievement goals and engagement, perceptions of success and cheating concerns. Mastery-approach goals were positively associated with more engagement and higher perceptions of success. Achievement goals were unrelated to cheating. Students in large classes and who were originally concerned about cheating became more concerned about cheating in remote learning conditions. Our study provides information to researchers and instructors about how achievement goals relate to student outcomes across learning conditions. By extension, we provide timely recommendations for instructors as they continue to wrestle with how to deliver their courses during the COVID-19 pandemic.


This study focuses on the application, advantages, and disadvantages of E-learning in neurology education. The findings of the study demonstrate that E-learning can effectively improve learning efficiency and reduce learning costs. Neurologists can access the right study material on the Internet anytime, anywhere. Compared with traditional teaching methods, it is easier for text, graphics, animation, audio, video, and other multimedia formats of E-learning to attract learners’ interest. This makes the complex subject of neurology, including its basic theories, more vivid, and easier to understand for young neurologists. Moreover, in clinical practice, gaps in knowledge and skills acquisition can be bridged by treating virtual patients and watching videos of examination techniques and pathological signs. Compared with traditional teaching methods, E-learning can better meet individual needs, and thus it has come to be one of the foremost choices for young neurologists to continue learning.

Description : En septembre 2019, deux langues étrangères, l’espagnol et le français, étaient proposées pour la première fois dans une université américano-chinoise (située à l’est de la Chine). Pour une centaine d’étudiants allait ainsi commencer un voyage inédit. En effet, apprendre une langue étrangère est toujours une nouvelle aventure-même si c’est la troisième langue- entraînant des émotions diverses, allant de la trépidation à l’anxiété, le processus d’apprentissage d’une L3 pouvant être influencé par de nombreux facteurs tels que l’apprenant de l’identité, le rôle de la L2, l’aptitude linguistique personnelle, la motivation et les émotions, etc. Enseigner une L3 en utilisant les approches communicative et actionnelle aux étudiants universitaires chinois peut se vouer à l’échec face à la culture éducative chinoise traditionnelle et peut ainsi générer des émotions négatives dans le processus d’apprentissage. Afin de soutenir ces apprenants de L3 et d’améliorer leur motivation et leur bien-être, des activités de travail en binôme (se basant sur l’apport de la psychologie positive) dans les classes de français et d’espagnol L3 ont été mises en place. Cette approche pédagogique s’est inscrite dans le cadre d’une recherche-action à partir d’une recherche qualitative dont les résultats ont montré que le stress ressenti par certains étudiants au début du semestre s’est estompé grâce aux activités de groupe permettant de développer la compétence orale dans une ambiance détendue. Ces activités en binôme ont donc eu un impact significatif sur les émotions positives de ces apprenants en classe de français et espagnol L3, ce qui était gratifiant pour nous, enseignants-chercheurs. Toutefois, avec l’apparition du coronavirus et des mesures sanitaires de protection mises en place, l’apprentissage à distance de la L3 s’est imposé aux apprenants, entraînant une nouvelle démarche d’enseignement/apprentissage de la langue et des contraintes de différents ordres. Ces étudiants reçoivent désormais un enseignement à distance synchrone du français ou de l’espagnol et un accompagnement pédagogique sur les plateformes de l’université. Ainsi, les bénéfices des activités orales entre membres du groupe et le stress surmonté en classe lors du premier semestre ne sont plus qu’un vécu lointain. Le principal défi pour nous est de préserver dans nos classes virtuelles les émotions positives ressenties en présentiel quelques mois plus tôt en élaborant des activités attractives et interactives, d’une part, répondant aux besoins des apprenants et, d’autre part, pouvant maintenir l’intérêt et la motivation des étudiants pour la L3. De notre point de vue et vis-à-vis de nos étudiants, de nombreux questionnements émergent : qu’est-ce que l’apprentissage à distance change pour les apprenants en termes de stratégies d’apprentissage, de relation aux autres (isolement, collaboration, solidarité, formation d’une communauté virtuelle...), d’émotions ressenties (stress, solitude, gêne, plaisir...). Plus largement, qu’est-ce qu’ils préfèrent, qu’est-ce qui est plus motivant pour eux, un cours traditionnel en face- à-face ou un cours à distance, et pourquoi ? Cette communication présentera les résultats d’une enquête qualitative en cours portant sur les effets négatifs et positifs de l’apprentissage à distance d’une L3 pour ce public universitaire chinois, et ce, notamment, par rapport à leur expérience passée de l’apprentissage de cette même L3 en présentiel.


Underrepresented racial minority college students attending predominantly White institutions disproportionately experience school-based racial/ethnic microaggressions, which can impede college satisfaction and college graduation rates. This study examines the longitudinal implications of school-based racial/ethnic microaggressions...
on college attitudes (e.g., college satisfaction and graduation expectations). The study also compares the mediating roles of academic achievement (GPA) and academic affect (feelings toward academic experiences). Among a sample of 437 Black and Latinx college students attending five universities in the Midwestern United States, results indicated that academic affect, but not academic achievement, mediated the relationship between school-based microaggressions and graduation expectations. Additionally, school-based discrimination indirectly predicted lower college satisfaction through a negative impact on academic affect. Overall, more frequent exposure to school-based discrimination in college led to lower academic affect, which in turn, predicted lower graduation expectations and lower college satisfaction. These findings highlight the powerful role of academic affect in explaining how racial discrimination impairs graduation expectations and college satisfaction over time. Implications and policy recommendations regarding the impact of racial discrimination on underrepresented minority college students are further discussed.


In a pair of studies, the present research examined mindfulness as a mediator through which perceived support for the basic psychological needs of autonomy and competence facilitate adaptive outcomes in a university classroom setting. In Study 1 (N = 199), dispositional mindfulness mediated the relation between perceived support for autonomy and competence in daily life and generalized test anxiety in college students. In Study 2 (N = 328), perceived support for autonomy and competence in the classroom predicted higher test performance and instructor evaluations among college students. Notably, perceived support for autonomy and competence in the classroom predicted increased state mindfulness minutes before a final exam, which in turn was associated with less test anxiety and better test performance, even after controlling for past academic achievement. In summary, instructor support of students’ basic needs for autonomy and competence in the classroom predicted heightened states of mindful awareness prior to a final exam, which explained improvements in academic performance among students. This research represents a first step toward identifying situational factors that facilitate mindful awareness in academic contexts.


Reading skills are usually assessed in silent conditions, but children often experience noisy educational settings. Effects of auditory distraction on children’s reading skills remain relatively unexplored. The present study investigates the influence of two features of background speech—intelligibility and loudness—on children’s reading speed and comprehension. Sixty-three 8-to-10-year-old elementary school children performed a reading task in the context of single-talker background speech. Background speech was either intelligible or unintelligible and presented at low (45–50 dB SPL) or moderate (65–72 dB SPL) sound intensity (here termed “loudness”). Results showed a differential effect of intelligibility and loudness, respectively affecting children’s comprehension and reading speed. In addition, the intelligibility effect was larger in children with lower interference control, as assessed with an auditory Stroop task. Our findings provide
evidence for the influence of different properties of background speech on children's text reading with implications for reading in everyday classroom environments. Lay Summary Children often read in noisy environments, but we know little about how background chatter might affect their reading. Here, we found that 8–10-year-old children read stories more slowly with louder background speech. The children also understood less about a story if the background voice was speaking in their own language—especially those who, in a different task, were less able to ignore irrelevant but attention-grabbing information. This suggests background speech differentially affects beginning readers.


For educators to help children exposed to adverse life experiences, it is necessary to understand how adversity impacts different mechanisms of learning, emotion, and planning as these capacities underpin success in schools and beyond. The goal of this paper is to review essential findings on how early life adversity transforms the brain which, in turn, impacts educational outcomes. Part 1 begins by discussing the species-specific and expectant experiences that guide typical development, and then turns to early life adversities and their relationship to both physical and mental health outcomes. Part 2 summarizes four dimensions of adversity—type, timing, term, and toxicity—and how each differentially impacts the developing brain, including individual differences in psychopathology. Part 3 discusses the relevance of these findings for educators, highlighting how behavior can be modified to build resilience and greater academic and social-emotional competency.


The endless wealth of information on the internet sharpens the question: how much and what is really important for us to remember? This issue is related to questions regarding the core processes involved in reasoning and thinking. We present mental manipulation (MM) as the core of reasoning and examine the above-mentioned issue in light of MM's vital role in reasoning and problem-solving.


We examined the relationships between teachers’ communication styles and students’ perceptions of the classroom goal structure. Within the context of high school health classes focused on teaching about HIV/STD/pregnancy prevention, we surveyed 456 students about their teachers’ immediacy behaviors, efforts to make course content relevant, and their perceptions of the classroom goal structure. We found that the more teachers stressed the relevance of course material and used verbal and nonverbal immediacy behaviors, the more students perceived a mastery goal structure in their classrooms. Conversely, when teachers did not emphasize these immediacy behaviors, students were more likely to perceive an avoidance goal structure. Immediacy behaviors were not related to perceptions of an extrinsic goal structure. Our results suggest that teachers can help create a positive, mastery-oriented classroom by communicating with students in a way that demonstrates authentic care and concern for students’ learning.
Implications for future research into cues students rely on when perceiving classroom goal structurers and implications for instruction are discussed.


This study explored the content and nature of teachers' knowledge and perceptions of their students. The knowledge and perceptions of seven Dutch secondary school teachers regarding the same 33 students in one second-year school class were studied. Each teacher was invited to tell (in 60 s per student) how he/she perceived and what he/she knew about, each individual student. Interview data were analysed using both qualitative and quantitative methods. Results showed within- and between-teacher differences in the content, amount and evaluative nature of their knowledge and perceptions. In addition, there were within- and between-student differences in how their teachers knew and perceived them. The results suggest that teachers' knowledge and perceptions of their students varies per teacher-student combination and substantiate an interpersonal nature of teachers' knowledge and perceptions. To understand the function of teachers' knowledge and perceptions of students for teaching, future research should focus on how different knowledge and perceptions lead to differential educational trajectories for individual or specific groups of students.


Neuromyths have been discussed to detrimentally affect educational practice, but the evidence for this assumption is still very scarce. We investigated whether 255 student-teacher' beliefs in neuromyths are related to their academic achievement (overall grade point averages and first-year practical courses). Believing or rejecting neuromyths that make no direct assumptions about learners’ educability was not related to academic achievement. Believing in neuromyths that explicitly deny the educability of learners was only marginally related to academic achievement. We conclude that self-reported beliefs in neuromyths do not differentiate between high- and low-achieving initial teacher education students.


Prior research on epistemic beliefs, that is, individuals’ views about knowledge and knowing, has mainly focused either on individuals’ professed beliefs (as reported in questionnaires) or on their enacted beliefs (as indicated during task processing). However, little is known about the relation between professed and enacted epistemic beliefs. The present study focused on beliefs about the uncertainty of scientific knowledge and investigated both professed and enacted beliefs in the context of evaluations of scientific controversies. Participants were N = 79 university students who first completed a questionnaire that targeted their professed uncertainty beliefs about scientific knowledge. Then, approximately 1 week later, they completed a standardized
test in which they evaluated five scientific controversies. Cued retrospective verbal reports were used to measure their enacted uncertainty beliefs while taking the test. Results revealed that professed and enacted uncertainty beliefs were interrelated and that both variables predicted individuals’ performance with regard to the evaluation of scientific controversies. Furthermore, the effect of professed uncertainty beliefs on controversy-evaluation performance was partly mediated by enacted uncertainty beliefs. The findings of the present study point toward novel theoretical insights and educational implications regarding the relations between professed and enacted beliefs about the uncertainty of scientific knowledge and their role in individuals’ evaluation of scientific controversies.


Online citizen science allows us to bridge the gap between researchers and nonresearchers and to improve the scientific literacy of nonresearchers. The aims of the present study were (a) to determine whether a 5-week randomized control trial conducted by teachers in their classroom could improve 7- to 12-year-old children’s inhibitory control (IC) and (b) to provide proof of concept that online scientific research projects can provide meaningful results in the context of education. As expected, children in the IC training group improved their IC efficiency to a greater extent than children in the control training group. We provide the first evidence that such online scientific research projects can be effective in improving children’s IC abilities and bridge the gap between the lab and the classroom.


PlayWisely is a novel approach to early learning designed to target the positive development of a wide range of cognitive and physical/motor abilities by stimulating the rapidly developing brain of very young children (from 4 months to 3 years of age). The current pilot study represents a first step toward providing an evidence base for the efficacy of this approach by conducting a small-sample (N = 17) randomized controlled comparison of the cognitive and motor abilities of a group of children who were administered 16 weeks of PlayWisely training with a wait-list group of children who were administered this training 5 months later. Results showed a marginally significant 20% greater differential increase in the overall total cognitive scale scores over the 10-month study period coupled with significant differential increases in both fine motor and visual motor subscale scores and a marginally significant differential increase in the speed of processing subscale scores (as measured by the Merrill-Palmer-Revised Scales of Development).


Reading self-concept is an important predictor of reading comprehension and vice versa. However, the mechanisms that are at work in this relation have yet to be identified.
In line with the self-enhancement approach, we propose that in the reading domain, amount of reading, book choice (text difficulty and book length), and intrinsic reading motivation should function as mediating variables in the relation between reading self-concept and reading comprehension. We tested this hypothesis with longitudinal data gathered from \( N = 405 \) German students in Grades 7, 8, and 9. The results showed that reading self-concept had a positive effect on reading comprehension, intrinsic motivation, book length, and amount of reading. However, indirect paths between reading self-concept and reading comprehension were found only for intrinsic motivation, not for amount of reading or book choice. The results are discussed in the context of students’ reading comprehension development, and consequences for research and education are derived.


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The Self-Determination Theory of motivation (SDT) has significantly guided educational policy and research. It maintains that learning succeeds when brought about by autonomous rather than controlled motivation, and that extrinsic reward motivation cannot engender effective learning. We present an alternative approach, rooted in recent insights from the neurobiology of memory. In exploring environments to reap rewards, people pursue interrogative goals, accompanied by dopamine-based hippocampus activation, leading to the formation of rich relational memories. In contrast, seeking to avoid punishment or loss involves imperative goals, with amygdala activation driving the perirhinal cortex to form disjoint item memories. We suggest that structuring learning and evaluation to diminish failure and increase repeated opportunities for successful performance, as in gamification, may engender effective learning incorporating broad perspectives and rich associations. This may occur even in the absence of intrinsic motivation to master a particular subject. Employing this insight in instructional design may benefit many educational frameworks.

In this paper, we present a meta-analysis of the motivational and performance effects of experimentally induced achievement goals and the moderating effects of goal standard and goal framing; comprising 90 studies which provided 235 effect sizes (11,247 participants). The findings show that, relative to performance-approach and performance-avoidance goals and no-goals, induced mastery-approach goals enhanced performance, but not motivation. With regards to the goal standard used in the inducement, mastery-approach goals related to better performance than performance-approach goals, when mastery-approach goals were based on task-referenced standards or when social comparison was used as a standard for inducing performance-approach goals. With regards to the goal framing used in the inducement, mastery-approach goals were more beneficial when achievement goals were induced by means of goal content. We therefore conclude that goal framing and goal standard should be taken into consideration in achievement goal research and practice.


We investigated the role of linguistic and cognitive processes in reading precocity from kindergarten to grade 2. A sample of 33 precocious readers was identified that did not differ on age, gender, and parental education to a control group of 259 typical readers. The effects of verbal ability were also controlled. All children were administered a battery of cognitive and linguistic measures in three assessment points at the midterm of each year. Individual growth modeling (IGM) was used to test the rate and shape of change of the two groups. Results showed that precocious readers exhibited superior performance in phonological awareness, naming speed, and reading fluency, across development, whereas their early advantage in letter knowledge disappeared by grade 1. A cognitive advantage specific to executive function (planning) was also observed for the precocious readers early on and was maintained through grade 2. Precocious readers outperformed the control group also on silent word reading, reading comprehension, and on the expressive (production) and the receptive (recognition) orthographic processing tasks. We concluded that both linguistic and cognitive abilities—independent of verbal ability—underlie individual differences in reading precocity.


Teacher burnout has been identified as a significant occupational hazard. However, our understanding about individual variations in burnout risk among in-service teachers is still less than sufficient. This study explored socio-contextual burnout risk profiles and their association with the reported use of proactive strategies among in-service teachers by using a person-oriented approach. The survey data were collected from 2310 Finnish in-service primary and lower secondary school teachers using a probability sampling method. In the latent profile analysis, five socio-contextual burnout profiles were identified. The profiles differed from each other in terms of burnout symptoms and proactive strategy use. Results suggested that there is individual variation in teachers’ risk
of burnout. In addition, the results imply that well-developed proactive strategies, both in terms of self- and co-regulative strategies, are related to lower risk of experiencing socio-contextual burnout. The utilization of strong co-regulative strategies was related to lower risk of experiencing exhaustion and inadequacy during teacher-pupil interactions. However, strong self-regulation combined with low levels of co-regulation was related to an increased risk of experiencing cynicism. This implies that learning proactive strategies may be useful in preventing teacher burnout.


This study examines, through the lens of gender, whether engagement in sports, self-efficacy and grade level affect academic achievements of adolescents. The study comprised 491 10th–12th grade students—218 males and 273 females; 170 participated in competitive sports, 185 participated in non-competitive sports, and 136 were not involved in sports. We found in both genders a significant positive link between the sense of academic self-efficacy and academic achievement, and a negative link between the sense of self-efficacy in sports and academic achievement. However, girls engaged with the competitive sports showed better academic achievements than the boys and girls in the other groups, while boys engaged with competitive sports demonstrated the lowest academic achievements. In addition, we found that the variables examined provide stronger explanation of the academic achievement of boys than those of girls. Insights of this study should be incorporated into sports educators’ programs to further drive gender equality.


This study investigates young people’s awareness of gender differences in achievement and their reversal between educational and occupational contexts. Girls are generally more academically successful than boys but men still enjoy a superior position in the professional world. The present study therefore aimed to determine whether students were aware of a reversal in gender gap, and to explore whether the characteristics associated with high and low status groups (competence and warmth) are attributed to boys and girls in a way that is consistent with their perceived achievement-related status. From sixth grade to bachelor’s degree level, 638 students (347 girls and 290 boys, M(age) = 15.98) rated boys’ and girls’ academic status in middle school, high school and university, as well as men’s and women’s occupational status. They also assessed male and female students’ warmth and competence at their respective school levels. Overall, participants seemed to be aware of a reversal in gender status between educational contexts, where they attributed the highest status to girls, and the occupational context, in which men were perceived as having the highest status. The youngest students have a limited awareness of gender inequalities in the professional world suggesting that understanding of gender dynamics increases with age. Furthermore, female students were perceived as more competent but not necessarily warmer than male students, suggesting they might be considered as a non-traditional female subgroup. This set of perceptions might have different, yet important, implications for boys’ and girls’ educational and occupational experience and the maintenance of gender hierarchy.

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This longitudinal study explores three research questions. First, what is the prevalence of math and science gender stereotypes among high school students, their parents, and teachers? Second, are parents’ and teachers’ gender stereotypes related to adolescents’ stereotypes? And third, are adolescents’ gender stereotypes associated with their math and science identity and outcomes? We used a nationally representative U.S. sample (N = 22,190, 50% girls, 53% White, 22% Latinx, 13% Black) of adolescents surveyed at 9th and 11th grade, their parents, and teachers. Adolescents’ transcripts were also collected at the end of high school. Adolescent gender stereotypes became significantly more traditional from 9 to 11th grade. Parents were three times more likely to believe that males are better at math/science (compared to believing females are better), and we found significant positive relations between parents' and adolescents' stereotypes. Finally, adolescents' math/science gender stereotypes were significantly related to their math/science identity, which in turn was related to their STEM outcomes over the course of high school. Our findings give insight to the development of academic gender stereotypes in adolescence, their potential precursors, and their relations to academic outcomes.

Grit has recently been challenged for its weak predictive power and the incompleteness of its measurement. This study addressed these issues by taking a developmental, person-oriented approach to study academic-related goal commitment and grit and their effects on academic achievement. Using longitudinal data among Finnish eighth and ninth graders (n = 549, 59.4% female, age = 14–16), the longitudinal changes in grit and academic goal commitment profiles were investigated through latent profile and latent transition analyses. Four profiles were identified across two grades: High committed-persistent and moderate consistency (~17%), Moderate (~60%), Low committed-persistent and moderate-low consistency (~8%) and Extremely low committed-persistent and moderate-low consistency (~12%). The students in the High committed-persistent and moderate consistency profile had the highest academic achievement of all the profiles when controlled for gender, socioeconomic status, conscientiousness, and academic persistence. The results revealed that students’ profiles changed between the eighth and ninth grades, with more than one-third of the High committed-persistent and moderate consistency adolescents dropping from this group. Further analysis showed that the profiles varied by educational aspiration, gender, and socioeconomic status. These findings imply that the combination of grit and academic goal commitment influences academic achievement; however, this combination is less common, unstable, and affected by internal and external factors. The study provided important implications on the weak grit effect and the ways to improve it.


Accurate self-evaluation leads to better regulation of learning and better performance in elementary school children and acts as a predictor of future academic success. The present study investigates the conditions under which preschoolers’ self-evaluation accuracy can be enhanced. In the empirical research, 111 children were assigned to one of four conditions: control group, group receiving performance feedback, group acquiring repeated experience of testing, and group obtaining both performance feedback and repeated experience. All the children performed the same analogical reasoning tasks and provided self-evaluation judgments. The overall effects of the performance feedback and repeated experience were significant; however, low performers benefited only from performance feedback, while high performers benefited from performance feedback as well as repeated experience.


Despite the massification of higher education, social inequality in higher education outcomes still persists. It is known that secondary schools’ socioeconomic composition is at least partly responsible for this social inequality. Nevertheless, the mechanisms by which socioeconomic composition affects higher education enrollment are still poorly understood. Based on the attribution theory, this study expects students’ feelings of academic self-efficacy and sense of futility to act as underlying mechanisms. Additionally, given that individual self-efficacy beliefs and individual sense of futility are shared among students within schools — that is, schools have different self-efficacy and
futility cultures — we investigate whether these cultures are consequential for higher education enrollment and program choice. Results of binomial logistic multilevel analyses on the data of the International Study of City Youth (www.iscy.org) in Ghent, consisting of 1214 Flemish students across 29 schools, indicated that students in low socioeconomic composition schools are less likely to enroll in higher education because these schools are characterized by high futility cultures. In contrast, high self-efficacy and self-efficacy cultures are positively associated with the choice for academic bachelor programs, but they did not explain socioeconomic composition effects. We conclude that educational policies should aim at increasing a sense of control over academic outcomes in order to improve social equality in higher education outcomes.


Obtaining adequate understanding of scientific concepts is considered challenging due to learners’ misconceptions about natural phenomena. Misconceptions may coexist with scientific knowledge in the brain. Therefore, misconceptions must be cognitively inhibited in order to select the scientific knowledge. There is, however, lack of substantial neuroscientific evidence supporting this hypothesis. In this study, we sought for this evidence by investigating medical students who solved a cardiovascular conceptual problem in a magnetic resonance imaging scanner. Brain activation was compared between understanders who had the scientific knowledge, and misunderstanders who held a misconception. No significant activation was found in brain areas related to cognitive inhibition in understanders compared with misunderstanders. Therefore, we could not confirm the idea that cognitive inhibition is involved in overcoming a misconception. Instead, we found that the putamen was significantly activated in misunderstanders compared with understanders, suggesting a role for episodic memory in learners holding a misconception.


Efforts have been made to promote children’s interest in science, but little is known about how children’s interest in science relates to other characteristics, such as science-specific curiosity, domain-general epistemic curiosity, and verbal intelligence. The current study examines how these factors relate to individual differences in children’s self-reported interest in science topics. Children 7- to 10-years-old (n = 91) rated their interest in science and non-science topics and completed measures of science-specific curiosity, domain-general epistemic curiosity, and verbal intelligence. An additional 94 7- to 10-year-olds rated their interest in science and non-science topics and completed the science-specific curiosity measure. The results suggest that individual differences in children’s science interest relate most strongly to scientific curiosity, and specifically to the drive to seek out information and new experiences.

Despite decades of research on the close link between eye movements and human cognitive processes, the exact nature of the link between eye movements and deliberative thinking in problem-solving remains unknown. Thus, this study explored the critical eye-movement indicators of deliberative thinking and investigated whether visual behaviors could predict performance on arithmetic word problems of various difficulties. An eye tracker and test were employed to collect 69 sixth-graders' eye-movement behaviors and responses. No significant difference was found between the successful and unsuccessful groups on the simple problems, but on the difficult problems, the successful problem-solvers demonstrated significantly greater gaze aversion, longer fixations, and spontaneous reflections. Notably, the model incorporating RT-TFD, NOF of 500 ms, and pupil size indicators could best predict participants' performance, with an overall hit rate of 74%, rising to 80% when reading comprehension screening test scores were included. These results reveal the solvers’ engagement strategies or show that successful problem-solvers were well aware of problem difficulty and could regulate their cognitive resources efficiently. This study sheds light on the development of an adapted learning system with embedded eye tracking to further predict students’ visual behaviors, provide real-time feedback, and improve their problem-solving performance.


It is widely accepted that general intelligence and phonological awareness contribute to children’s acquisition of reading and spelling skills. A further candidate in this regard is orthographic knowledge (i.e., the knowledge about permissible letter patterns). It consists of two components, word-specific (i.e., the knowledge of the spelling of specific words) and general orthographic knowledge (i.e., the knowledge about legal letter patterns of a writing system). Among German students, previous studies have shown that word-specific orthographic knowledge contributes to both reading and spelling. The results regarding general orthographic knowledge and its contribution to reading and spelling are inconsistent. The major goal of the present study was to determine the incremental predictive value of orthographic knowledge for reading and spelling skills among German elementary-school children (N = 66), over and above the contribution of general intelligence and phonological awareness. The second goal was to examine whether there is a difference between the two subtypes of orthographic knowledge in the amount of their respective contribution to reading and spelling performance. The results show that word-specific as well as general orthographic knowledge contribute to both reading and spelling performance, over and above intelligence and phonological awareness. Furthermore, it reveals that both word-specific and general orthographic knowledge explain more variance of spelling compared to reading. Possible explanations for these results, limitations, and implications of the study are being discussed.

Teacher-directed and self-directed learning have been compared across various contexts. Depending on the settings and the presentation of material, mixed benefits are found; the specific circumstances under which either condition is advantageous are unclear. We combined and reanalyzed data from two experimental studies investigating the effects of contrasted versus sequential presentation of materials on learning the principles of algebraic addition and multiplication in sixth-grade classrooms. In both studies, students were presented the same structured materials that differed only in whether the principles were explained by the teacher (n = 154) or inferred by the students (n = 91). We found short- and medium-term advantages of combining teacher-direction with contrasted presentation of algebra principles. An examination of aptitude-treatment interactions shows that particularly students with lower reasoning abilities benefitted from teacher-direction in the demanding contrasted condition. Based on these findings, we discuss the particular circumstances under which teacher-directed instruction reveals its advantages.


Vigorous debates have unfolded challenging public recognition of individuals whose names and images are emblazoned on public displays of recognition, including professional awards. Efforts to diversify higher education institutions in the U.S. have largely been focused at recruitment and retention efforts with less attention directed to racial and gender disparities of public recognition and recipients of professional awards. This study considered the role of professional awards by disciplinary educational organizations. Specifically, we ask how are named professional awards reflective and productive of discursive structures within professional higher education associations? While considering the historical and social structures of higher education and the professional associations, our findings reveal a markedly differed discourse from awards named after women and racially minoritized individuals to that of white men. We suggest ways in which professional associations can reconsider their practices to attract a broader and more inclusive pool of deserving recipients of prestigious awards.


In tracked and highly stratified educational systems, where educational reproduction is particularly strong, the chances of students to achieve more education than their parents did are truncated. Little is known, however, what may help students raised in lower-educated families to become upwardly mobile at the transition to upper-secondary education. In tracked educational systems, this transition is decisive for ultimate educational attainment across the life course. The study addresses this research
gap by examining whether quality of social relationships (i.e., social capital) among students, parents, and teachers matters for student and teacher assessment of students’ agentic capabilities (i.e., work habits) at age 15. If so, the question is whether these assessments help students become enrolled in high-status upper-secondary school tracks at age 18, thus achieving educational upward mobility. The analyses are based on 401 students from two cohorts in the German- and French-speaking parts of Switzerland, interviewed at the ages of 15 (T1) and 18 (T2) (60.35% females, Mage 15 = 15.2, SDAge 15 = 0.2; 58.35% older cohort), including data collected by questionnaire from primary caregivers and teachers at student age of 15. The students come from families where highest parental education attainment is below the high-status academic or vocational baccalaureate in upper-secondary education. They may thus experience the opportunity to gain access to these high-status tracks at the transition to upper-secondary education. A structural equation model reveals the role of student assessment of their agentic capabilities and teacher assessment of these competencies in mediating the relation of social capital accrued at home and at school to educational upward mobility. This novel evidence on mechanisms of social advancement may be prone to inform interventions helping students from less-educated families to succeed in tracked and stratified educational systems.


Demographic explanations for the rise in household income inequality include increased educational assortative mating and changes in the division of paid labour within families. Building on this research, the current study focuses on the connected nature of these two inequality-producing mechanisms, while at the same time bridging the divide with the economic literature on the role of income differentiation. Drawing on the 2004–2008 European Union Statistics on Income and Living Conditions, we consider variation across Europe in the disequalising effect of educational assortative mating and relate these patterns to the general characteristics of welfare state regimes, focusing on the degree of gender equality and income differentiation. First, we document large educational differentials in men’s and women’s income in Eastern Europe, and smaller differentials in Anglo-Saxon, Continental and, especially, Northern Europe. Next, we find that this variation in gender equality and income differentiation parallels variation in the potential contribution of educational assortative mating to educational differentiation in household income. While all countries display larger educational differentials in household income under the scenario of 100% educational homogamy, the biggest differences are found in Eastern Europe, and the smallest differences in the Nordic countries. These results suggest that educational assortative mating is less disequalising in countries with more gender equality and support for equal opportunities.


Active labour market policies (ALMPs) are widely diffused measures aiming to re-integrate jobseekers into the labour market. Despite their crucial role in acting as gatekeepers to employment, the literature scarcely considers the employer’s perspective of these measures. We analysed whether and how employers consider ALMP participation in the hiring process as a signal that helps explain the labour market
outcomes of jobseekers. We developed a theoretical argument regarding how employers interpret ALMP participation and identify assumed agency, that is, whether employers believe that the agency for initiating ALMP participation lies with the jobseeker (voluntary participation) or the job centre (mandatory participation), as a crucial factor determining whether their evaluation of ALMPs is positive or negative. To examine our expectations, we conducted qualitative interviews with employers hiring for low-skilled occupations in Switzerland and Sweden, representing two countries with comprehensive ALMP systems. As expected, the interpretation of ALMP programmes differs depending on the assumed agency. Employers who believe that participation is voluntary interpret participation as a signal of motivation; however, employers who believe that participation is mandatory interpret participation as a signal of lower productivity, which reduces the chances of a successful labour market access.

«This book is about integrating popular culture into curricula to foster student engagement»--

This ethnographic research examines the sociocultural and educational experiences of migrant youth living in liminality in urban Yangon. Their liminality exemplifies the interplay between poverty, social-choice of dropping out of school and the militant culture of schooling. The research argues that narratives provide comprehensive understandings of the complex and multidimensional aspects inherent to dropping out of school in Myanmar: poverty; poor learning environments; an inherently militant culture of schooling; and ultimately, the foreseeable failures of these young people. By better understanding the context of being ‘out-of-school’ and the process of becoming ‘dropouts’ from their viewpoint, the author argues that more educational research needs to reconceptualize the meaning of schooling in the ever-changing lives and learning of youth in rapidly transforming societies in Asia and beyond.

Jarraud, F. (2020, février 19). L’EPS dans les beaux quartiers. Consulté 1 mars 2021, à l’adresse Le café pédagogique website: http://www.cafepedagogique.net/LEXPRESSO/Pages/2021/02/19022021Article637493190534969552.aspx?actId=ebwp0YMB8s1_OEGEGssDRkNUcvuQDVN7aFZ1E4yS5hsZMczVe00RbhmAPNiXrAmaf&actCampaignType=CAMPAIGN_MAIL&actSource=507543
«Il fallait réaliser cette enquête sur l’EPS enseignée dans un lycée favorisé pour dire à quoi ressemble la discipline quand elle s’adresse à une élite scolaire et apporter ainsi des contributions à la sociologie de l’école et à la sociologie et didactique de l’EPS enseignée dans un contexte favorisé», écrit Sarah Pochon qui publie une très intéressante thèse sur le cas du lycée Henri IV de Paris. «Face à ces élèves, appelés, pour la plupart, à présider aux plus hautes fonctions administratives du pays, face à des élèves considérés par l’équipe enseignante comme de «futurs dirigeants, futurs leaders», les enseignants d’EPS sélectionnent les contenus qui leur paraissent légitimes d’enseigner. Les techniques didactiques qu’emploient les enseignants et la nature des savoirs transmis fondent l’identité propre des leçons d’EPS dans cet établissement d’excellence. Dans
cette mesure, le travail renvoie finalement à la persistance des inégalités scolaires dans le cadre de l’EPS en montrant l’inégale distribution des contenus, des savoirs et des compétences selon les types d’établissement ».

Jarraud, F. (2021, février 19). Bilan positif pour la mixité sociale. Consulté 1 mars 2021, à l’adresse Le café pédagogique website: http://www.cafepedagogique.net/LEXPRESSO/Pages/2021/02/19022021Article637493190708570910.aspx?actId=ebwp0YMB8s1_OGEGSSDRkNUcvuQDVN7qFZ1E4yS5hsZMczVe00RbmhAPNiXrAmat&actCampaignType=CAMPAIGN_MAIL&actSource=507543

La mixité sociale c’est possible. Selon une étude de Julien Grenet et Youssef Souidi (Institut des politiques publiques), les trois expériences de mixité sociale lancées en 2016 dans 6 collèges parisiens ont réussi à infléchir nettement la composition sociale des établissements sans pour autant encourager la fuite vers le privé. L’étude démontre que la création de secteurs multi-collèges est « une piste prometteuse pour favoriser la mixité sociale ». Ce résultat positif interpelle la politique ministérielle qui a fait le choix de l’extraction des élèves « méritants » plutôt qu’encourager la mixité sociale.


« This book explores instructional strategies and curriculum decisions that create and support a socially just learning environment in higher education settings. It examines the cultural implications of teaching and functioning as a faculty member in higher education settings. It focuses on investigations of leadership and the impact of diversity and social justice issues on institutional goals »


Little research has investigated the impact of adolescent motivational resources, other than educational plans, on adult educational attainment, or whether their effects differ by gender and social class. Data from the St. Paul Youth Development Study (n = 874, 55% female, 30% children of college graduates) are used to estimate a second-order latent motivation factor encompassing adolescent (age 15–16) educational plans, academic self-concept, economic self-efficacy, and mastery. Then, using logistic regression, the effect of this second-order factor on odds of college graduation in adulthood (ages 26–27 to 37–38) is estimated. Heterogenous effects of motivation by gender and parental education are investigated. The results show that the second-order motivation factor had strong positive effects on educational attainment after adjusting for family background variables. The effect of motivation did not differ by gender in the whole sample nor among children of college graduates. However, among children of less-educated parents, women were found to benefit more than men from these psychological assets for achieving upward educational mobility. These findings suggest that adolescent motivation, especially among U.S. women whose parents do not have college degrees, may be a resource for higher educational attainment.

This article offers a tentative exploration of how working-class students’ mobility is affected by the push to enter middle-class careers and lifestyles, and the pull of their working-class origins. Based on a nine-year qualitative longitudinal study of working-class students at a Canadian university, I will show that few study participants experienced mobility as an uncontested or linear trajectory. Two key storylines can be identified: (a) a story of adjustment, modification and contentment; and (b) a story of conflict, loss, and struggle. For most, educational mobility was tempered by revisions of occupational ambitions, by returns to their home communities and by lifestyle choices that do not fit simple narratives of status mobility. And yet, all expressed a growing sense of self-confidence, appreciated their education as an experience of personal growth, and achieved on their own terms, in post-graduate education and newly discovered careers.

Quels liens entretient l’école avec ses territoires ? Quelles dynamiques à l’œuvre pour porter la mixité sociale comme une valeur partagée ?

L’Institut des politiques publiques publie aujourd’hui le bilan, plutôt positif, d’expériences menées à Paris pour améliorer la mixité sociale au collège. Mais la question a disparu de l’agenda politique.


In this paper, four scholars with minoritized identities explore the impact of harm and/or trauma when engaging in research alongside minoritized student populations. Using collaborative autoethnography, the researchers engaged in a process of individual journaling and collaborative dialogue to understand the ways in which they prepared for, navigated, and processed aspects of harm and/or trauma through their research. In particular, affect theory was used as a theoretical framework for this study. Four main subcategories of the temporalities of harm emerged: (a) harm as temporal; (b) harm as affective; (c) harm as embodied; and (d) harm as shared. Implications for pedagogy, practice, and research are shared based upon the study’s findings.

Increasingly students from diverse backgrounds are attending university, many from contexts where accessing higher education is the exception rather than the norm. We
know that these learners often have a lower sense of belonging when compared to their second or third generation peers but how this is experienced at an individual level remains unclear. This article explores how current and graduated students articulated their belonging within the higher education environment and how understandings of entitlement played into this conceptualisation. Drawing on Bourdieu’s concepts of field and habitus, particularly the notion of cleft habitus (habitus clivé), this article seeks to explore how learners negotiate their status both as university students and graduates. Utilising interviews and surveys conducted with enrolled and graduated first in family learners, the focus is on those who are regarded as successful in the sense of meritocratic achievements and degree conferral. This richly descriptive data points to the emotional undercurrents and relational complexity that attending university can have for those with no generational biographical belonging to this environment and the ways in which learners negotiate between existing and new expectations and norms.

The uniformly positive view of social mobility in the United Kingdom overlooks the difficulties working-class young people have in reconciling a working-class background with the middle-class environments of the university and the professional labour market. But even more hidden are the subtle processes of exclusion and exclusivity that permeate social life in, particularly, the elite universities. Here, working-class students’ marginalisation in relation to advantageous social activities and networks, compromises their chances of later success in the labour market. This paper scrutinises working-class students’ experiences of elite higher education through the lens of Bourdieu’s concepts of habitus, capitals and field. Drawing on a research project on working-class young people who gain entry to elite universities it analyses the disjunctures between working-class habitus and the field of elite higher education, focusing on the emotional and social consequences for working-class students. The findings raise concerns—largely unexplored in existing research—about working-class reception in elite fields. The paper concludes with a call to look beyond the attitudes and actions of working-class students to those of their upper- and middle-class peers, and the culture and ethos of the elite universities.

Adolescent agency has been identified as a central aspect in the study of social mobility and status attainment. There is however still a lack of understanding of (a) how different SES dimensions influence the expression of multiple dimensions of agency; (b) the interplay of SES and adolescent agency in shaping adult outcomes; and (c) variations in these associations by gender. Focusing on educational mobility, this study adopts a multiple exposure multiple outcome approach specifying the associations between multiple SES dimensions and multiple indicators of domain-specific agency and their relative role as predictors of educational attainment, also testing for potential gender differences. The study draws on data collected for the nationally representative Longitudinal Study of Young People in England, comprising 6719 individuals born in 1989/90 (48% female; 85% first generation students; 15% ethnic minority status). The
findings show that multiple SES indicators independently influence the expression of different agency dimensions, in particular regarding educational intentions and success expectations. Moreover, multiple dimensions of education-related agency are significant predictors of enrolment in university by age 20 and degree completion by age 25, after controlling for family SES, ethnicity, and prior academic attainment. The evidence points to mainly independent agency effects and provides some support for compensatory effects regarding school engagement. Although females report higher levels of education-related agency, the manifestation of agency benefits both males and females equally. The findings suggest that critical insights into social mobility processes can be gained when using more complex models that take into account multiple dimensions of SES and agency and their interactions over time.

**Climat de l’école**

Weiss, P. O. (2021). *Les universités françaises sont-elles sûres ? Une enquête de victimation dans les campus marseillais.* SociologieS. Consulté à l’adresse [https://hal.archives-ouvertes.fr/hal-03131647](https://hal.archives-ouvertes.fr/hal-03131647)

**Évaluation des dispositifs d’éducation-formation**


This US-based study examined the experiences of school counselors and social workers implementing a systems-oriented, programmatic student support practice model, City Connects, within high-need urban contexts. The City Connects model represents current best practices in student support, positioning school counselors and social workers primarily in the role of identifying students' needs and strengths and making connections between students, families, teachers, and service providers. This stands in contrast to older models in which these professionals functioned primarily in a direct care role. The goal of the study was to understand practitioners' experiences of efficacy, satisfaction, and engagement as well as the barriers to each of these within this best practice model. Acknowledging the documented challenges of working in high-need urban schools in the United States and the potential strains of systems-oriented practice, the study aimed to understand which aspects of their work enable practitioners to thrive, as well as which aspects do not. Qualitative analysis was used to examine written reflection data on the experiences of 35 practitioners implementing the model. Our analysis revealed six themes: (1) connecting/cultivating relationships (2) seeing impact, (3) having confidence in the effectiveness of the practice model, (4) having high levels of satisfaction with the practice, (5) managing role clarity, and (6) experiencing systemic barriers. Implications for practitioners, supervisors, clinician educators, and program designers are discussed.

Formation continue


Ce livre est un document pédagogique mis à la disposition de tous les acteurs de la formation en alternance, véritable levier de la professionnalisation dans les différents systèmes d’éducation et de formation. Toute formation en alternance exige une immersion professionnelle. Ce temps d’implémentation, passé en entreprise par l’apprenant et son tuteur, est sanctionné par la rédaction d’un rapport d’immersion professionnelle. L’édit rapport obéit à certaines règles d’écriture, de structuration et de présentation que l’auteur déroule tout au long de ce livre de méthodologie.


The COVID-19 crisis has reiterated the importance of adult learning and career guidance services as many adults have lost their jobs and now require upskilling and reskilling opportunities in order to keep pace with the rapidly evolving world of work. To foster the development of responsive and more widespread adult learning opportunities in Japan, this report analyses several policy options to expand access to training, remove the barriers to training participation, and ensure that the training provided is aligned with Japan’s labour market needs. It also discusses the importance for Japanese workers of receiving guidance and support from their employer to facilitate career progression and the need for externally provided guidance services for workers who want to change jobs. Based on this analysis, this report provides actionable policy recommendations as well as good practice examples from OECD countries.

Marché du travail


Entre 2008 et 2017, dans le secteur marchand non agricole, le nombre d’emplois salariés a diminué dans les microentreprises et les petites et moyennes entreprises (PME). A contrario, il a augmenté dans les entreprises de taille intermédiaire (ETI) et les grandes entreprises. Il s’agit là des évolutions mesurées par la seule comparaison des stocks d’emplois par catégorie d’entreprises. Ces évolutions masquent cependant les dynamiques à l’œuvre. Les microentreprises, les PME et les ETI créent 275 000 emplois salariés en France sur la période, mais beaucoup d’entre elles changent de catégorie à la suite de leur croissance ou de leur rachat par des entreprises de plus grande taille. Ainsi, bien que les microentreprises et les PME créent des emplois, leurs effectifs salariés diminuent sur la période. La croissance des grandes entreprises est due au rachat d’entreprises plus petites (en particulier des ETI). Sans ces apports externes, les grandes entreprises suppriment des emplois dans la grande majorité des zones d’emploi, à hauteur de – 246 000. Les entreprises créent 340 000 emplois salariés dans les dix zones...
d’emploi les plus dynamiques, alors que l’emploi salarié progresse peu sur l’ensemble du territoire et diminue dans plus des deux tiers des zones d’emploi.


Institutionalist explanations of the high non-standard employment rate in the Spanish labour market have pointed to the relevance of flexibilization at the margin, that is, the deregulation of non-standard jobs. Using Spanish social security micro data, we find evidence that the liberalization reforms of 2010 and 2012 had flexibilization at their core, that is, greater instability due to open-ended and full-time contracts (erosion of employment protection) and a rise in turnover among periphery workers, increasing the segregation gap. We conclude that there is a high level of deregulation and simultaneous dualization due to the combination of flexibilization at the margin (until 2008) and the core (2010–2012).


Les situations professionnelles qui ne répondent plus à un employeur unique et durable tendent à se multiplier. Parmi elles, figurent des formes d’« emploi éclaté », caractérisées par le cumul ou la discontinuité des emplois sur une année. Quand il perdure, l’emploi éclaté peut devenir « durablement précaire ». Les salariés concernés se forment moins que les autres alors que pour beaucoup d’entre eux, la question du recours à la formation se pose d’autant plus fortement que la crise sanitaire touche de plein fouet les secteurs dans lesquels ils évoluent.


Les quartiers dits « prioritaires » de la politique de la ville, les plus défavorisés du point de vue des revenus de leurs habitants, concentrent les difficultés sociales, notamment en matière d’emploi. Un quart des actifs y sont au chômage, principalement des jeunes et des personnes peu qualifiées.


Using data from the Chinese Household Income Project survey in 2013, our male–female pay-gap decomposition illustrates that the gender earnings gap is larger among the self-employed than the wage-employed after controlling for the effect of various pay-determining characteristics. Our self-employed versus wage-employed decomposition also controls for selection into self-employment as well as those pay-determining characteristics. We find that wage-employed women would earn less than their current earnings if they shifted to self-employment, while wage-employed men would earn more than their current earnings if they became self-employed. In essence, self-employed women suffer from double jeopardy. They not only earn less than men in self-employment due to lower returns for the same pay-determining characteristics, but women in self-employment also earn less than women in wage employment when they have the same pay-determining characteristics.

Technology and digital media are now embedded in children’s daily lives and can have significant impact on children’s early development and learning. Preparing early childhood teachers to integrate a variety of technologies into classroom practices can be challenging. This study explores perceptions of preservice teachers about technology integration into their educational programs and assesses their satisfaction with such preparation. A total of 192 preservice teachers participated in this study. Data were collected through questionnaires and in-depth interviews. Results indicated that preservice teachers held positive perceptions of the importance of technology and digital media integration in early childhood classrooms. However, their satisfaction with their preparation for technology integration into classrooms was less positive. Knowledge needs indicated by the preservice included learning more about technology integration in practice, and how to engage children in activities using technology and digital media. Based on the overall findings, it seems that teacher education programs need to develop stronger curricula that address these concerns so that future teachers are more confident and able to support children’s learning through integration of technologies into their teaching practice.


Shortages of qualified teachers in primary and secondary education are very common in almost all European countries and in the US. Since high quality teachers are usually the most likely to leave, much attention has been focused on teacher turnover; retaining the best teachers can help to ameliorate teacher shortages. Using data from the Survey of Health, Ageing and Retirement in Europe (SHARE), this paper examines the rates and characteristics of teacher turnover across European countries. Though the numerical rates of teacher turnover have followed similar patterns, countries are very individual in other respects, including the types of positions teachers hold and how they are appraised. Moreover, from the early 1990s, Eastern European countries experienced economic transitions that have influenced teacher mobility in the long term. Thanks to SHARE, we can study the occupational trajectories of respondents in nineteen European countries. By identifying those who changed their occupation, we can learn more about teacher turnover, its characteristics across Europe and how it has been affected by economic and political transition.


OCDE. (2021). What are the roles and salaries of school heads? (Education Indicators in Focus No 78). https://doi.org/10.1787/97d6b7a5-en


This article contributes to the debate on the empirical applications of critical realism (CR) in school effectiveness research. Researchers that endorse this research paradigm privilege intensive, over extensive, research designs, focussing, hence, in ethnographic methods and qualitative interviewing. However, and despite some recent academic proposals, there is little guidance in the literature on how to analyse qualitative data using the lenses of CR to produce causal knowledge about the operation of education policies in society. The current piece elaborates on the tenets of dialectical CR to develop some methodological arguments on how to engage in this type of empirical work. These reflections are then applied to analyse qualitative information retrieved in three ‘failing’ schools from Northern Colombia as an exemplar.


In this collaborative autoethnography, written by multiple stakeholders involved in a teacher residency program, we address the complexities of preparing and supporting social justice-oriented teachers. We identify three tensions faced in the design and (re)development of the teacher preparation program. These tensions include preparing teachers to work in a specific context, collaborating with mentor teachers to support social justice-oriented practice, and offering university-based induction to support novice teachers’ work. We describe the ways in which we attempted to navigate these tensions, and we highlight the difficulties and possibilities of the work. We offer implications for the field and, for us, as teacher educators, to continue to grapple with concepts of social justice.

Numérique et éducation

Les contributions à cet ouvrage appartiennent à deux champs : celui de l’innovation numérique et technologique et celui de l’éducation. Les premiers chapitres sont consacrés à l’humanisme numérique car on ne peut pas ouvrir un champ de réflexion sur les évolutions accélérées des systèmes éducatifs, sans considérer la singularité des innovations technologique et numérique auxquelles elles ne sont plus étrangères. Les contributions relatives aux plans de l’éducation et de la pédagogie présentent l’avantage d’avoir exploré, dans le contexte des modernités africaines, les enjeux et les problèmes de ce genre particulier d’innovation que sont l’innovation éducative et l’innovation pédagogique.


« This book examines the use of virtual and augmented reality in educational settings »--


Technology and digital media are now embedded in children’s daily lives and can have significant impact on children’s early development and learning. Preparing early childhood teachers to integrate a variety of technologies into classroom practices can be challenging. This study explores perceptions of preservice teachers about technology integration into their educational programs and assesses their satisfaction with such preparation. A total of 192 preservice teachers participated in this study. Data were collected through questionnaires and in-depth interviews. Results indicated that preservice teachers held positive perceptions of the importance of technology and digital media integration in early childhood classrooms. However, their satisfaction with their preparation for technology integration into classrooms was less positive. Knowledge needs indicated by the preservice included learning more about technology integration in practice, and how to engage children in activities using technology and digital media. Based on the overall findings, it seems that teacher education programs need to develop stronger curricula that address these concerns so that future teachers are more confident and able to support children’s learning through integration of technologies into their teaching practice.


Blended learning is the fastest growing teaching modality in North America and much of the world. However, research and training in blended learning are far outpaced by its usage. To remedy this gap, we developed a competency framework and Blended Teaching Readiness Instrument (BTRI) to help teachers and researchers evaluate teacher readiness for blended environments. The purpose of this research is to show that the blended teaching readiness model and accompanying BTRI are reliable for use with teacher candidates both before and after going through a blended teaching course. This knowledge would allow researchers and practitioners to have greater confidence in using the BTRI for future growth curve modeling for the identified blended teaching competencies. To accomplish this, we collected pre- and post-data from teacher
candidates across multiple semesters who were studying in a blended teaching course. Using confirmatory factor analysis, we determined the pre-class survey results fell within the range of the four fit statistics cutoffs (RMSEA = 0.045, CFI = 0.933, TLI = 0.929 and SRMR = 0.043). And, the post-class survey results had good fit as well (RMSEA = 0.044, CFI = 0.911, TLI = 0.905 and SRMR = 0.051). We also showed that the factor loadings and communalities were statistically significant. By testing the factors in this way, we make a case for the survey to be a valid and reliable instrument in assessing blended teacher competency. Additionally, we tested the model for measurement invariance and found that we could reliably use the BTRI for pre-post growth modeling.

Practitioner Notes

What is already known about this topic?

Blended learning is the fastest growing teaching modality in Canada and the United States, and is expanding rapidly throughout the rest of the world. Teaching in blended learning settings requires distinct skills and dispositions specific to the modality. A blended-teaching-focused competency framework is a necessary element in any blended teacher preparation program. Though there have been attempts to make a blended teaching framework before, none of these exclusively focus on the distinct skills of blended teaching nor have they been validated. What this paper adds?

Describes our free, publicly accessible competency framework that focuses exclusively on blended teaching Validates a concise Blended Teaching Readiness Instrument (BTRI) to go along with the framework. Confirms pre-post measurement invariance for the BTRI which allows for use with pre-post growth modeling.

Implications for practice and policy

The competency framework and validation are a theoretical contribution to the rapidly expanding field of blended learning research. With the valid BTRI instrument and framework, teachers can get feedback on their strengths and weaknesses in blended teaching and learn how to improve and help others.


Il ne faudrait pas confondre « école numérique » et « école à distance ».


Guiding hints and challenge can help scaffold learners to progress beyond what they would achieve independently. The interactive and adaptive capabilities of mobile devices allow educational applications (apps) to support learning through scaffolding designs. However, little research has tested the effects of scaffolding features in apps on young children’s learning. Using a 3 × 2 between-subjects design, this study experimentally tests how three types of app feedback (nonverbal sounds, verbal encouragement, or scaffolded verbal hints) and two types of leveling (gradual vs. random-ordered challenge) influence 4–5-year-old children’s learning of novel words (N = 240). Results showed that scaffolded feedback was especially useful when provided at the beginning of app play (p < .01), and scaffolded leveling through gradual increases in difficulty supported faster and more accurate responses than random order challenge (p < .001). Practitioner Notes

What is already known about this topic?

Researchers have worked to apply what we know about traditional in-person teaching with young learners and how that might translate to digital platforms. Parent and teacher scaffolding has been shown to successfully help young children learn. Guidance through increased difficulty and explanatory feedback can help learners gradually build their skills and
reflect more deeply on the content they are learning. What this paper adds This study adds to the newly growing collection of experiments testing the design features of educational pre-school apps. Findings show that scaffolding through educational app feedback and leveling can support young children learning. Results also show that the impact of scaffolding can depend on when the guidance is presented during app play – at the very beginning of play versus later on. Implications for practice and/or policy Findings can help educators and other consumers identify which types of apps are better for scaffolding young children’s learning. Suggestions are provided to support educational app developers in designing products that are truly effective. Findings suggest that combinations of app designs may differently impact young children’s learning, providing next step testing conditions for educational app designs.


This multiple case study investigates instructional designers’ perceptions of online course quality, their use of cognitive load strategies when designing online courses, and whether utilization of these strategies contribute to online course quality. The participants of this study were instructional designers (n = 5) who worked in various campus programs at a large Midwestern university. Data sources included pre-interview survey, semi-structured interview and sample course design documents. Employing a pattern matching technique, the results showed that instructional designers (a) define online course quality based on established standards and rubrics; (b) apply cognitive load strategies intuitively while designing online courses; and (c) consider CLT design strategies as an element contributing to course quality. The results also showed instructional designers’ use of cognitive load strategies mainly focused on reducing extraneous cognitive load. Implications for practice and research as well as directions for future research are discussed. Practitioner Notes What is already known about this topic Cognitive load theory (CLT) provides empirically tested strategies to manage cognitive load in different settings CLT strategies has a positive impact on student learning processes and outcomes When designing online courses, it is important for faculty to collaborate with instructional designers to manage cognitive load and improve online course quality There is a need to investigate instructional designers’ perceptions of online course quality and their use of CLT strategies when designing online courses What this paper adds Provides a deep understanding of instructional designers perspectives on online course quality, application of CLT strategies while designing online courses and how application of these strategies contribute to the online course quality Although instructional designers identify multiple CLT strategies from their work and perceive CLT strategies as an element contributing to course quality, they apply these strategies innately Implications for practice and/or policy Multiple stakeholders should be involved in determining online course quality Collaboration between faculty and instructional designers is essential to manage cognitive load and increase online course quality CLT and related theories should be emphasized in instructional design programs Future research should focus on how instructional designers integrate CLT strategies into the systematic instructional design process and instructional designers’ decision-making process through think-aloud and/or journaling efforts

The purpose of this study is to examine the relationship between competence beliefs, value beliefs, pedagogical beliefs and teachers' technology integration. The sample includes two hundred and five in-service teachers from 121 schools in Taiwan. Using the latent moderated structural equations approach, this study finds that there is a synergistic interaction between competence beliefs and traditional pedagogical beliefs. The negative effect of traditional pedagogical beliefs on technology integration is amplified when competence beliefs is at an extremely low level. On the contrary, the maladaptive nature of traditional pedagogical beliefs is neutralized when the level of competence beliefs increases. Value beliefs in terms of perceived interest and usefulness significantly predicted technology integration. However, when controlling for the effects of these beliefs, constructivist pedagogical beliefs and perceived cost are not significant predictors. These findings revealed that the additive effect model commonly seen in the literature is short of capturing the complexity of teacher beliefs about technology integration. Stakeholders are suggested to devote their resources to foster competence and value beliefs about technology integration instead of pedagogical beliefs.

**Practitioner Notes**
What is already known about this topic: Teacher beliefs demonstrate an additive relationship with technology integration. Competence beliefs, value beliefs and pedagogical beliefs are significantly associated with teacher technology integration. What this paper adds: Teacher beliefs demonstrate a multiplicative relationship with technology integration. Competence beliefs serve as a buffer between traditional pedagogical beliefs and technology integration. Perceptions of cost and constructivist pedagogical beliefs are not significant predictors of teachers' intention to integrate technology.

Implications for practice and policy: Teachers' beliefs about their capability, interest and the usefulness of integrating technology, not pedagogical beliefs, are suggested to be the reasonable targets for future intervention work. Stakeholders may consider devoting their resources to first support teachers who have strong traditional pedagogical beliefs, low competence beliefs and low values beliefs about technology integration.


La proportion de personnes handicapées décroit fortement tout au long du parcours scolaire. Cela a comme conséquence de plus faibles niveaux de qualification, ce qui amène un obstacle supplémentaire aux possibilités d’emploi et renforce leur exclusion de la sphère sociale. De plus, ce constat est aggravé lorsque la situation de handicap implique des troubles cognitifs. L’importante évolution des formations en ligne, comme en témoignent la croissance massive des plates-formes MOOC (Massive Open Online Courses) pourrait fournir une réelle opportunité afin de répondre aux besoins de formation des personnes handicapées. Malheureusement, comme pour de nombreux autres dispositifs numériques, ces systèmes souffrent d’un déficit d’accessibilité. Sur la base d’un état de l’art sur l’accessibilité des systèmes numériques d’éducation, nous avons mis en place un processus de co-conception auquel ont participé des étudiants ayant des déficiences cognitives (N = 6), ainsi que des professionnels du domaine du handicap cognitif et de l’accessibilité (N = 13). Celui-ci a permis le développement d’un
cadre de travail pour la conception de systèmes d’apprentissage en ligne accessibles, découlant des différents besoins et recommandations qui ont émergé au cours de ce processus. Il a donné lieu au développement et à l’implémentation d’un premier prototype de lecteur de MOOC accessible nommé Aïana. Une expérimentation en environnement écologique autour d’un MOOC diffusé sur la plateforme nationale FUN a été réalisé afin d’évaluer l’efficacité d’Aïana en termes de performances d’apprentissage, de charge cognitive, d’auto-détermination induites, d’utilisabilité et d’efficience des interactions personne-système, et ce auprès d’un échantillon assez large de participants (N = 1087 dont 150 ont déclaré un handicap). Les résultats confirment la bonne utilisabilité de notre lecteur ainsi que son impact positif sur l’apprentissage et le soutien à l’autodétermination des personnes handicapées, notamment celles ayant des troubles cognitifs, renforçant ainsi la pertinence des principes de conception mis en œuvre.


This paper uses nationally representative survey data of adults Internet use in Britain to examine current patterns in the uptake of lifelong learning via the Internet. We develop and test a model that accounts for structure, agency and outcomes using structural equation modelling to address two questions: (1) how structure (as measured by age, gender, SES, Education and ACORN) is related to personal and capital enhancing outcomes of learning online; and (2) how agency (as measured by digital skills and engagement with online learning) mediates this relationship. We demonstrate that social structure remains an important factor in understanding patterns of uptake and outcomes of online learning, alongside an individual’s agentic behaviours. We suggest that countries such as the UK, which have become overly focused on individual interventions to increase the uptake of lifelong learning via the Internet, are going in the wrong direction. Such interventions have failed in the past, and we suggest that they will continue to do so unless policy makers reconceptualise lifelong learning and the Internet in ways that take social structures into account.


The use of video is commonplace for professional preparation in education and other fields. Research has provided evidence that the use of video in these contexts can lead to increased noticing and reflection. However, educators now have access to evolving forms of video such as 360 video. The purpose of this study was to adapt and validate an instrument for assessing immersive 360 video use in an undergraduate preservice teacher university training program. Data provided evidence of the validity of the Extended Reality Presence Scale (XRPS) for 360 video research in preservice teacher professional development. Moreover, evidence from the study suggests that those with higher feelings of presence are less likely to jump around (or twitch) while watching 360 videos. The main implications are that: a) the XRPS is a validated and reliable instrument and b) more research is needed to examine the presence and practices for in-service and preservice teachers while watching 360 video. Practitioners notes What is already known about this topic? Instructional videos are widely used in preservice teacher training. 360
videos show promise for improving preservice teacher professional development in terms of immersion and presence. What this paper adds? An instrument for assessing 360 video teacher presence is presented (XRPS), targeting a current gap in the literature. Data provided evidence of the validity of the tool for future 360 video research and integration. Implications for practice and/or policy Practitioners can use XRPS for assessing preservice teachers’ experiences in immersive environments and evaluating 360 videos. Higher feelings of presence are associated with more focused viewpoints. Therefore, practitioners should support and facilitate this watching behavior. Higher scores of presence are associated with a perceived sense of agency and emotional attachment. Therefore, 360 videos should include design elements promoting these feelings.


There has been a lot of interest in competence-based education in research and scholarship. How competence-based education has been developed and implemented varies across education systems in Europe. The European Commission defines digital competence as one of the eight key competence standards for lifelong learning. The European digital competence framework DigComp provides a comprehensive and exhaustive framework for citizens; it has the potential to be adapted to the needs of specific target groups. Nevertheless, no current research has focused on the need for developing a common framework for primary and secondary education. To address this gap we present a digital competence framework for European primary and secondary students. DigComp and a set of European frameworks are analysed in this paper. Combining categorical analysis with the collaboration of teachers and experts in the field, we define performance criteria and components that contribute to competence by five categories, providing a framework to promote the acquisition and evaluation of digital competence. This framework can be implemented in any EU country, it incorporates the most recent theoretical advances in research on information and communication technologies.


Teachers play key roles in advancing the use of mobile devices for language learning in both formal and informal settings. However, in contexts where top-down educational policies are prevalent, the roles of teachers are usually overemphasized while learners—the end-users of educational technologies remain largely ignored. Less understood is what roles students expect teachers to play in facilitating their acceptance of mobile-assisted language learning. This study was conducted in an attempt to fill this gap using the extended technology acceptance model (TAM). Survey data from 293 higher education learners of English in Vietnam were analyzed by the Rasch-based path model. Results indicated that students showed stronger desire for teachers’ orientation toward appropriate use of mobile resources for language learning both inside and outside the classroom than teachers’ demonstration of mobile-assisted language learning activities in the classroom. The findings offer useful implications for teachers, researchers, and language education policy makers in fostering the use of mobile devices for language
learning. What is already known about this topic? Teachers’ role in promoting learners’ adoption of mobile-assisted language learning is under-researched. In contexts dominated by top-down educational policies, the voice of learners is largely ignored. Learners’ expectation of teachers’ roles in promoting their adoption of mobile-assisted language learning needs more empirical evidence. What this paper adds? This paper highlighted the important roles of teachers in orienting students toward appropriate mobile learning resources for out-of-class learning. Teachers were considered by learners as “guide on the side” rather than “sage on the stage” in enhancing their adoption of mobile-assisted language learning. Implications for practice/policy Teacher training programs on mobile-assisted language learning can be redesigned to enable teachers to better support mobile-assisted language learning in and outside the classroom. Teachers should be better able to enrich their knowledge of various mobile learning resources to support their students.


Past research shows that both teachers’ technological pedagogical content knowledge (TPACK) and their engagement in metacognitive activities are essential to technology integration in the classroom. However, the interplay between teachers’ TPACK ability and their metacognitive skills is still underexplored, especially in the context of developing technology-infused lesson plans. This study examined how the interrelations among metacognitive activities and TPACK constructs affected preservice teachers’ technology integration in instructional design. Sixty-four preservice teachers designed a lesson with nBrowser, a computer-based learning environment (CBLE) that helps teachers incorporate technology into instruction by promoting self-regulated learning (SRL).

Drawing on the lesson plans, we extracted six types of metacognitive processes preservice teachers exhibited while solving the task and generated two distinct SRL profiles according to the identified latent profile of metacognitive patterns. The competent self-regulated learners demonstrated more efforts in metacognitive monitoring activities than the less competent self-regulated learners in regulating their task solving processes. When comparing TPACK comprehension and design performance between the two profiles, the competent self-regulated learners outperformed the less competent self-regulated learners on comprehension and design outcomes. This study provides deep insights into teachers’ self-regulation in CBLEs and emphasizes the pivotal role of metacognition and SRL in teachers’ TPACK development.

Practitioner Notes What is already known about this topic Success in technology integration calls for teachers’ conceptual understanding of technological pedagogical content knowledge (TPACK). Teachers’ self-regulated learning (SRL) ability mediates their TPACK development since metacognitive activities in the SRL process enable teachers to monitor and evaluate TPACK learning towards the sophisticated levels of TPACK. What this paper adds nBrowser, the computer-based learning environment fosters teachers’ engagement in regulated TPACK development. Analysis of teachers’ lesson plans affords opportunities to identify teachers’ specific metacognitive processes in self-regulated TPACK development. Latent profile analysis helps to understand the heterogeneity of teachers’ metacognitive processes and establish distinctive profiles regarding teachers’ self-regulation. Teachers’ TPACK development differed significantly across distinctive SRL profiles. Implications for practice and/or policy Teacher educators should find ways to support teachers’ SRL ability in technology education. The identification of SRL profiles
Digital game-based learning (DGBL) is a frequently adopted mode for facilitating teaching and learning, where learners are immersed in game contexts to engage in gameplay and to construct meaningful knowledge. However, without guidance, students might have difficulties organizing what they have experienced in gaming contexts. Thus, in this research, a multidimensional repertory grid (MDRG) approach was proposed, and a digital game was implemented accordingly. Moreover, an experiment was executed in a geography course to examine the effectiveness of the strategy. A total of 83 high school students (15.5 years old on average) participated in the experiment. The experimental group learned with the multidimensional repertory grid-based educational game, while the control group learned with the conventional gaming mode. The analysis results revealed that the experimental group had better learning achievement as well as higher learning motivation, self-efficacy and metacognition awareness. In addition, the behavioral analysis and interview results revealed that those learning with the proposed strategy had a greater tendency to promote higher order thinking. Accordingly, the limitations and suggestions for future research are provided.

Practitioner Notes

What is already known about this topic

Digital game-based learning is an effective teaching approach that enables learners to effectively acquire knowledge in joyful contexts, hence enhancing their learning achievement and learning motivation. Suitable strategies should be embedded in games to enable students to have a higher level of thinking ability and to improve their academic performance. In view of guiding students to observe from multi-dimensional perspectives, a repertory grid is believed to be a suitable tool since it enables students to observe different learning objects according to different aspects and elements. What this paper adds

A multi-dimensional repertory grid-based educational game (MDRG game) was developed to facilitate students' learning achievement, learning motivation, and self-efficacy as well as their metacognition awareness. In addition to promoting students' learning outcomes, students' learning behavioral transition diagrams were presented and interview results were analyzed in this study. Implications for practice and/or policy

Traditional graphs or tables could help students memorize and understand features of learning objects; however, it is not easy to promote students' higher order thinking skills of making comparisons and reflections from multiple dimensions. The multi-dimensional repertory grid-based feedback provides students with systematically organized information to make comparisons and reflections, which furthermore enhances students' higher order thinking competences. Embedding suitable strategies (e.g., multi-dimensional repertory grid-based feedback) in games can effectively improve students' learning performance without increasing their cognitive load.

With the development of the maker movement, more and more teachers are applying a broad range of technological tools in their pedagogy, instead of only information technology. This study details the development and validation of the Teachers Maker-based TPACK Survey Instrument (TMTSI), a revised model designed to measure technology teachers’ maker-based technological pedagogical content knowledge (TPACK) in utilizing maker-based tools to support their teaching. We recruited 165 preservice secondary technology teachers in Taiwan for this study and confirmatory factor analysis was applied to validate the instrument. Our findings suggest that TMTSI provided a valid and highly reliable research-based instrument that also serves as a professional development model to help scaffold the development of K-12 technology teachers. This paper details the theoretical foundations of TMTSI, reports on its reliability and validity, and discusses the application and implications of TMTSI for teacher education and professional development.


This study compared the effects of support for peer feedback, peer feedforward and their combination on students’ peer learning processes, argumentative essay quality and domain-specific learning. Participants were 86 BSc students who were randomly divided over 43 dyads. These dyads, in a two-factorial experimental design, were assigned to four conditions including: peer feedback (n = 22), peer feedforward (n = 22), mixed (n = 20) and control group (n = 22) conditions. An online peer feedback environment named EduTech was designed which allowed us to implement various types of support in the form of question prompts. In this online environment, students were asked to write an argumentative essay on a controversial topic, to engage in peer learning processes and to revise their essay. Overall, the results showed that students in the three experimental conditions (peer feedback, peer feedforward and their combination) benefited more than students in the control group condition (without any support) in term of peer learning processes, argumentative essay quality and domain-specific learning. However, there was no significant difference among the three experimental conditions. This implies that peer feedforward can be as important as peer feedback in collaborative learning environments which is often neglected both in theory and practice.

What is already known about this topic? Writing argumentative essays is a common practice for higher education students in various disciplines which deal with controversial issues. Writing argumentative essay requires solid argumentation strategies which makes it a challenging task for higher education students. Additional instructional support is needed to help students write high-quality argumentative essays. What this paper adds? Peer learning is a promising instructional strategy for improving students’ argumentative essay writing and learning. Online support in the form of question prompts to guide students during peer learning can improve their argumentative essay writing and learning. Next to the peer feedback, peer feedforward is also a promising instructional approach to support students’ argumentative essay writing and learning. Implications for practice and/or policy Given the positive effects of peer learning processes, the use of peer feedback and peer feedforward should be given more attention by teachers to support students write high-quality argumentative essays for controversial issues. Teachers and educational designers should not only provide opportunities for students to engage in peer feedback processes (how I am doing?) but also in peer feedforward processes (where to next?).

Given the increased need for broadening participation in computing, there must be a focus not just on providing culturally relevant content but also on building accessible and inclusive computational tools. Most efforts to design culturally responsive computational tools redesign surface features, often through making nominal changes to add cultural meaning, yet the deeper structural design remains largely intact. We take a critical perspective towards novice programming environments to elucidate how the underlying structure privileges particular epistemologies and cultures. In this paper, we examine how the cultural practice of storytelling is supported and/or inhibited within novice programming tools. We draw upon the experiences of 38 Native American youth, who worked in teams to create place-based, interactive stories and games for their community. Findings offer insights to the embedded cultural biases that exist in the structures of computational tools. We discuss insights for how to address cultural biases and promote deeper integration of cultural practices in future designs of culturally responsive computational tools.

**Practitioner Notes**

What is already known about this topic? Culturally responsive computing connects computing content heritage and vernacular cultural practices. “Black boxing,” or lack of transparency in how it works, in computational tools makes it difficult for novices to enter computing cultures. Design tools are embedded with particular ways of being, knowing, valuing and doing. What this paper adds? Thirty-eight novice learners’ computational designs were shaped by the ways in which a computational tool privileged particular knowledge systems. Storytelling, as a critical cultural practice, especially in Indigenous cultures, is heavily constrained by the design structure of computational tools. Computational tools are cultural artifacts with deeply embedded epistemological, ontological and axiological biases, which directly frame what learners can do with these tools. Implications for practice Collaborative, community-based design processes could mitigate the cultural biases that persist in computational tools. Transparency in computation tools in critical to broadening participation in computing cultures. Culturally responsive design of computational tools at the structural level is required to build inclusive computing cultures.


Matters of data privacy related to social media are increasingly relevant for educators as happenings such as the 2018 Cambridge Analytica scandal have attracted public attention. Many educators use social media for professional purposes, including with their students and should, therefore, be knowledgeable regarding data privacy issues that impact education. This research explores this issue from an interpretive paradigm based on a mixed-methods approach derived from survey data from an international sample of 148 pre-service teachers who were studying education courses at three universities. Data suggest that pre-service teachers see both educational and distracting potential in social media, but lack knowledge regarding relevant policies and regulations, which reflects trends in the broader population. Attitudes toward educational social media use were not correlated with awareness of data privacy policies. However, comfort with companies’ use of personal and student data and faith in governments’ capacity to
regulate social media companies were correlated. We discuss our findings in relation to
the use of social media and related data privacy considerations and the need for data
literacy training in teacher education programs. We include recommendations in light of
the findings.

augmented reality in medical and health science education: A randomised controlled
Due to increasing demands in the amount of content to be learned within a medical
and health sciences curriculum, there are benefits towards exploring options for new and
effective delivery modes. Augmented reality technology has the potential to enhance
learning in physiology and anatomy, where students require a three-dimensional
knowledge of human organ systems and structures. This study aimed to assess the
effectiveness of learning when an identical lesson was delivered through augmented
reality using either the Microsoft HoloLens or a mobile handheld tablet device. Thirty-eight
pre-clinical undergraduate participants completed a lesson detailing the physiology and
anatomy of the brain. Pre- and post-intervention tests were provided to evaluate
acquired knowledge. After the activity, participants also completed a Likert-style
questionnaire to evaluate adverse health effects experienced and assess their
perceptions of the module. There were no significant differences between test scores
from lesson delivery in either the HoloLens or mobile-based augmented reality. However,
a significant increase was reported in dizziness when using the HoloLens (25% higher, n =
19, p = .04). No other adverse health effects, such as nausea, disorientation or fatigue
were observed. Both modes were effective for learning, providing evidence to support
educators and developers wishing to adopt an augmented reality method of delivery in
health sciences and medicine. A video abstract of this article can be viewed at
https://youtu.be/GSayCmopGZg Practitioner Notes What is already known about this
topic Modern technology continues to disrupt the way we teach in higher education.
Teaching through virtual and augmented reality has shown great benefit in enhancing
learning and the student experience in health sciences and medicine. There is the
potential for new and upcoming delivery modes to continue this trend, including the
introduction of both mobile and head-mounted display based augmented reality. What
this study contributes Investigates the potential for augmented reality to be used as a
teaching tool, and supports its implementation in tertiary education. Identifies that
although slight dizziness was reported in some participants from using the HoloLens, this
does not appear to impact learning or student perceptions of the technology. Presents
the HoloLens and mobile-based augmented reality as novel and evidence-based
methods of instruction in health sciences and medicine. Implications for practice and/or
policy Augmented reality is an effective delivery mode which can enhance learning.
Students consider augmented reality through both the HoloLens and mobile-based
devices to be enjoyable and engaging. This novel method of instruction is useful to
supplement learning in a tertiary education programme.

Ng, O.-L., & Chan, T. (2021). *In-service mathematics teachers’ video-based noticing of
https://doi.org/10.1111/bjet.13053
We adopt five observation categories, namely classroom management, classroom
environment, communication, mathematical content and tasks, to analyse four in-
service secondary mathematics teachers’ noticing upon watching video episodes showing an actual mathematics lesson that implemented 3D Printing Pens for teaching and learning shape and space. We use coding to analyse what the participants generally identified as important or noteworthy in the video. Moreover, we employ thematic analysis to delve deeper into the participants’ interpretations and decisions in relation to using 3D Pens for teaching and learning mathematics. Our findings have implications for teachers’ professional development in the area of technology integration especially in terms of their realisation of the affordances of novel-to-them technologies. We also report methodological and conceptual contributions towards teacher noticing. Practitioner notes What is already known about this topic Various frameworks have been proposed for conceptualising teachers’ expertise in technology-rich pedagogies; however, few have addressed teachers’ initial experience of adopting a novel-to-them technology in subject teaching. In teacher education, the method of video-based noticing has been widely undertaken in the last two decades to help preservice and in-service teachers visualise complex classroom situations and interpret classroom events. What this paper adds This study investigates what in-service mathematics teachers find significant, the pedagogical considerations they make and their professional development in integrating technologies for teaching and learning mathematics. Particularly, video-based noticing is used as a means for facilitating teachers’ professional growth through realising the affordances of 3D Printing Pens in mathematics education. Implications for practice and/or policy This study provides qualitative evidence that video-based noticing was productive in facilitating teachers’ technological, pedagogical and content knowledge (TPACK), in particular, in realising the educational affordances of a novel-to-them technology. The videos captured the dynamic process of students’ drawing with 3D Pens “in action” rather than merely capturing their final products in a static manner, which facilitated the teachers’ reflections about the evolution of students’ mathematical thinking.


Children on the autism spectrum (AS) often struggle with writing tasks at school. They commonly experience difficulty with two key aspects of writing: the skills required for handwriting (fine motor and perceptual) and the conceptual and language skills required for written composition. Specialist intervention to assist with written expression is, therefore, often needed for students on the AS to succeed academically. This research evaluated the impact of using self-regulated strategy development (SRSD) in combination with assistive technology on the quality and length of written compositions of students on the AS. It also investigated how students felt about using the SRSD writing strategy. Eight primary school students on the AS between the ages of 9 and 12 participated in this single-subject study. An ABAC study design was used to evaluate student writing performance across three conditions. Baseline handwriting measurements were collected during condition A. During condition B students used assistive technology alone; in condition C, students applied their understanding of SRSD while using assistive technology. Results from this study show that, in many cases, the quality and/or length of written compositions and feelings of self-efficacy towards persuasive writing of students on the AS improved when they received physical and/or conceptual writing supports. This paper presents the research design, methods and results from this single-subject study followed by a discussion of the results and final
thoughts and areas for future research. Practitioner Notes What is already known about this topic? There is limited research about how the persuasive writing of students on the autism spectrum (AS) can be supported in a socially inclusive way. Research has shown that the use of assistive technologies like keyboards and writing-support software can improve the writing outcomes of students on the AS. Research has shown that the use of self-regulated strategy development (SRSD) writing strategies can improve the persuasive writing outcomes of diverse students. What this paper adds? A single-subject study using an ABAC study design showed that persuasive writing outcomes improved in quality or length for some students when they used an app that combined the two strategies. Implications for policy and practice SRSD combined with writing-support software appeared to improve the writing outcomes of some students on the AS. It can, therefore, be used as a tool to support teachers in developing strategies for inclusive classrooms.


In the present study, we tested the effectiveness of three learning strategies (self-explanation, learning by teaching and passive viewing) used by students who were learning from video lectures. Effectiveness was measured not only with traditional measures, but also with electroencephalography (EEG). Using a within-subjects design, 26 university students viewed three sets of short lectures, each presenting a different set of English vocabulary words and were asked to use a different learning strategy for each set of lectures. Participants’ EEG signals were assessed while watching the videos; learning experience (self-reported motivation and engagement) and learning performance (vocabulary recall test score) were assessed after watching the videos. Repeated measures ANOVAs showed that the self-explaining and teaching strategies were more beneficial than the passive viewing strategy, as indicated by higher EEG theta and alpha band power, a more positive learning experience (higher motivation and engagement) and better learning performance. However, whereas the teaching strategy elicited greater neural oscillations related to working memory and attention compared to the self-explanation strategy, the two groups did not differ on self-reported learning experience or learning performance. Our findings are discussed in terms of potential application in courses using video lectures and in terms of their heuristic value for future research on the neural processes that differentiate learning strategies. Practitioner Notes What is already known about this topic? Watching video lectures does not always result in learners actively making sense of the learning material. Self-explaining facilitates deep learning from viewing video lectures and in traditional educational settings. Learning by teaching also facilitates deep learning in traditional educational settings. What this paper adds? Learning by teaching resulted in the highest theta and alpha band power in EEG assessment while viewing video lectures. Compared with passive viewing, learning by teaching enhanced students’ motivation to try to understand the material; in addition, both learning by teaching and self-explaining enhanced the amount of mental effort students put into understanding the material. Learning was increased via both self-explaining and teaching strategies after viewing video lectures. Implications for practice and/or policy Learners are encouraged to generate explanations during pauses in video lectures or after viewing them, in order to increase learning. Learners are also encouraged to learn by teaching, as this strategy
can increase learning and also increase neural oscillations associated with memory and attention.


The number of students accessing Alternative Provision (AP) in the UK is growing and the ways in which such provision is facilitated is evolving with the use of EdTech. However, there is very little evidence of such provisions being evaluated in terms of their educational impact nor regarding the way in which students engage with them. This results in the voices of students participating in AP being further marginalised by being out of mainstream education, as they fail to be heard by their educators, schools or local authorities. Within this exploratory paper digital data collection methods are shown to offer a solution to this problem and reveal student voice insights into how they engage with and experience one specific form of synchronistic online AP. This study provides evidence of how student voice can effectively be collated in order to provide an opportunity for marginalised student voices to be heard. Practitioner Notes What is already known about this topic Student voice is a critical tool in both engaging students and student engagement. There is a preference in students to give anonymous feedback and this facilitates more honest, open responses. AP uptake is increasing. There has been little evidence of any effort to obtain student voice from students in AP. What this paper adds Gathering student voice from students in AP is critical to assess how students view and respond to their provision. Digital data collection facilitates AP student voice; students both younger and potentially more vulnerable to disengagement can have their voices heard more easily. A substantial majority of students in AP who have left mainstream education perceive online learning delivery methods to have positive impacts. Implications for practice/pedagogy Practitioners should strive to ensure AP students have avenues through which they may have their student voices heard to gain insights into the effectiveness of the provision from a student perspective. Anonymous feedback, which enables students to be confident in expressing their views, even when verbally expressed, can be facilitated through digital data collection methods. Use of live, online interactive lessons are a valuable form of AP worthy of further exploration.


This paper reports on a case study of English as a second language (ESL) vocabulary learning that examined a group of Grade 4 students’ mobile learning experiences of bridging in-class and real-life vocabulary learning mediated by a mobile learner-generated content (m-LGC) tool. This study was premised on the proposed framework of mobile vocabulary learning from an ecological perspective using the concept of affordances, taking the topic of “Food” as an example. Data collection included learning logs created by students and a questionnaire about students’ perceptions of the m-LGC tool for vocabulary learning. The results revealed four types of affordances of the m-LGC tool that the learners perceived and acted on in real life outside the classroom, namely: vocabulary form-meaning mapping, consolidating vocabulary by productive use, vocabulary revision and social affordance. The students’ perceptions of the m-LGC tool for vocabulary learning were positive. This study shows that the various affordances helped students in applying newly learned words to real-life contexts. Social
affordance provided the social contexts for communication via peer interaction, vocabulary expansion as well as the creation of a learning community.


Educational social network sites have many uses in the field of education. The present paper aims to determine factors influencing students' behavioral intention to use a popular educational social network site, Edmodo. Using an extension of the technology acceptance model, we analyzed quantitative responses of 218 university students, registered in an Edmodo supported course. Data were analyzed through partial least squares structural equation modeling. Results highlighted that intention was significantly predicted by its antecedents. More specifically, the attitude was the most important factor, whilst perceived usefulness had a moderate impact on predicting intention. Perceived ease of use predicted perceived usefulness directly and also it influenced intention indirectly through attitude. External antecedents of perceived usefulness and perceived ease of use were all significant. Discussion and implications were drawn based on the results. Practitioner Notes What is already known about this topic Understanding why users accept or reject a particular information system is a common research area. Technology acceptance model (TAM) is used to explain individuals' acceptance and adoption of different technologies. Social Networking Sites (SNSs) have been used to enrich learning. However, the adoption of educational SNS studies is limited. What this paper adds This study is one of the first attempts for employing extended TAM that scrutinizes factors influencing university students' intention to use Edmodo as an educational SNS and a learning management system (LMS) in teaching and learning environments. External antecedents included in the model (subjective norms, output quality, perceptions of external control, perceived enjoyment, technological complexity, and self-efficacy) significantly predicted university students' intention to use Edmodo as an educational SNS and LMS. Major factors driving the intention to use Edmodo were attitude and perceived usefulness. Implications for practice and/or policy Considering that the attitude was found to have the strongest influence on the intention to use Edmodo, instructors may attach prominent importance to foster students’ positive attitudes toward Edmodo use. Instructors may design virtual learning environments with collaborative activities on SNS to increase students’ perceived usefulness. Designers and developers of an educational SNS should design interfaces that should be not only less complex but also more enjoyable.


Despite social media’s ubiquity in modern life, research on some topics related to educators’ use of social media for professional purposes remains underdeveloped, such as how use may change over time. This study explores educators' self-directed learning through social media by comparing change and continuity in how users contribute, interact and converse in two teaching-related subreddits, r/Teachers and r/education. More than a million Reddit contributions spanning three-and-a-half years comprise the dataset: 696 660 contributions to r/Teachers from 55 148 users and 339 618 contributions to r/education from 43 711 users. Learning ecology and affinity space concepts frame multiple methods of analysis, including quantitative measures of individual contributions,
content interactions and social interactions, as well as qualitative content analysis of top posts and responses. Findings are discussed in light of the literature as change and continuity in Redditors' participation patterns in the two subreddits suggest distinct spaces for distinct purposes. This study offers a starting point for further work to understand the opportunities and challenges of self-directed learning in open and complex social media spaces. Practitioner Notes What is already known about this topic Educators use social media to reach outside their local contexts for self-directed learning. Teaching-related subreddits vary in how users contribute and interact. What this paper adds Different online spaces host distinct kinds of discussion. Educators’ participation in online spaces is not static. Social media research methods should account for the possibilities of change and continuity in contributions, interactions and conversations. Implications for practice and/or policy Teaching-related subreddits continue to grow and may offer helpful content and interactions to users; however, self-directed learning through social media also necessitates increased digital literacy. r/Teachers appeared to be a conversational space primarily for teachers. r/education seemed to be a bulletin board space for posting about broader educational topics.


Due to the lack of life experience and situational experience, it is difficult to arouse pupils’ inner motivation and interest in writing. Therefore, the early stage of Chinese writing may be a challenge for Chinese pupils. In order to solve this problem, a spherical video-based virtual reality (SVVR) experience learning system was developed to help pupils improve their writing performance and interest. To evaluate the effectiveness of the proposed approach, an experiment was carried out in a primary school in Zhejiang province, China. First, a writing pretest was administered in two grade 4 classes. The researchers then randomly selected 40 pupils of about 10 years old with similar writing abilities, and assigned them to an experimental group, which used the SVVR learning method, and a control group, which used the traditional learning method. The researchers observed and recorded the pupils’ writing process and then, interviewed them. The results showed that there was a significant difference in the comprehensive writing performance of the two groups (F = 6.272; p = .017 < .05). The mean of the experimental group (Mean = 73.85) was higher than that of the control group (Mean = 70.00). Moreover, there were significant differences between the two groups in terms of the thematic coherence, structural integrity and linguistic expressiveness of their writing performance. However, there was no significant difference in the achievement of creative thinking. In the experimental group, different levels of learning behavior engagement could affect the structural integrity and language expression of writing achievements, and the degree of writing learning behavior engagement was highly correlated with reading time. Through the interviews, it was found that the pupils in the experimental group were more satisfied with the SVVR learning method than the control group pupils were with the traditional learning method. Practitioner Notes What is already known about this topic? Spherical video-based virtual reality (SVVR) set a simulated environment enabling students to have in-depth experience in learning contexts. Most SVVR studies focused on speaking and writing in middle schools and colleges, while its impacts on young children’s writing performance is generally ignored. What this paper adds? An SVVR system based on experiencing learning theory was developed to promote young students’ in-depth
experience and perception in descriptive paper writing. The proposed approach promoted students’ writing performances, writing experience and learning behavior engagement. Implications for practice and/or policy SVVR is a potential technology for implementing experiential learning activities, especially in improving thematic coherence, structural integrity and linguistic expressiveness. It is worth promoting such a low-tech and low-cost experiential learning approach to other courses.


Intrinsic motivation is seen as the principal source of vitality in educational settings. This study examined whether intrinsic motivation promoted online group creativity and tested a cognitive mechanism that might explain this effect. University students (N = 72; 61 women) who volunteered to participate were asked to fulfill a creative task with a peer using online software. The peer was actually a fake participant who was programed to send prepared answers in sequence. Ratings of creativity (fluency, flexibility and originality) and eye movement data (focus on own vs. peer’s ideas on the screen) were used to compare students who were induced to have high intrinsic motivation and those induced to have low intrinsic motivation. Results showed that compared to participants with low intrinsic motivation, those with high intrinsic motivation showed higher fluency and flexibility on the creative task and spent a larger percentage of time looking at their own ideas on the screen. The two groups did not differ in how much they looked at the peer’s ideas. In addition, students’ percentage dwell time on their own ideas mediated the beneficial effect of intrinsic motivation on idea fluency. These results suggest that although intrinsic motivation could enhance the fluency of creative ideas in an online group, it does not necessarily promote interaction among group members. Given the importance of interaction in online group setting, findings of this study suggest that in addition to enhancing intrinsic motivation, other measures should be taken to promote the interaction behavior in online groups.


Des bacheliers professionnels déjouent les statistiques en s’orientant vers l’université. Cet article souligne le poids des engagements sportifs sur des parcours vers l’enseignement supérieur, les (dés)orientant vers des études en sciences et techniques des activités physiques et sportives (STAPS). Loin d’être dans l’illusion notamment d’une possible conversion de compétences sportives en réussite académique, ces bacheliers atypiques évoquent très largement leur orientation risquée et/ou osée. Ces jeunes, qui tentent d’échapper au destin social associé à leur baccalauréat, sont toutefois animés par une autre croyance tenace, celle de l’importance de la « motivation ».

02/Des%20bacheliers%20professionnels%20en%20STAPS%2C%20du%20délic%20à%20la%20conquête%20de%20l'université%20C3%20A9.pdf


This article reports a study that investigated secondary school students' higher education aspirations (towards university studies, ISCED 6 and above) and how these differ between student groups as well as how these are impacted by values of education. Panel data of more than 300 secondary school students in two countries, Luxembourg and Switzerland (the Swiss Canton of Bern) was analysed. Schools are structured differently in the education systems of Luxembourg and the Swiss Canton of Bern. The results of our analysis show that students in the Luxembourgish sample more often aspire to higher education than in the Swiss sample. Disparities in higher education aspirations were also more pronounced in the Luxembourgish sample, boys and students from families of low socio-economic status (SES) were less likely to aspire to higher education. While the effects of values of education are generally scarce, stimulation in terms of anticipated enjoyment and interest derived from participation in higher education seems to have a positive effect on higher education aspirations.


The agenda for widening participation in higher education has led to increasing numbers of students with a broader range of education and family backgrounds. However, transitioning to the university landscape remains a highly complex negotiation process, especially for first-in-family students, who cannot draw on previous experience from higher education in their families. Gaining access to informational capital—a combination of cultural and social capital—plays a crucial role in managing education
transitions. We draw on rich empirical data obtained from 26 autobiographical narrative interviews with first-in-family university students in Austria to investigate how transitions to university are affected by informational capital. We also explore how access to informational capital was influenced by (1) institutional practices, such as initiatives to support students, especially first-year students; and (2) cultural fit—the extent to which a student’s cultural capital corresponded with the dominant cultural capital in the field of their chosen discipline or higher education establishment. Our findings show that gaining access to informational capital was strongly affected by the institutional practices at universities within the different disciplines, thus highlighting the importance of higher education institutions in supporting their students during transition processes. We conclude with policy implications for how higher education institutions can assist first-in-family students to succeed at university.

Manifet, C. (2021). *Quels publics et quels sens pour la reprise d’études à l’université?* Consulté à l’adresse https://www.cereq.fr/sites/default/files/2021-02/Quels%20publics%20et%20sens%20pour%20la%20reprise%20d%27%C3%A9tudes%20%C3%A0%20l%27%C3%A9tude.pdf


**Politique de l’éducation et système éducatif**


The purpose of large-scale international assessments is to compare educational achievement across countries. For such cross-national comparisons to be meaningful, the participating students must be representative of the target population. In this paper, we consider whether this is the case for Canada, a country widely recognised as high performing in the Programme for International Student Assessment (PISA). Our analysis illustrates how the PISA 2015 sample for Canada only covers around half of the 15-year-old population, compared to over 90% in countries like Finland, Estonia, Japan and South Korea. We discuss how this emerges from differences in how children with special educational needs are defined and rules for their inclusion in the study, variation in school participation rates and the comparatively high rates of pupils’ absence in Canada.
during the PISA study. The paper concludes by investigating how Canada’s PISA 2015 rank would change under different assumptions about how the non-participating students would have performed were they to have taken the PISA test.


As schools adopt more inclusive practices, educators increasingly collaborate and co-teach to meet the needs of diverse learners. Co-teaching has been found to have benefits for students across elementary and secondary grades. However, there is a need for teacher educators to provide more preservice training in collaboration and in co-teaching. This mixed method study describes the experience of 20 general education teacher candidates, or residents, using co-teaching models to differentiate instruction with their mentor teachers in high school math and science classrooms of a yearlong urban teacher residency programme. Data included surveys on co-teaching and resident evaluations of lessons co-taught with their mentors, and how these practices influence inclusion of children with special needs. Findings indicate some comfort and effectiveness at implementing co-teaching models in the residency. Implications for preparing preservice general educators using co-teaching models in residency are shared.


Despite the marginal success that anti-affirmative action groups have had at paring back the use of race in college admissions practices, affirmative action has remained largely in-tact as a tool to promote diversity on college campuses. But what might happen if “diversity”—the very thing that heretofore has protected affirmative action—was used instead as proof of its supposed unfairness? In this paper, focusing on the Students for Fair Admissions v Harvard case, we will employ Political Spectacle Theory to analyze the strategies and tactics used by the anti-affirmative action groups to distract from their real aims and to divert focus away from mitigating structural inequality.


devient insuffisant, c’est même une impasse. Certains veulent sa disparition. Enfin, d’autres craignent une destruction calculée. Pour l’auteur, il y a une cinquième voie. Dans cet ouvrage, il propose deux lectures : l’université au XXe siècle et l’université pour le XXIe siècle. Cette seconde voie s’esquisse en référence à des finalités et en termes qualitatifs. La réflexion passe par Bachelard, Fourastié, Laborit et Edgar Morin, mais se met aussi à l’écoute des universitaires, étudiants, seniors et observateurs.

School improvement frameworks and their associated reform efforts often have limited durability and are frequently not fully implemented. Improving their viability, requires a more realistic understanding of contextual organisational structures and the school culture in which the reform is to be implemented. Internationally, and in Australia specifically, education research has informed policy heavily promoting collaboration as a school improvement strategy, with the aim of building teacher capability and student achievement. Consequently, secondary school leaders are charged with promoting the need for teachers to collaborate meaningfully with hundreds of students, carers, parents and colleagues each week across the ‘silos’ of subject departments and grade levels in their school. Social Brain Theory suggests that there are cognitive limits on the number of natural face-to-face social interactions that one can have and maintain. Relationships require significant investment in time and frequency. Additionally, sociality is much more cognitively demanding than at first thought, having unforeseen influence on improvement efforts. The number of interactions required in a collaborative environment, an individual’s likely cognitive overload and the ‘silo’ nature of the school’s organisational structure must all be considered. This paper offers an alternative theoretical framework to support policy makers and leaders in optimising school improvement efforts.

Traditionally, education policy focuses on reforms that address class size, teaching and learning within classrooms, school choice, and changes in leadership as ways to improve students’ educational outcomes. Although well intentioned, education policy can distract from the multi-layered causes that impact achievement and opportunity gaps, and how students’ life circumstances can affect their school attendance. Students who miss school frequently are less likely to be impacted by even the most robust and comprehensive education reforms. This paper discusses how the root causes of chronic absenteeism are complex and that policy distractions can stifle solutions to solve school attendance issues. As a wicked problem, chronic absenteeism, requires a conceptual framework that helps to organize policy responses within all levels of the educational system, as well as expansive to include other social sectors within public policy.

In contrast with the assumptions made in standard measurement models used in large-scale assessments, students’ performance may change during the test administration.
This change can be modeled as a function of item position in case of a test booklet design with item-order manipulations. The present study used an explanatory item response theory (IRT) framework to analyze item position effects in the 2012 European Survey on Language Competences. Consistent item position effects were found for listening but not for reading. More specifically, for a large subset of items, item difficulty decreased along with item position, which is known as a practice effect. The effect was found across all tested languages, although the effect sizes varied across items, test levels, and countries.


Cet article propose, à partir d’une recherche sur la mise en place des Parcours d’excellence dans une académie du sud de la France, d’interroger comment l’apparition des dispositifs centrés sur l’« excellence » fabrique un nouveau besoin éducatif pour certains élèves de l’éducation prioritaire. Après avoir présenté les Parcours d’excellence au sein des politiques d’éducation prioritaire, il analyse la façon dont les personnels éducatifs se confrontent à la nécessité de définir ce nouveau besoin et de cibler les élèves qui en relèvent. Le propos s’intéresse ensuite à la manière dont les élèves appréhendent leur inscription dans ce dispositif et les effets que cela peut avoir sur la manière dont ils se perçoivent.


International large-scale assessment in education aims to compare educational achievement across many countries. Differences between countries in language, culture, and education give rise to differential item functioning (DIF). For many decades, DIF has been regarded as a nuisance and a threat to validity. In this paper, we take a different stance and argue that DIF holds essential information about the differences between countries. To uncover this information, we explore the use of multivariate analysis techniques as ways to analyze DIF emphasizing visualization. PISA 2012 data are used for illustration.


Cet ouvrage propose un curriculum scolaire alternatif, qui engagerait l’école sur la voie d’une transition écologique fondée sur les principes de la durabilité forte, afin de permettre aux futurs citoyens de développer les savoirs, les compétences et les attitudes nécessaires pour faire face aux défis de l’Anthropocène.


« This book addresses issues and challenges facing universities utilizing the expanded use of adjunct faculty since the recent pandemic, in which the majority of instructors are now
working remotely and teaching via online, providing unique focus on concrete practices and perspectives »--

Le rapport d’activité 2020 présente les travaux de la DEPP en quatre thématiques, les élèves, les personnels, les établissements et les territoires.

Disruptive classroom behavior produces a host of problems for students and teachers. The Good Behavior Game (GBG) is an effective procedure to reduce disruptive behavior. In this study, experimenters conducted the GBG in two preschool classes and demonstrated its effectiveness using a reversal design. Subsequently, experimenters systematically removed components of the GBG in a multiple baseline across classes design. Several features of the GBG were successfully removed without a return of disruptive behavior. Vocal feedback could not be removed in either class without disruptive behavior increasing. These data demonstrate one potential way to reduce teacher effort while maintaining the effects of the GBG.

Despite earning the highest grade point average (GPA) in her graduating class at the recently integrated Cleveland High School (CHS) in Cleveland, Mississippi, Ms. Jasmine Shepard, an African-American female, was named “co-valedictorian” with Ms. Heather Bouse, a White female, who had a lower GPA. Utilizing Derrick Bell’s rules of racial standing theory and Cheryl Harris’ analytical construct whiteness as property, this article examines Ms. Shepard’s lawsuit against the Cleveland School District. In addition to explaining how White flight was deployed as a policy distraction to justify the inequitable treatment of Ms. Jasmine Shepard, this article posits that the specter of Ms. Shepard becoming Cleveland High School’s first Black valedictorian triggered area Whites’ fear of losing the property value of their whiteness.

Le dispositif Parcoursup mis en place en 2018 est aujourd’hui bien installé dans le paysage national de l’enseignement supérieur. Intégrant chaque année à la plateforme numérique de plus en plus de formations ouvertes aux candidats à une entrée en première année d’enseignement supérieur, Parcoursup regroupe désormais l’ensemble de ces offres de formation accréditées par l’État, soit plus de 17 000 formations. D’un même élan, le dispositif a su répondre à une demande grandissante depuis 2018 : le nombre de candidats utilisant la plateforme pour se préinscrire en première année a
fortement augmenté entre 2018 et 2020 (17%) : il atteint maintenant plus d’un million de candidats, toutes procédures confondues. Le profil de ces candidats s’est diversifié au fil des ans : si les néobacheliers constituent naturellement le public majoritaire (70% en 2020), les candidats non lycéens (qui représentaient un quart des candidats en 2018) sont de plus en plus nombreux à utiliser la plateforme au fil des ans, qu’il s’agisse d’étudiants en demande de réorientation, d’étudiants scolarisés à l’étranger, ou de personnes non scolarisées en reprise d’études, pour qui un nouvel outil – Parcoursup – a d’ailleurs spécifiquement été mis en place en 2020. Cette montée en puissance fait de Parcoursup un écosystème complexe qui, loin de pouvoir se résumer à un algorithme ou à une plateforme, fait intervenir de nombreux acteurs interagissant à différents niveaux et à différents moments : candidats, responsables de formation, enseignants membres des commissions d’examen des vœux, autorités et services académiques, ministère, etc.). Cet état de fait impose la plus grande vigilance quant au respect des critères qui fondent la légitimité du système et la possibilité de son contrôle démocratique. Une telle vigilance est d’autant plus nécessaire que la campagne annuelle Parcoursup constitue désormais un véritable « rite de passage » pour toute une génération de néo-bacheliers et, à ce titre, polarise le débat public sur l’enseignement supérieur et alimente les controverses politiques et juridiques.


Schools and districts across the country have been thrust into the political limelight as they grapple with sometimes competing policy messages about the education of transgender and gender expansive students. Drawing on 2 years of survey data from families of transgender and gender expansive youth in one mountain state, this article uses critical trans politics to examine the ways the current policy climate aligns with the supports schools provide. Results suggest that parents desire policies and practices that transform cis-heteronormative school structures, and they recognize that policy is often limited in its ability to affect the material experiences of youth in schools. We therefore argue that a focus on bathroom bills and policies regarding trans accessibility have distracted from a conversation that needs to be elevated to address broader structural issues and should ultimately be driven by families and trans youth.


The 2021 Politics of Education Yearbook brings together scholars from diverse theoretical orientations—including policy studies, critical trans politics, and Critical Race Theory—to explore the politics of distraction within education policymaking. This introductory article previews the work included in the Yearbook and presents a grounding framework for policy distraction, which we define as a persistent focus on a narrowly defined set of policy solutions that diverts attention from root causes, structural forces, and historical/contextual circumstances (Bell, 2003; Giroux, 2013, 2017; Spade, 2011, 2013, 2015). We articulate five elements of policy distraction. They (a) rely on narrow policy frames to address educational problems of practice; (b) name phenomena in ways that affect our understanding; and (c) largely ignore inequalities and structural conditions. In doing so, they may (d) reinforce the status quo; and (e) reify ideas of what counts as normal or, alternatively, as deviant (Spade, 2011).

Tout système scolaire se façonne à partir de références étrangères. L'espace transatlantique incarne un laboratoire privilégié de la fabrication de savoirs scolaires mêlés. Cet ouvrage plaide pour un désenclavement de l'histoire de l'éducation.


Teachers’ willingness to teach in inclusive classrooms consists of their intention and readiness to include students with a disability into their classes. This article reports on a qualitative pilot study examining how pre-service teachers understand the essence of including students with disability and how willing they are to engage in inclusive teaching. Partially structured interviews were held with 18 pre-service teachers in various training years and types of training programme. The findings show the distinction between willingness to help students with disability and willingness to apply inclusive teaching. It turns out that the willingness to engage in inclusive teaching, as declared by the pre-service-teachers, suits the normalisation principle rather than current inclusion principle based on the more up-to-date approach of inclusive classes. This distinction may explain the causes of difficulty in applying the inclusion policy in education systems.


The paper uses data from the combined TIMSS (Trends in International Mathematics and Science Study) and PIRLS (Progress in International Reading Literacy Study) assessment in 2011 to explore the subject-specific strengths and weaknesses among fourth grade
students worldwide. Previous research came to the conclusion that students only differed in overall achievement levels and did not exhibit subject-specific strengths and weaknesses. This research did, however, not control for differences in overall performance levels when searching for profile differences. Therefore, the present study uses factor mixture analysis to study qualitatively different performance profiles in mathematics, reading, and science while controlling for differences in performance levels. Our findings suggest that the majority of students do not show pronounced strengths and weaknesses and differ mainly in performance levels across mathematics, reading, and science. At the same time, a smaller share of students does indeed show pronounced subject-specific strengths and weaknesses. This result does not represent an artefact, but we find clear and theory-conforming associations between the identified profiles and covariates. We find evidence for cross-country differences in the frequency of subject-specific strengths and weaknesses and gender differences, as well as differences between students who do not or only sometimes speak the language of test at home.


Research related to the “teacher characteristics” dimension of teacher quality has proven inconclusive and weakly related to student success, and addressing the teaching contexts may be crucial for furthering this line of inquiry. International large-scale assessments are well positioned to undertake such questions due to their systematic sampling of students, schools, and education systems. However, researchers are frequently prohibited from answering such questions due to measurement invariance related issues. This study uses the traditional multiple group confirmatory factor analysis (MGCFA) and an alignment optimization method to examine measurement invariance in several constructs from the teacher questionnaires in the Trends in International Mathematics and Science Study (TIMSS) 2015 across 46 education systems. Constructs included mathematics teacher’s Job satisfaction, School emphasis on academic success, School condition and resources, Safe and orderly school, and teacher’s Self-efficacy. The MGCFA results show that just three constructs achieve invariance at the metric level. However, an alignment optimization method is applied, and results show that all five constructs fall within the threshold of acceptable measurement non-invariance. This study therefore presents an argument that they can be validly compared across education systems, and a subsequent comparison of latent factor means compares differences across the groups. Future research may utilize the estimated factor means from the aligned models in order to further investigate the role of teacher characteristics and contexts in student outcomes.


Representing approximately 20% of the workforce, educators of color (EOC) leave the field at a rate 25% higher than their White counterparts. Despite workforce diversification efforts, few studies investigate the psychosocial consequences of navigating racialized school climate as reasons EOC may leave the workforce. This study relies on survey data collected from educators of color (paraprofessionals through superintendents) across the
state of Iowa. Applying a critical quantitative research design, we examined factors that link racialized school climate to their job satisfaction and psychological well-being. Findings indicate that a racialized school climate has a significant, direct effect on EOC’s race-based stress and professional racial self-efficacy. We argue that solely focusing on the retention of educations of color acts as a distraction from dismantling the institutionalized racism that continues to permeate our school systems.


The aim of the present study was to compare the relationships of siblings of children with sensory impairments and typically developing children. The statistical population of the study included all siblings of children with blindness, deafness, and typically developing children in Shiraz, Iran. The sample consisted of 91 siblings (23 siblings of children with blindness, 15 siblings of children with deafness, and 53 siblings of typically developing children). The Sibling Relationship Questionnaire (SRQ: Furman, W., and D. Buhrmester. 1985. “Children’s Perceptions of the Qualities of Sibling Relationships.” Child Development 56 (2): 448–461. doi:10.2307/1129733) was used for measuring the relationships. Multivariate analysis of variance (MANOVA) test were used for the data analysis. The results showed that two subscales of relationships (status/power and conflict) of siblings of children with sensory disabilities were significantly higher than those of siblings of typically developing children. Furthermore, no significant difference was found between the study groups in terms of warmth and closeness and rivalry. Hence, it seems to be essential to parents specially those who have children with blindness and deafness have a plan to reduce the possible conflict and the dominance developing in the relationships of their children and their siblings.


Charter schools because of their entanglements with privatization remain one of the most publicly contested and controversial educational reform initiatives. Charter schools, in theory, are to balance autonomy and accountability in order to provide students with innovative learning environments and increased achievement on traditional academic measures. The governance of charter schools and the vision espoused in the charter school application are central in determining the organization and operation of charter schools. As such, connected to charter schools are the actors that envision them and the processes and policies that enable them. Utilizing the case of post-Katrina New Orleans, I examine the charter authorization process, an understudied aspect of charter school policy. Understood as an objective, colorblind process in mainstream policy articulations, the authorization process regulates entry into educational markets. This paper applies a Critical Race Theory analysis to the authorization process. I argue the charter school authorization process is a foundational gatekeeping mechanism that structures charter markets. In so doing, the charter school authorization process is embedded within and constitutive of on-going processes of racial formation and racialized power solidification. Moreover, I argue mainstream policy articulations situate the charter school authorization process as an accountability mechanism that is neutral, benign, and objective; such
articulations distort and distract from the racial antagonisms upon which neoliberal reform projects are built.

Jarraud, F. (2021, mars 1). Christian Maroy : L’école à l’épreuve du pilotage par les résultats. Consulté 1 mars 2021, à l’adresse Le café pédagogique website: http://www.cafepedagogique.net/lexpresso/Pages/2021/03/01032021Article637501796627464444.aspx?actId=ebwp0YMB8s1_OGEGssDRkNUcvuQDVN7aFZ1E4yS5hsZMczVe00RbhmAPNixrAmaf&actCampaignType=CAMPAIGN_MAIL&actSource=507705

Alors que le ministère pousse, par exemple avec le Grenelle de l’Education et la nouvelle évaluation des établissements, l’Education nationale vers une forme de pilotage par les résultats, Christian Maroy, professeur à l’université de Montréal, décrypte 20 années d’application de la Gestion par les résultats (GAR) au Québec. Appuyé sur de nombreux entretiens avec des responsables du système éducatif et des enseignants, sur l’exploitation des textes et statistiques disponibles, Christian Maroy livre une oeuvre clé pour comprendre comment la GAR se met en place et sur ses effets sur l’École et le métier enseignant. Les enseignants français et les personnels de direction y retrouveront bien des éléments de ce qui est déjà appliqué ou en route en France. Mise en place d’indicateurs de résultats, harmonisation de la notation, contrôles communs, contrats locaux d’établissements, communautés de pratique et visites de classe : tout concourt à rendre le travail enseignant plus visible et plus controlable. Tout amène à réduire l’enseignement en indicateurs chiffrés. Ainsi se met en place une nouvelle conception de l’École qui s’accompagne d’une profonde mutation de ses acteurs. Au final, le niveau des élèves n’a pas progressé. Mais l’École est passée entre les mains des managers. Christian Maroy dévoile quelques points de cet ouvrage important qui nous aide à comprendre ce qui se construit en France.


La mise en œuvre de « l’école inclusive » débouche sur un élargissement du domaine du handicap à l’école primaire. L’extension de la scolarisation en classe ordinaire des élèves catégorisés comme « en situation de handicap » ou à « besoins éducatifs particuliers » se traduit par une augmentation de la charge de travail des professeurs des écoles. Parallèlement, ceux-ci font face à une moindre reconnaissance de leurs compétences et à une réduction de leur autonomie. L’imposition par l’employeur d’une transformation de la professionnalité enseignante participe ainsi de la dégradation de leurs conditions de travail en redéfinissant la licence et le mandat du métier.


« Cet ouvrage porte sur les campus universitaires ou collégiaux conçus comme lieux structurés pour favoriser le développement de l’éducation supérieure et de la recherche. Il met l’accent sur la complexité des questions soulevées par l’organisation matérielle d’un campus et l’étonnante diversité des solutions retenues pour créer ces lieux. Plutôt que d’examiner successivement plusieurs campus, cet ouvrage examine une à une leurs nombreuses composantes, en vue de cerner la façon dont chacune de celles-ci contribue à l’atteinte des objectifs d’une institution académique. À cette fin, environ 300 parmi ces institutions ont été visitées par l’auteur et l’information recueillie in situ a été
complétée par un examen de la littérature spécialisée concernant les campus. Cette façon de procéder a permis d’illustrer par de nombreux rapprochements les multiples façons de concevoir chacun des éléments constitutifs d’un campus. Sont ainsi examinés et comparés, entre autres, les plans de ces campus ainsi que leurs immeubles, depuis ceux consacrés strictement aux activités académiques (auditoriums, laboratoires) jusqu’aux structures utilitaires (parkings, centrales énergétiques) en passant par les équipements culturels ou sportifs. Cet examen d’autant d’éléments associés aux campus devait être basé sur une réflexion portant sur la nature des campus, sur leurs rapports à la ville, sur les relations entre universités et collèges et sur les questions éthiques associées à la conception et au développement de ces campus. À ces questions sont consacrés le premier et le dernier chapitre qui encadrent les trois chapitres où sont examinées et discutées les composantes évoquées ci-dessus.


While the policy distractions outlined in this collection manifest in myriad ways—and our authors examine them through a wide range of lenses and analytic tools—we were struck as an editorial team by the commonalities they share. What is clear throughout these articles is that scholars, most centrally, raise the ubiquitous power of policy distraction as it relates to ignoring systems and structures that serve to maintain normativity in many forms. Throughout, scholars instead point to policy distractions that locate both problems—and solutions—in individual actors (e.g., students, educators), symbolic gestures, and taken-for-granted procedures and practices that are rooted in white supremacy, cis-heteronormativity, anti-blackness, and patriarchy, to name a few. In this final article we, as an editorial team, offer insights about how we see the voices in the Issue in conversation, and, in the spirit of curious collaboration and engaged scholarship, we invite you to think along with us.


Organizational building is essential if school leaders are to promote school improvement, but it can be difficult to combine with school leaders’ requirements to satisfy teachers’ personal and relational needs. The aim of this study is to explore critical aspects when combining organizational building with requirements to satisfy teachers’ personal and relational needs in efforts to strengthen improvement capacity. The paper draws on a 3-year collaborative research project between a research team at a Swedish university and a municipality. It is based on data acquired in 137 interviews with 535 respondents in 28 public school and preschool units. The results highlight the importance of combining organizational building with efforts to improve teachers’ understanding of, motivation to promote, and adaptation to, the goals of the school organization. The significance of the study lies in clearly distinguishing the need to link organizational building and requirements to meet teachers’ personal and relational needs. Continually telling the story of the school and thus enabling teachers to personally connect to the improvement history is suggested as an innovative school leader strategy.

Rapport d’information fait au nom de la commission des finances


International comparative assessments of student achievement are constructed to assess country-level differences and change over time. A coherent understanding of the international trends in educational outcomes is strongly needed as suggested by numerous previous studies. Investigating these trends requires long-term analysis, as substantial changes on the system level are rarely observed regarding student outcomes in short periods (i.e., between adjacent international assessment cycles). The present study aims to link recent and older studies conducted by the International Association for the Evaluation of Educational Achievement (IEA) onto a common scale to study long-term trends within and across countries. It explores the comparability of the achievement tests of the Trends in International Mathematics and Science Study and previous IEA studies on mathematics in grade eight. Employing item response theory, we perform a concurrent calibration of item parameters to link the eight studies onto a common scale spanning the period from 1964 to 2015 using data from England, Israel, Japan, and the USA.


Les classes préparatoires aux grandes écoles (CPGE) accueillent 84 900 étudiants à la rentrée 2020, un effectif stable par rapport à 2019 (-0,2 %), en 1ère comme en 2nde année, en dépit de la forte hausse du nombre de bacheliers à la session 2020. Ces effectifs restent quasiment stables quelle que soit la filière considérée : scientifique, économique ou littéraire. pendant la présence des femmes diminue (-1,1 %) dans ces formations, tout particulièrement en 1ère année de la filière scientifique.


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Inspirée de la nouvelle gestion publique, la politique de gestion axée sur les résultats (GAR) a changé profondément la gouvernance du système scolaire québécois en renforçant le pouvoir du ministère de l’Éducation sur les commissions scolaires (CS) et


In recent years, conservative advocates have obscured their transphobia by framing their concerns as religiously-based parental rights claims. They have advocated for limitations on youth rights to gender identity self-determination. This article examines policy debates over transgender-inclusive practices in schools, including conservative demands for parental notification and limitations on healthcare access for transgender youth. I suggest that schools ought to be more concerned with children’s or students’ rights to help enable diverse students to flourish and become who they are in supportive schools. This shift would move schools away from the distractions of conservative parental rights claims and re-focus them instead on the needs of students.


The goal of this research project was to assess the effects of an intervention programme based on theatrical improvisation in three different groups of Asperger Syndrome adolescents. It was organised around 2 single individual case studies and one small group, which included 11 participants. Study 1: a 14-year-old female adolescent of high sociocultural level within a mainstreamed high-school group. Study 2: a 12-year-old male adolescent of low sociocultural level within a mainstreamed high-school group. Study 3: 9 adolescents, 14–19 years old, enrolled in an Asperger and Autism Association. Three different intervention programmes were implemented. All of them based on theatrical improvisation and focused on spontaneity and imagination. Open-ended questions, diaries and semi-structured interviews were used to assess the programmes’ impact. Analyses of the data produced four major themes of balanced importance and several sub-themes: expression (express oneself, overcoming external judgement), creativity (spontaneity, imagination), benefits (taking risks, de-stressing, motivation, self-esteem), and socialisation (being accepted, knowing the other participants, being part of the group). These findings indicated that theatrical improvisation can produce positive effects in Asperger Syndrome Adolescents.


The authors present a qualitative study which investigates the intersections between English Language Learner (ELL) status, disability, and special education in a mid-sized urban school district in Upstate New York. They explore how teachers conceptualize and implement New York State Education Department policies which affect the inclusive education of ELL students. The authors discuss how the discourse used in these policies, along with teachers' limited access to guidance and support, could lead to the exacerbation of educational inequities and exclusion of ELLs, despite the promise to support inclusion and success for all students. The Disability Critical Race Theory (DisCrit) framework is used as an intersectional tool to help re-frame existing inclusive policies and practices.


To the authors’ knowledge, the research reported in inclusive physical education (IPE) literature is limited to exploring teachers’ and educational assistants’ (EAs) experiences working together in a joint classroom environment. Teachers’ and EAs’ experiences can be misunderstood when their stories are not heard in context, together, or compared to other stories and situations. This hermeneutical and interpretive research involved learning about IPE experiences from three diverse cases, which involved three in-service teachers and three EAs. Data gathered included class observations, interviews, focus groups, and reflective journals. The information learned through these processes was analysed to develop themes. The findings highlight three issues: how teachers’ and EAs’ training and background education, along with their practical experiences and support from EAs, contribute to the implementation of IPE; how teachers’ and EAs’ past physical education experiences and current engagement with physical activity impact their teaching/assisting in IPE; and how the planning and choice of activities influences student participation in IPE. Overall, experiences of IPE are dependent on past experiences, education/training, and IPE situations. To improve IPE implementation, teachers and EAs need practical and contextual professional development (PD) that considers activities that are appropriate for their prior knowledge and experience and for their students.


The article addresses the way in which characteristics of the education crisis in the postmodern era are manifested in parental deliberations when choosing to homeschool their children in Israel. Based on a review of the characteristics of the education crisis and examination of possible solutions, homeschooling is presented as an optional solution to this crisis. The article is based on a qualitative study that examined the reasons of Israeli parents for selecting homeschooling, which demonstrates the link between the deliberation process of those choosing homeschooling and the characteristics of the education crisis. The article ends with an explanation about why it is important to regard homeschooling as a unique solution. Highlights Education crisis characteristics. Possible solutions for the education crisis. Home education as one of the possible solutions for the

Children’s early engagement in design of outdoor spaces can form the basis of later attitudes and responsible action for sustainability. The present study is part of a participatory action research project in an urban multi-ethnic preschool in Sweden, involving children, parents, preschool staff and management with a focus on improving the preschool playground. The methodology involved children taking pictures of the outdoor space, informal participant observation by one researcher and conversations with children and teachers. Analyses completed of selected fieldwork excerpts focus on learning opportunities for children and adults, children’s participation, cooperation and leadership for sustainability. Deeper awareness and confidence, and practical pedagogies for staff in preschools are required for effective sustainability education. A joint frame of reference on pedagogical practices and processes for reflection is needed within and across early childhood institutions. More continuous training of staff and preschool leadership would be of benefit. However, such commitment is ultimately a matter of policy to invest in giving preschools the means to develop and realise ambitions for environmental and sustainability education.

OCDE. (2021a). *How schools can help protect young people in a recession* (OECD Education Policy Perspectives No 30; p. 20). [https://doi.org/10.1787/18f7d6f0-en](https://doi.org/10.1787/18f7d6f0-en)

OCDE. (2021b). *What can schools and teachers do to boost students academically?* [https://doi.org/10.1787/6a8a364d-en](https://doi.org/10.1787/6a8a364d-en)

With most students around the world having experienced remote learning over the past year because of the COVID-19 pandemic, the importance of teachers and schools has become all the more evident. Temporary school closures underline how richly students benefit from being in school with their teachers and classmates. Positive, High-achieving Students? What Schools and Teachers Can Do pinpoints some of the factors that make an effective teacher and school.


La formation s’étalera sur trois années au lieu de deux, avec un objectif : inciter davantage d’étudiants à intégrer le marché du travail à « bac + 3 ». Des poursuites vers les masters resteront toutefois possibles, mais encore floues.


Alors que le paradigme d’individualisation devrait dissoudre la catégorie de besoin éducatif particulier, celle-ci continue à désigner des élèves spécifiques, envisagés à partir de leurs difficultés ou de leur inadaptation. Plusieurs recherches menées à Genève,
dans l’enseignement primaire, nous permettent de montrer que si le principe de personnalisation est partagé, son opérationnalisation tend paradoxalement à démultiplier les formes de catégorisation. De même, le brouillage des contours du BEP ne s’accompagne pas d’un affaiblissement de la norme scolaire. La catégorie reste rigide, démeurant devant tout juridique et pensée à partir de prestations et de diagnostics prédéfinis.


This paper presents findings from a research study, which sought to illuminate the perceived notions of inclusion of four to five year old children in pedagogical activities, in the early years classes of two schools in the North of England. It employed a qualitative methodology to gather extensive data with forty children over a six-week period in each school. This included collecting fieldnotes; undertaking observations of children in pedagogical activities; and conducting group and individual interviews. Central to the research aim was the use of participative tools to engage with children’s voices; these included photographs and drawings. Children’s perceived notions of inclusion resonated with two dimensions: belonging and relationships (with practitioner and/or child) and democratic pedagogies. The findings advance the conceptualisation of the notion of inclusion and bring to the fore the voices of a young group of children that has not been studied before. Engaging with children in meaningful ways can enable practitioners to better understand young children’s perceived, multi-faceted notions of inclusion as they experience it within pedagogical activities.


Research to date on the effects of between-school tracking on inequalities in achievement and on performance has been inconclusive. A possible explanation is that different studies used different data, focused on different domains, and employed different measures of inequality. To address this issue, we used all accumulated data collected in the three largest international assessments—PISA (Programme for International Student Assessment), PIRLS (Progress in International Reading Literacy Study), and TIMSS (Trends in International Mathematics and Science Study)—in the past 20 years in 75 countries and regions. Following the seminal paper by Hanushek and Wößmann (2006), we combined data from a total of 21 cycles of primary and secondary school assessments to estimate difference-in-differences models for different outcome measures. We synthesized the effects using a meta-analytical approach and found strong evidence that tracking increased social achievement gaps, that it had smaller but still significant effects on dispersion inequalities, and that it had rather weak effects on educational inadequacies. In contrast, we did not find evidence that tracking increased performance levels. Besides these substantive findings, our study illustrated that the effect estimates varied considerably across the datasets used because the low number of countries as the units of analysis was a natural limitation. This finding casts doubt on the reproducibility of findings based on single international datasets and suggests that researchers should use different data sources to replicate analyses.


More historically White institutions of higher education are compelled to respond, in some way, to increased activism and awareness of continued legacies of racism and racial crises on campuses. The author suggests that how schools wrestle with their legacies of racism and/or respond to student demands to right racial wrongs on campus might be considered university acts of racial redress. Through a Critical Race Theory inspired chronicle, the author argues that seemingly positive university acts of racial redress such as policies, place un/naming, or public statements are, in fact, Racial Symbols that do little to change the material realities of racially marginalized people on campus.


Teachers and students are the main stakeholders of educational policies in the states; hence, the higher order policies, rules, and regulations must be in alignment with their rights, values, ideologies, needs, competencies, and peculiarities of each region and district. In such a case, the classroom practice will be improved and more promising outputs will be obtained. Iranian previous language programs failed to enhance students’ communicative competence and linguistic needs to survive at the international level; hence, an educational reform occurred to change the language curricula and English textbooks. A total of 86 Iranian English language teaching (ELT) teachers were selected through snowball sampling to find their role in the recent REFORM in Iranian ELT curricula and policies. Analysis of oral interviews and online focus group data was conducted through Strauss and Corbin’s constant comparative method and illuminated the status quo of reform and policies, the marginalization of teachers as the sole implementers in language classrooms, and suggestions for teachers’ involvement in educational policies. These findings stress that a change within higher education policy makers’ attitude toward engagement of teachers within educational policy and decision-makings improves the classroom outputs.


Avec Parcoursup, certaines licences « non sélectives » le sont devenues, faute de places, quand d’autres restent accessibles. Une situation qui change les stratégies des lycéens.


Black girls’ experiences with sexual harassment in schools remain critically understudied. To mediate this void, this study explored the role of educators and school policy as disrupting or perpetuating racialized sexual harassment toward them. Using a disability critical race theory (DiSCrit) framework, we argue educator response and education
policy create a nexus of subjugation that makes Black girls increasingly vulnerable to experience racialized sexual harassment at the hands of adults and peers, while largely failing to provide protection from or recourse for such harassment.


Cet article rend compte de la construction de la catégorie de besoin éducatif particulier (BEP) dans une perspective diachronique et transnationale afin de comprendre ses enjeux contemporains. Née en Angleterre d’une volonté de réformer l’enseignement spécialisé, la catégorie des BEP a ensuite été diffusée par des institutions internationales promouvant une norme d’efficacité gestionnaire en matière d’éducation. Sa retraduction dans le contexte français s’est faite à travers le champ du handicap. Les BEP donnent à voir la place croissante des normes médicales, psychologiques et libérales dans les systèmes éducatifs contemporains.


This study investigated the effects of inclusive education for children with developmental disabilities. The study panel comprised 19 class teachers from 16 regular elementary schools across 3 districts in Shanghai, China. By integrating focus groups, individual interviews, and archival data, the results showed that children with developmental disabilities demonstrated certain school adjustment. Regarding social development, they maintained a relatively narrow social network, possibly due to their being overprotected. In terms of academic development, they showed progress in learning process. However, the learning outcomes of some students stagnated or deteriorated. As such, this study explored teacher’s experiences regarding the practical realities and value of inclusive education for students with developmental disabilities. In addition, this study makes some suggestions regarding the creation of a beneficial environment in classes for students with developmental disabilities.


Academic resilience refers to students' capacity to perform highly despite a disadvantaged background. Although most studies using international large-scale assessment (ILSA) data defined academic resilience with two criteria, student background and achievement, their conceptualizations and operationalizations varied substantially. In a systematic review, we identified 20 ILSA studies applying different criteria, different approaches to setting thresholds (the same fixed ones across countries or relative country-specific ones), and different threshold levels. Our study on the validity of these differences and how they affected the composition of academically resilient students revealed that the classification depended heavily on the threshold applied. When a fixed background threshold was applied, the classification was likely to be affected by the developmental state of a country. This could result in an overestimation of the proportions of academically resilient students in some countries while an underestimation in others. Furthermore, compared to the application of a social or
economic capital indication, applying a cultural capital indicator may lead to lower shares of disadvantaged students classified as academically resilient. The composition of academically resilient students varied significantly by gender and language depending on which indicator of human capital or which thresholds were applied reflecting underlying societal characteristics. Conclusions drawn from such different results depending on the specific conceptualizations and operationalizations would vary greatly. Finally, our study utilizing PISA 2015 data from three countries representing diverse cultures and performance levels revealed that a stronger sense of belonging to a school significantly increased the chances to be classified as academically resilient in Peru, but not in Norway or Hong Kong. In contrast, absence from school was significantly associated with academic resilience in Norway and Hong Kong, but not in Peru.


From a sociocognitive perspective, item parameters in a test represent regularities in examinees’ item responses. These regularities are originated from shared experiences among individuals in interacting with their environment. Theories explaining the relationship between culture and cognition also acknowledge these shared experiences as the source of human cognition. In this context, this study argues that if human cognition is a cultural phenomenon and not everywhere the same, then item parameters in cross-cultural surveys may inevitably fluctuate across culturally different populations. The investigation of item parameter equivalence in TIMSS 2015 supports this argument. The multidimensional scaling representation of similarity in the item parameters across countries in TIMSS 2015 shows that the item parameters are more similar within Arab, Western, East Asian and post-Soviet country clusters and are remarkably less similar between these clusters. Similar fluctuation structure across countries in discrimination and difficulty parameters in mathematics and science subjects point to the vital role of cultural differences in item parameter nonequivalence in cross-cultural surveys. The study concludes that it is very difficult for cross-cultural surveys to achieve the highest level of measurement invariance that guarantees meaningful scale score comparisons across countries.


Avec l’utilisation des technologies de l’information et de la communication, la mission principale d’un enseignant est aussi bien d’enseigner, que de faciliter la transmission de connaissance et le développement. Dans le cadre de cette thèse, notre objectif est de proposer une stratégie d’accompagnement-type pouvant soutenir le développement de l’autodirection des étudiants en formation hybride. La revue de la littérature scientifique nous a permis d’élaborer une typologie des rôles d’accompagnement et un canevas des stratégies d’accompagnement (CSA). Nous conduisons une série d’études de cas pour comparer plusieurs stratégies mises en œuvre dans des formations réelles. Les résultats montrent que l’accroissement du niveau d’autodirection des étudiants est davantage soutenu par la mise en place d’une méthode d’apprentissage actif que par le type de dispositif hybride conçu. Nous observons également que la réussite est liée à
cet accroissement. Une stratégie-type est testée dans une formation d’anglais langue seconde et nous constatons que le résultat est généralisable à d’autres contextes d’apprentissage des langues.


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Montessori, Waldorf, and Reggio Emilia education remain three of the most popular models for alternative early childhood education. Each of these approaches has developed globally, with a rich history of supporting children’s educational freedom. This narrative analysis provides a means for early childhood educators and scholars to understand the aims, philosophical and theoretical frameworks, historical development, benefits, and challenges in these models and their methods of practice. As early childhood education evolves with technology and as re-conceptualizations about early education occur, an understanding of these alternatives to traditional education models is important. While adaptive options of these models may emerge in education systems across national contexts, this review allows educators to consider their applications and cultural appropriateness in specific local and community contexts.


Trois enseignants sur quatre déclarent retirer fréquemment de la satisfaction de l’enseignement des mathématiques. Ils proposent à leurs élèves, et de façon presque unanime, des activités visant aussi bien le développement d’automatismes en calcul que la compréhension des procédures. Plus de 90 % des enseignants portent fréquemment attention au travail de leurs élèves, cherchant à aider immédiatement ceux qui se trouvent en difficulté. Ils déclarent unanimement travailler sur les erreurs de leurs élèves lorsque celles-ci sont récurrentes, même si les moyens préférentiellement mis en œuvre pour y parvenir varient selon les professeurs. Toutefois, un tiers des professeurs
estime qu’ils ont des élèves qu’ils ne pourront pas vraiment faire progresser en mathématiques.


The aim of this article is to examine some of the difficulties, paradoxes, and challenges involved with developing community-based collaborative artistic and pedagogical practices, both in museums and galleries and within the context of the so-called educational turn. The author, who is a scholar and educator at the Es Baluard museum (Spain), focuses on one concrete case in which she has been involved, together with renowned artists, in collaborating with a group of sex workers. This article presents the findings of this case study, which was conducted from a phenomenological approach, in order to reflect on the complexities and potentialities that arise when running programs of such kind. Going beyond the rhetoric of success in which practices are usually represented, it gives the reader important keys towards developing horizontal relationships between cultural institutions and the communities they are situated in. The analysis is undertaken using the framework of critical mediation and the concept of “contradicting oneself”, as stated by theorist and educationalist Carmen Mörsch, wherein the mediator’s positionality is a key aspect.


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Cette thèse décrit les pratiques d’une enseignante au préscolaire envers des élèves présentant des comportements extériorisés (PCE), ainsi que les réactions de ces élèves, et analyse ces pratiques à la lumière du concept de zone proximale de développement (ZPD; Vygotsky, 1933/2012a). Ce faisant, elle permet de mieux comprendre les interrelations entre les dimensions affective et cognitive qui se développent dans la relation entre cette enseignante et ses élèves (REE) au sein de cette zone. La relation qui s’établit entre les enseignantes et leurs élèves PCE est habituellement pénible et conflictuelle, et ce, dès l’entrée au préscolaire. Il est en effet difficile pour certaines
d'entre elles d'interagir adéquatement avec ces d’élèves, précisément en raison de leurs comportements agressifs et violents ainsi que des émotions que ces comportements provoquent en elles (Levasseur et Hamel, 2017; Sutton, 2005). À l’heure actuelle, les études qui valorisent la création d’un lien positif à la maternelle avec les élèves PCE préconisent surtout des pratiques enseignantes centrées sur la prévention ou la diminution des comportements extériorisés (Morrison Bennett et Bratton, 2011; Vancraeyveldt, Verschueren, Van Craeyevel, Wouters, et Colpin, 2015). Elles sont axées sur la dimension affective de la relation et visent le plus souvent à promouvoir les comportements attendus (Fernandez et al., 2015; Vancraeyveldt et al., 2015), alors que l’enseignante a pour rôle de contribuer au développement global de l’enfant, soit à son développement cognitif et affectif (Conseil supérieur de l’éducation; CSÉ, 2012). Pour leur part, Pianta, La Paro et Hamre (2008) ont défini la relation entre l’enseignante au préscolaire et ses élèves tout venant (ceux qui ne présentent pas de difficulté d’ordre comportemental) en tenant compte de ces deux dimensions. Cette définition est d’ailleurs appuyée empiriquement par quelques auteurs (Goldstein, 1999; Venet, Schmidt, Paradis et Durex, 2009), qui ont constaté que les dimensions affective et cognitive de la REE étaient étroitement liées, notamment dans le cadre d’activités d’enseignement apprentissage se situant dans la ZPD des élèves. Nous considérons qu’il est d’autant plus important de tenir compte de cette interdépendance dans le cas des élèves PCE qui sont aux prises avec des émotions qu’ils ont de la difficulté à maîtriser (Berkowitz, 1993). C’est pourquoi nous nous demandons si le fait d’intervenir autant sur le plan cognitif que sur le plan affectif auprès des élèves PCE ne contribuerait pas à prévenir et à diminuer les comportements extériorisés ainsi qu’à faciliter l’établissement d’une REE positive tout en favorisant le développement global de ces élèves. C’est dans le cadre d’activités d’enseignement-apprentissage au préscolaire que nous nous intéresserons aux interrelations entre les dimensions affective et cognitive de la relation. Sur le plan théorique, nous nous sommes appuyée sur le concept de ZPD pour mieux comprendre la façon dont ces deux dimensions interagissent constamment tant chez les élèves que chez l’enseignante et dans la relation elle-même. Ainsi, il est spécifiquement dans la ZPD de l’élève que l’enseignante au préscolaire mettra en place les conditions nécessaires au développement des fonctions cognitives (soit de ses fonctions psychiques supérieures en termes vgyotksiens) de l’élève. En tenant compte de ses intérêts et de ses besoins ainsi que de ce qu’il sait faire de manière autonome (soit de son niveau actuel), elle pourra amener celui-ci vers son niveau de développement potentiel. Pour ce faire, elle pourra notamment lui proposer des instruments psychologiques qui lui permettront de réaliser les activités d’enseignement apprentissage choisies (Vygotsky, 1933/2012a). C’est grâce à cet accompagnement respectueux des intérêts et du développement actuel de l’enfant que devrait s’établir une REE positive dans le cadre de laquelle l’enseignante pourra amener ce dernier à assimiler peu à peu les exigences de l’école (soit le programme scolaire) (Vygotsky, 1934/2012b). Sur le plan méthodologique, nous avons privilégié l’étude de cas afin d’identifier de manière fine et concrète les pratiques d’une enseignante au préscolaire qui favorisent la création d’une relation positive auprès de ses élèves PCE. Pour ce faire, nous avons également observé les réactions des élèves PCE et les interactions entre l’enseignante et ces derniers. La collecte de données s’est effectuée dans une classe au préscolaire et a consisté à filmer une enseignante et ses élèves, dont trois PCE évalués à deux reprises et identifiés selon le PSA A ou le Profil Socioaffectif Abrégé (agressivité/irritabilité et compétence sociale). Ces enregistrements vidéo, de nature non participante, ont porté sur deux activités d’enseignement apprentissage, l’une réalisée en début d’année et l’autre à la fin de l’année. Nous avons
rédigé les verbatims de chacune de ces activités et, après les avoir analysés, nous les avons découpés en quatre moments clé: 1) l’accueil des élèves; 2) le message du jour; 3) la présentation du concept à l’étude suivie de l’explication du travail à réaliser et 4) le réinvestissement. Cette organisation des données recueillies nous a permis de coder chacune des pratiques développementales et d’accompagnement de l’enseignante selon les dimensions affective et cognitive de la REE qui se déploient au sein de la ZPD et, par conséquent, de construire une grille d’analyse claire et structurée. Nos résultats montrent que l’enseignante recourt à des pratiques qui mobilisent en alternance et conjointement les dimensions affective et cognitive de la relation. L’enseignante observée engage les élèves dans les activités d’enseignement-apprentissage en s’appuyant sur un affect positif et intervient très fréquemment dans la ZPD de ses élèves PCE, dans la mesure où elle vérifie leur développement actuel (en observant ce qu’ils savent faire seuls) avant de viser leur développement potentiel. Ce faisant, elle tient compte à la fois de leurs capacités cognitives et affectives, comme elle le fait d’ailleurs avec tous les autres élèves de la classe. Nos résultats permettent d’illustrer concrètement la façon dont l’enseignante a procédé pour établir une relation positive en particulier avec l’un de ses élèves PCE. L’originalité de cette thèse réside dans le fait qu’elle permet : 1) de conceptualiser les interrelations entre les dimensions affective et cognitive de la REE au regard du concept de ZPD; 2) de proposer une grille d’analyse de pratiques précises et concrètes qui contribuent à opérationnaliser le concept de ZPD; et enfin 3) de montrer qu’il est possible d’intervenir d’une manière différente auprès des élèves PCE en adoptant des pratiques de nature affective et cognitive qui s’inscrivent dans leur ZPD. Ainsi, sur le plan scientifique, les résultats de cette thèse mettent en lumière l’interdépendance constante qui s’établit entre les dimensions affective et cognitive du psychisme de l’adulte et de l’enfant et se manifestent dans leurs interactions et donc dans la REE. Par ailleurs, les résultats de cette thèse pourraient avoir une incidence positive sur la formation initiale et continue en suscitant des prises de conscience chez les enseignant(e)s en devenir ou déjà en poste quant à l’importance d’intervenir dans la ZPD des élèves PCE pour favoriser la création d’une REE positive.


Cet article s’efforce de montrer à la lumière de plusieurs enquêtes que les pratiques usuelles d’apprentissage de la lecture sont à l’origine des difficultés d’une partie des élèves qui sont ensuite définies comme «pathologiques» et attribuées à leurs spécificités cognitives. Elles sont le produit d’une histoire des normes pédagogiques qui aboutissent aujourd’hui à des pratiques «hybrides». Ces pratiques sont inspirées à la fois des connaissances récentes sur les processus cognitifs et des démarches qui elles, correspondent à un état plus ancien des savoirs. Il en résulte une faible exposition des élèves aux pratiques les plus efficaces pour maîtriser la lecture.


Ce numéro spécial a été lancé à la suite du 4 ème colloque anglophone International Teaching Forum organisé par l’Université Clermont Auvergne en Novembre 2019 1 et portant sur les pratiques pédagogiques innovantes, l’interculturalité et les compétences.
À la suite de cet événement, un appel à contributions a été diffusé afin de répondre à la problématique suivante : Comment des pratiques pédagogiques innovantes dans un contexte interculturel de l’enseignement supérieur permettent-elles de développer les compétences des étudiants et des enseignants ? Les articles proposés dans ce numéro spécial apportent des réponses contextualisées à cette question.


A l’heure où le terme « innovation pédagogique » est diffusé dans tous les médias, il semble important d’en comprendre à la fois les fondements et les enjeux. Au-delà de l’aspect marketing que suggère cette expression, nous vivons dans une société cognitive où l’économie de la connaissance et l’économie numérique sont devenues les plus grandes richesses d’un pays. Notre objectif est donc de déterminer en quoi le contexte économique et les évolutions technologiques des trente dernières années ont permis (ou non) l’émergence d’innovations pédagogiques en France, et dans quelle mesure ; ceci afin d’identifier les impacts observables dans la formation professionnelle. Notre démarche vise à répondre à un besoin d’explicitation du terme d’innovation en pédagogie pour tous les acteurs sous le prisme de l’atteinte de la masse critique. Ainsi ces travaux portent à la fois sur une fonction épistémologique (la conception et la pratique de la connaissance) et sur une analyse historique de la représentation de l’innovation pédagogique des acteurs de la formation professionnelle et continue. Le choix d’une double méthodologie de recueil de données nous permet de réaliser cette analyse historique en mettant en regard la documentation via la revue Éducation permanente et l’évolution des discours des différents acteurs de la formation professionnelle. Grâce à ce travail, nous apportons des éclairages sur les facteurs de l’innovation dans la formation ainsi que sur leurs impacts. En outre, nous proposons la
catégorisation d’unités lexicales pédagogiques illustrant l’histoire et l’évolution de la formation.


La note est l’un des sujets les plus discutés en éducation. Les réformes visant à la supprimer ou la remplacer par d’autres codes n’ont toutefois pas abouti à ce jour à des améliorations des pratiques évaluatives à large échelle. Réorientons donc le débat en postulant que l’existence de la note est moins problématique que son mode d’élaboration et d’exploitation. En s’appuyant sur les apports théoriques issus de la recherche et sur des situations d’évaluation concrètes menées dans différents contextes scolaires primaires et secondaires, cet ouvrage montre qu’à certaines conditions, il est possible d’élaborer une note référée à l’apprentissage, constructive et à haute valeur informative, pouvant aider le corps enseignant dans ses prises de décisions et soutenir tous les élèves. L’enjeu est de traiter de manière pragmatique la question de la lutte contre l’échec scolaire, toujours trop important dans la plupart des systèmes scolaires francophones.


La piste des pédagogies alternatives est toujours à l’honneur et les personnels de l’enseignement public eux-mêmes sont formés à ces méthodes (Montessori, par exemple). Si certains discours disqualifient encore ces pratiques, il est aujourd’hui acquis que grâce au précepte « Apprends par toi-même » les enfants bénéficient d’un enseignement bien adapté à leur personnalité et sont plus heureux. Cet ouvrage propose un bilan des recherches menées depuis une quinzaine d’années sur des pédagogies « différentes », en précisant leurs fonctionnements, leurs intérêts et leurs limites. Il précise en quoi les effets de certains changements de pratiques peuvent être bénéfiques non seulement sur le climat scolaire et le bien-être des élèves et des enseignants mais aussi sur la lutte contre l’échec scolaire. L’ouvrage est destiné à un public « élargi » d’enseignants, de futurs enseignants, de formateurs, de chercheurs et de parents d’élèves.


Dans le cadre d’une enquête ethnographique de plus de deux ans dans un quartier prioritaire de la politique de la ville, nous avons rencontré des équipes enseignantes et des familles afin de mieux comprendre les objectifs des projets visant à faire venir les parents à l’école. La notion de culture, très présente dans les discours des enseignant·e·s, fait l’objet de cet article. Nous mettons ici en évidence les contextes dans lesquels elle est évoquée : c’est souvent le comportement des élèves, jugé non « normé », qui débouche sur des lectures ethnicisantes, car il suscite des interrogations relatives à l’éducation familiale. L’intrication des registres explicatifs des difficultés familiales, mêlant classe sociale et origine culturelle, s’ancre dans une dialectique « eux /nous » et favorise des pratiques visant l’acculturation des parents. En effet, l’origine étrangère (parfois...
supposée) ouvre la voie à des tentatives de normalisation des pratiques éducatives familiales par les équipes enseignantes.

**Relation formation-emploi**


In high participation systems of higher education, the link between undergraduate study and progression to graduate employment is increasingly tenuous. One response is a growing emphasis on the development of employability skills and preparing students to take advantage of future opportunities as part of university study. This paper uses a Bourdieusian-based conceptualisation of graduate capitals, combined with a concern for the psycho-social dimensions of classed experience, to consider transitions through university and into employment for students from working-class backgrounds in England, drawing on data from a study of students who attended the two universities in Bristol UK. It is argued that the assemblage of capitals that make up graduate capital could be seen as constituting a form of symbolic capital with magical powers, that hides the power relations involved in successful progression to graduate futures. While the move from university into work is more prolonged and precarious for students from all backgrounds, access to the resources that enable the development and mobilisation of graduate capitals, along with psycho-social dimensions of class, create additional challenges for the development of viable graduate career identities for working-class students such as those discussed in this paper. The paper concludes by noting implications for policy and practice.

**Réussite scolaire**


This study tested the mediating role of self-directed learning skills (SDL) between students’ conceptions of mathematics and their achievement in mathematics using a structural equation model. Data were collected using the “Conceptions of Mathematics Questionnaire” and the “Self-Rating Scale of Self-Directed Learning”, together with students’ achievement in mathematics. A sample of 440 first year university students at King Saud University participated in the study. The findings confirm the moderating role of students’ self-directed learning skills between their conceptions of mathematics and their achievement in mathematics. Students who have a highly fragmented conception of mathematics tended to have low SDL skills, and in turn low mathematics achievement (partial mediation), whereas students who have a highly cohesive conception of mathematics tended to have high self-directed learning skills, and in turn high mathematics achievement (full mediation). Mathematics educators should be aware that students’ conceptions of mathematics may be influential, but not sufficient to predict achievement in mathematics. Equipping students with appropriate conceptions of mathematics and self-directed learning skills is key to enhancing their performance in mathematics.


Un ensemble de caractéristiques de la période contemporaine participent d’un empêchement de l’exercice de la citoyenneté : l’accélération, la modification de façon durable des conditions d’habitabilité de la planète Terre, la révolution numérique et technoscientifique, la montée des radicalisations religieuses et politiques, l’explosion des inégalités sociales, l’hégémonie des logiques économiques de maximisation des intérêts individuels... Pour bon nombre d’individus la citoyenneté apparaît ’abord comme étant empêchée. Face à ce constat, les contributeurs de ce livre proposent d’esquisser un mouvement à partir de la conviction que l’éducation est dépositaire du pouvoir de la préparation de l’avenir. Comment apprendre à construire ensemble de commun et à déjouer ce qui nous en empêche ? Comment pouvons-nous apprendre un nouvel habitus relationnel marqué par la responsabilité et l’hospitalité ?