



European
Commission



European Expert Network
on Economics of Education

The latest research trends in the field of economics of education: July-December 2024

EENEE Coordination team

Please cite this publication as:

EENEE (2024). 'The latest research trends in the field of economics of education: July-December 2024', *EENEE report*.

ABOUT EENEE

EENEE is an advisory network of experts working on economics of education and training. The establishment of the network was initiated by the European Commission's Directorate-General for Education and Culture and is funded by the Erasmus+ Programme. PPMI is responsible for the coordination of the EENEE network. More information on EENEE and its deliverables can be found on the network's website www.eenee.eu. For any inquiries, please contact us at: eenee@ppmi.lt.

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Important themes and issues for future European Commission's work on the economics of education

This document provides a summary of important themes and issues to inspire future European Commission's work in the field of economics of education and training. The summary highlights specific focus areas covered by recently published research and foresight studies (between July and December 2024) and are relevant to the European Commission's programme 2024¹ and the Directorate General for Education, Youth, Sport, And Culture (DG EAC) Strategic Plan² 2020-2024. Reviewed Journals are presented in the table below.

This summary of the most relevant articles from top-ranked journals includes the following major topics:

- Financing literacy and economics education
- Education inequality: socioeconomic, geographic and gender factors
- Teacher's role in the changing context: inclusive, digital and culturally responsive teaching;
- Human capital and economic growth;
- Other topics.

TABLE 1. REVIEWED JOURNALS

JOURNAL	ISSUES IN THE PERIOD	PUBLICATION COUNT
Citizenship, Social and Economics Education (CSEE)	2	3
Econometrica	3	0
Economics of Education Review	3	11
Economies	6	1
Education Economics	3	4
Education Finance and Policy	2	2
International Journal of Educational Research	3	7
Internet and Higher Education	1	2
Journal of Development Economics	1	2
Journal of Economic Education (JEE)	2	5
Journal of Economic Growth	2	2
Journal of Finance	2	0
Journal of Human Capital	2	3

¹Commission work programme 2024. https://commission.europa.eu/strategy-and-policy/strategy-documents/commission-work-programme/commission-work-programme-2024_en

² [Strategic Plan 2020-2024 Directorate General for Education, Youth, Sport, And Culture](#)

Journal of Human Resources	3	5
Journal of Labour Economics	2	2
Journal of Political Economy	5	2
Journal of the European Economic Association (JEEA)	2	4
JRC	-	1
OECD	-	2 Education policy outlook
Quarterly Journal of Economics	2	1
Review of Economic Studies	2	5
Review of Educational Research	3	4
UNESCO	-	2 Global education monitoring report
World bank	-	1
Educational Assessment, Evaluation and Accountability	1	2
Large scale assessments in education	2	2
Journal of vocational behavior	4	3
Review of Economics and Statistics	3	5
Teaching and Teacher Education	3	11
Total	64	94

While tracking research trends in the most prominent academic journals and recent foresight studies (see Table 1), **we observed four themes** relevant to the highlighted priorities and broader context of the economics of education and training. The following table also covers specific topics, providing a quick oversight of key research themes developed in the academic journals that have an economic aspect of education (see Table 2).

The report is structured according to the themes indicated in the table. Several articles on each theme are then discussed to give a broader understanding of the issues covered in each theme. Even though some of the studies present evidence from the non-EU countries, may also reflect some of the EU challenges and priorities.

TABLE 2. THE MAIN THEMES DISCOVERED IN THE JOURNALS

THEMES	ARTICLES
Financing literacy and economics education	<ul style="list-style-type: none"> - <i>Pedagogical content knowledge in school economics in Malta;</i> - <i>Representational visuals of abstract financial concepts: A means to foster financial literacy (Germany);</i> - <i>Using LinkedIn in the economics curriculum;</i> - <i>The economic knowledge of Czech high school students: Analysis of the Economics Olympiad;</i> - <i>The Impact of High School Financial Education on Financial Knowledge and Saving Choices (Spain).</i>

<p>Education inequality: socio-economic, geographical and gender factors</p>	<ul style="list-style-type: none"> - <i>Educational attainment and labour market outcomes are improving but more is needed on equality of opportunities (OECD);</i> - <i>On the family origins of human capital formation: Evidence from donor children in the Netherlands;</i> - <i>Home computer ownership and educational outcomes of adolescents in Greece;</i> - <i>Childcare and parenting in the production of early life skills in the USA;</i> - <i>Are separate classrooms inherently unequal? The effect of within-school sorting on the socioeconomic test score gap in Hungary;</i> - <i>Human capital, self-esteem, and income inequality;</i> - <i>Gender gap in university studies of economics-business area: Evidence from Spain;</i> - <i>PISA Maths-Reading index and its relationship with gender and levels of performance (Spain);</i> - <i>Improving introductory economics course content and delivery improves outcomes for women;</i> - <i>Leveraging large-scale assessments for effective and equitable school practices: The case of the Nordic countries.</i>
<p>Teachers' role in the changing context: inclusive, digital and culturally responsive teaching</p>	<ul style="list-style-type: none"> - <i>Teacher shortages and leadership in education (OECD);</i> - <i>Effectively teaching students with special educational needs (SEN): A template analysis and comparison of mainstream and special education teachers in Flanders;</i> - <i>Exploring teachers' agency in inclusive education: Secondary education teachers navigating their projects in responding to the diversity in students' sociocultural backgrounds (Netherlands);</i> - <i>Attitudes and self-efficacy as buffers against burnout in inclusive settings: Impact of a training programme in pre-service teachers (France);</i> - <i>Digital learning in schools: Which skills do teachers need, and who should bring their own devices (Germany)?</i> - <i>Through tensions to identity-based motivations: Exploring teacher professional identity in Artificial Intelligence-enhanced teacher training;</i> - <i>Culturally responsive teaching in question: A multiple case study examining the complexity and interplay of teacher practices, beliefs, and microaggressions in Germany;</i> - <i>Teacher voices on teaching students with a refugee background in Greece; Language Training and Refugees' Integration.</i>
<p>Human capital and economic growth</p>	<ul style="list-style-type: none"> - <i>Skills shortages in the EU: what difference with non-EU firms and how to adjust? (Joint Research Center)</i> - <i>A new macroeconomic measure of human capital exploiting PISA and PIAAC: linking education policies to productivity (OECD);</i> - <i>Educational quality and disparities in income and growth across countries;</i> - <i>Human capital, self-esteem, and income inequality;</i> - <i>Impact of international student mobility in rural Portuguese regions;</i> - <i>The impact of a missing school graduation cohort on the training market (Germany).</i>
<p>Other topics</p>	<ul style="list-style-type: none"> - <i>Impact of missing data on international studies – Exclusions and non-response in contemporary international large-scale studies;</i> - <i>Science education – Evolution vs. Creationism in the Classroom: The Lasting Effects of Science Education.</i>

1.1. Financing literacy and economics education

Several studies published in the second half of 2024 examined economics education, its impact to students' financial knowledge as well as variety of innovative/effective financing teaching methods in both high-school and higher education. For instance, **in Malta** recent study by Emanuel Mizzi (2024) analysed the **creative teaching in school economics education** that can be understood and explored through the concept of pedagogical content knowledge (PCK), which integrates **content and pedagogy to effectively engage** diverse **learners**. The analyses indicated that economics teachers develop and

apply their PCK to communicate subject knowledge and enhance student learning, offering insights for educators and researchers across disciplines.

Another paper by **German authors** – Awais Malik and Bärbel Fürstenau (2024) provided ideas and enhanced understanding of how grounded cognition theory can be utilised as a guideline to create **representational visuals of abstract financial concepts** and thus **multimedia learning material**, which in turn may support increasing people's financial literacy. Researchers discussed three approaches, 'situations', 'emotions' and 'metaphors', which might be used to generate representational visuals. Additionally, research by E. Anne York (2024) suggests that **LinkedIn can be effectively used as an educational tool in economics courses to help college students differentiate themselves in the labour market**, apply economics to real-life contexts, and enhance learning. The report's focus on online platform usage as an educational tool provides outcomes and evidence that are valuable on a global scale, including within Europe.

Two studies conducted in Czechia and Spain explored the state of students' financial knowledge and the effects of financial education courses on students' financial understanding and behaviour. Findings of Frantisek Mašek, Pavel Potužák and Renan Serenini (2024) indicated that **Czech high school students exhibit strong knowledge of basic economic concepts** and **international economics** but weaker understanding of microeconomic and macroeconomic theory, with notable **disparities in economic knowledge** linked to gender and differences in education quality across school types and regions. Whereas, article by Olympia Bover, Laura Hospido and Ernesto Villanueva (2024) demonstrated that **financial education in Spanish high schools improved 9th-grade students' financial knowledge, patience in saving choices, and decision-making**, particularly benefiting disadvantaged students in public schools by raising low scores and patience levels.

1.2. Education inequality: socioeconomic, geographic and gender factors

Education inequality refers to the disparities in access to opportunities, quality education, educational outcomes, school behaviour among different groups of students, often influenced by factors such as socioeconomic status, geographic location, gender, etc. A bunch of studies conducted in different countries illustrate various **educational inequalities at early childhood, school and higher education level** as well as present **good practices to tackle them**.

In September 2024 OECD³ declared that even though educational attainment and labour market outcomes are improving but **more is needed on equality of opportunities** – education systems can adapt further to improve results for all groups – including **girls, women, and low-income students**. According to them, improving equality of opportunity early on is fundamental to levelling the educational playing field, particularly for low-income families.

The socio-economic background plays important roles in shaping educational development. In 2024 research from the **Netherlands** demonstrated how the **education of mothers has a significant impact on child test scores**, while the education of fathers does not, after accounting for genetic influences. The study, using unique data from children conceived through IVF with sperm and egg donation, suggested that maternal education plays an important role in the intergenerational transmission of human capital skills.

³ <https://www.oecd.org/en/about/news/press-releases/2024/09/educational-attainment-and-labour-market-outcomes-are-improving-but-more-is-needed-on-equality-of-opportunities.html>

Another study by Vladana Djinovic and Nicholas Giannakopoulos (2024) examined the **impact of home computer ownership on educational outcomes during adolescence in Greece**. The results showed that home computer ownership during adolescence significantly impacts educational outcomes, with **students who have computer access being less likely to drop out of school and showing an increase in years of schooling** compared to those without access. According to the researchers, disparities in computer access can substantially affect human capital development during adolescence (see 1.4. for more information on human capital formation).

Study by Zoltán Hermann, Hedvig Horváth and Dorottya Kisfalusi (2024) revealed that **within-school sorting**, where students in **Hungary** of different socioeconomic statuses were placed into separate classrooms, significantly **increased socioeconomic test score inequalities**. This sorting negatively **impacts low-status students**, while high-status students benefit only marginally or not at all. The study attributes these effects to the reallocation of educational resources and variations in educational practices within schools.

Research on the importance of socioeconomic background, childcare, and their connection to educational outcomes has been also conducted outside European Union. For instance, study by Sebastián Gallegos and Jorge Luis García (2024) in **US** analysed early childhood education programmes that increase parental investment and showed their **effectiveness, especially for disadvantaged children, in promoting the development of early life skills** compared to programmes that only enhance childcare. This finding supports the notion that **successful early childhood education programmes should stimulate both parental investment and provide high-quality childcare to improve skill development** and mobility.

Some studies have explored the **influence of gender on educational performance and access**. Research in **Spain** (2024) produced empirical evidence of a **gender gap in university studies** within the **economics-business field** at the University of Seville, showing that while female students demonstrate better academic performance and retention, they remain **underrepresented** (40.4%) in these programmes. The study highlighted the potential for encouraging more women to pursue these fields to promote gender equality in the profession.

Another study on the introductory economics course content and delivery in the US (2024) showed that **gender-neutral changes in the content and teaching methods** of introductory economics courses in universities, such as incorporating applied problems and structured group work, can enhance student engagement and **improve academic outcomes for women**. The intervention eliminated women's baseline underperformance in Introductory Macroeconomics and improved their grades relative to men in both Microeconomics and Macroeconomics, highlighting the **significant role of course design in addressing gender disparities** in economics education. It is worth noticing that even though the research was conducted in the US, the correlation between the implementation of gender-neutral changes and their influence to the female academic outcomes is also insightful for the European context.

Research by Susana Nieto-Isidro and Fernando Martínez-Abad (2024) analysed the relationship between personal and educational characteristics and school students' performance in math versus reading using the **Spanish PISA 2018 data**. In the article **combined effects of gender and level of performance** are taken into account, showing that the factors **affect male and female students differently** for the disparate performance-based groups. Authors found that **gender and non-cognitive factors** such as self-concept and expected occupational status **influence high performers**, while **socio-economic factors impact medium performers**, and **grade repetition** is

important for low performers. The study highlights that the factors affecting students' **math-reading score differences vary by gender and performance levels**, providing insights into factors that influence students' academic tendencies and potential study choices, particularly in STEM fields.

As a response to the challenges in seeking more equal education opportunities, other researchers explored **what makes school practices effective and equitable** in improving educational outcomes and addressing educational inequality in the **Nordic countries**, using international large-scale assessments. (PIRLS, TIMSS, and PISA). It highlights the variations in school student outcomes among these countries despite their shared characteristics and identifies key themes such as **educational effectiveness measurement**, the **role of teachers**, and the **importance of both cognitive and non-cognitive outcomes** in understanding educational equity and effectiveness.

1.3. Teachers' role in the changing context: inclusive, digital and culturally responsive teaching

According to the OECD Policy Outlook 2024⁴, addressing **teacher shortages** and the **changing demands** placed on educators are among the key issues requiring urgent attention. The report emphasises balancing the **supply** and **demand for quality teaching, attracting and retaining skilled teachers**, and **equipping them** to deliver education that meets the challenges of technological advances, socio-economic shifts, and the goals of equitable societies outlined in the 2022 OECD Declaration, as well as **strengthening capacity in evaluation and monitoring**. Among the key aspects UNESCO⁵ also mentions the **role of school principals** and various aspects of **leadership standards** such as improved selection principles for professionalised principals' careers, shared school leadership including parents and community members, role of system leaders and political leadership.

In today's world, teachers encounter numerous challenges that arise both during training programmes and in their teaching practices. For instance, in **Flanders** authors J. Delafontaine, K. Aesaert, and S. Nijs analysed challenges in seeking to **effectively teach students with special educational needs (SEN)**. According to the authors, the main difficulties remain in **translating broad teacher effectiveness principles into specific teaching behaviours**. Through interviews with mainstream and special education teachers, the study reveals that while both groups identify a variety of effective teaching principles, significant differences exist in their approaches, particularly regarding within-class differentiation and activating or reviewing prior knowledge. This highlights the need for **clearer, context-specific guidance to support teachers in addressing the needs of students with SEN effectively**.

According to the study on teachers' agency in inclusive education in the Netherlands (2024), **Dutch secondary teachers** view **inclusive educational projects** as **meaningful** but often find them **poorly integrated into daily teaching practice**. Teachers' agency in implementing these projects depends heavily on their ability to **align** the projects **with the existing curriculum** and on **support from school management**. The study refines Banks' Multicultural Education model and identifies misconceptions that hinder teachers' agency in fostering inclusive practices, highlighting the need for better structural and managerial support to enhance inclusivity in education.

⁴ https://www.oecd.org/en/publications/education-policy-outlook-2024_dd5140e4-en.html

⁵ <https://unesdoc.unesco.org/ark:/48223/pf0000391406.locale=en>

Whereas research in **France** (2024) highlighted the **connection between inclusive teacher training and burnout**. Article showed that **inclusive education training positively impacts pre-service teachers by improving their attitudes**, self-efficacy, and sense of personal accomplishment while reducing general burnout. The research highlights that self-efficacy mediates the relationship between attitudes and the personal accomplishment dimension of burnout. These findings underscore the **importance of developing efficient, inclusive training programmes** to better equip teachers and support their well-being in an inclusive educational framework.

Another challenge emphasised in the articles relates to aspects of digital education. Researchers in **Germany** (2024) examined **digital education in school and teacher digital skills**. Study showed that **teachers' technology-related teaching skills play an important role in fostering students' active learning with digital technology**, while the **availability of digital equipment** in schools is **less significant**. School support positively influences successful digital teaching and learning, and the success of Bring-Your-Own-Device (BYOD)⁶ initiatives depends on whether teachers or students provide the devices. These findings emphasise the **importance of teacher training and supportive school environments** to optimise digital education practices.

Artificial intelligence-enhanced teacher training has been analysed by Yanzhen Lan (2024). According to the author, **teacher professional identity (TPI) tensions** such as groupness vs. individuality, humanity vs. technology, and continuity vs. Openness **shape educators' motivations for integrating Artificial Intelligence (AI)** in teaching. Through a Chinese university-level AI-enhanced teacher training programme, the study identified three conceptual models for the relationship between teachers and AI: Navigator, Collaborator, and Inventor. It highlighted the **importance of tailored AI training programmes to align educators' identities and motivations with technological advancements**, offering a strategic framework for effective global AI integration in teacher education.

Culturally responsive teaching (CRT) has been also examined by Judith Kehl, Priscilla Krachum Ott, Maja Schachner and Sauro Civitillo (2024). According to the researchers, the implementation of this teaching method can fall short when it becomes tokenistic and fails to address critical thinking and anti-racism. The study of **secondary school teachers in Germany** highlights that CRT practices vary, but teachers often unknowingly **perpetuate deficit- and racist ideologies, overlook structural causes of inequity, and fail to recognise classroom microaggressions** as problematic. The research underscores the need to embed **critical thinking at the core of CRT** to effectively promote equity in education.

Findings from research in **Greece** (2024) showed that **teaching students with a refugee background** in public schools presents both positive experiences and **significant challenges for teachers**. The thematic analysis used extracted core themes: teachers' first feelings, challenges in teaching refugee students, positive experiences from teaching refugee students, facilitations for refugee students, refugee students' difficulties, teaching methods, and recommendations. It also emphasised the need for structural improvements in the Greek education system to better support the inclusion and education of students with a refugee background.

⁶ Bring your own device (BYOD) involves allowing pupils/students to bring their own devices, especially tablets and other suitable personal devices, into classrooms to support improving student learning outcomes.

1.4. Human capital and economic growth

Recruiting skilled staff has become increasingly challenging for EU companies. Addressing these challenges is essential for **maintaining a strong human capital base** that drives economic growth across the region. As stated in the policy briefs published by the European Commission's Joint Research Centre (2024), addressing skills shortages requires both long-term strategies, such as **industrial policy changes** and **active labour market programmes**, and short-term measures implemented by companies. Short-term strategies include **training existing staff, hiring temporary workers, subcontracting, adopting digital technologies, and scaling back product lines** or activities. While large firms benefit from upskilling, SMEs face constraints like limited budgets and time, making such efforts less effective. To **support SMEs**, the policy brief recommends measures to **lower training costs, raise awareness about reskilling benefits**, and encourage **collaborative learning**. The EU's 2024 action plan aims to tackle skills shortages as part of a broader strategy to enhance competitiveness and resilience.

The quality and accessibility of education, encompassing both school and university levels, play an important role in building human capital, which ultimately drives economic growth. As stated by OECD (2024), **improvements in the quality of education have a much greater impact on human capital and productivity** compared to increases in educational quantity. The paper⁷ also underscores the long-term productivity gains from quality improvements and provides a framework for simulating the impact of specific education policy reforms, such as pre-primary education, on human capital and productivity. Another OECD study on educational quality across 92 countries (1970–2015) demonstrates its **significant impact on income disparities and economic growth**. By incorporating both the quantity and quality of education, the researchers Hanol Lee and Jong-Wha Lee (2024) estimated human capital stock and showed that **educational quality** plays an important role in **explaining cross-country income differences and contributes meaningfully to per capita income growth**.

According to the research by Mark Gradstein and Luigi Ventura (2024), **self-esteem**, driven by academic achievements, plays a **significant role** in shaping the evolution and persistence of **income inequality** over time and across different population groups. The self-esteem component creates a gap between households with high and low academic achievements, contributing to inequality (see also 1.2 for more information on this aspect). Thus, certain parenting styles can worsen income inequality while lowering children's self-esteem.

Research in **Portugal** (2024) displayed that **international students from higher education** have a **transformative societal impact on the local communities** surrounding the higher education institutions. The study highlights how international student mobility contributes to **demographic renewal, economic growth, cultural vibrancy, and knowledge transfer**, particularly in disadvantaged regions. These findings emphasise the strategic role of HEIs in **driving regional development** through internationalisation, offering valuable insights for regions facing demographic and economic challenges.

Another study by Matthias Dorner, Katja Görlitz and Elke J. Jahn in Germany (2024) aimed to provide empirical evidence on **how the training market adjusts to supply shocks in trainee availability**, using data on regional and temporal variations caused by missing or dual school graduation cohorts. It found that **reduced supply** (due to missing school graduation) **leads to fewer trainees being hired (-10%) and higher wages (+1%), while excess supply has the opposite effect**. The study also revealed differing

⁷ https://www.oecd-ilibrary.org/economics/a-new-macroeconomic-measure-of-human-capital-exploiting-pisa-and-piaac-linking-education-policies-to-productivity_a1046e2e-en

responses based on firm wage levels: high-wage firms reduced hiring when supply decreases, whereas low-wage firms increased hiring during excess supply.

1.5. Other topics

Two additional noteworthy articles that were not specifically covered by the themes mentioned above include studies on the impact of missing data in international research and the long-term effects of science education.

According to Christian Christrup Kjeldsen and Rolf Strietholt (2024), **missing data** issues in **International Large-Scale Assessments** (ILSAs) like **TIMSS, PIRLS, and PISA** pose significant challenges to data integrity, representativeness, and validity, potentially leading to biased results. Research examines various sources of missing data such as exclusions, non-responses, and omitted items and their implications for sample reliability and generalisability. It highlights critical research findings and **proposes methodological improvements to address these challenges (e.g. implementing rigorous standards, improving engagement strategies, enhancing test designs)**, ensuring more accurate and equitable educational assessments worldwide.

As stated by Benjamin W Arold in his article (2024), **science education**, particularly the coverage of evolution theory, can play a **significant role in influencing school students' anti-scientific attitudes, knowledge, and life choices**. The study shows that expanding the coverage of evolution in U.S. state science standards leads to increased knowledge about evolution, stronger beliefs in evolution in adulthood, and a higher likelihood of pursuing careers in life sciences, without affecting religiosity or political attitudes. Although the research was conducted outside the EU, the topic of fostering scientific attitudes (e.g. as a response to disinformation) within societies and encouraging career paths in life sciences is highly relevant to the European context.

Bibliography

Anne Lohr, Michael Sailer, Matthias Stadler, Frank Fischer. Digital learning in schools: Which skills do teachers need, and who should bring their own devices? *Teaching and Teacher Education*, Volume 152, 2024, <https://doi.org/10.1016/j.tate.2024.104788>.

Asián Chaves, R., Buitrago Esquinas, E. M., Masero Moreno, I., & Yñíguez Ovando, R. (2024). Gender gap in university studies of economics-business area: Evidence from Spain. *The Journal of Economic Education*, 55(3), 232–248. <https://doi.org/10.1080/00220485.2024.2320145>

Avery, M., Caldwell, J., Schunn, C. D., & Wolfe, K. (2024). Improving introductory economics course content and delivery improves outcomes for women. *The Journal of Economic Education*, 55(3), 216–231. <https://doi.org/10.1080/00220485.2024.2334041>

Benjamin W Arold, Evolution vs. Creationism in the Classroom: The Lasting Effects of Science Education, *The Quarterly Journal of Economics*, Volume 139, Issue 4, November 2024, Pages 2331–2375, <https://doi.org/10.1093/qje/qjae019>

Djinovic, V., & Giannakopoulos, N. (2023). Home computer ownership and educational outcomes of adolescents in Greece. *Education Economics*, 32(4), 523–537. <https://doi.org/10.1080/09645292.2023.2243550>

Dorner, M., Görlitz, K. & Jahn, E. (2024): The impact of a missing school graduation cohort on the training market. In: *Economics of Education Review*, Vol. 103. DOI:10.1016/j.econedurev.2024.102580

Égert, B., de la Maisonnette, C., & Turner, D. (2024). A new macroeconomic measure of human capital exploiting PISA and PIAAC: linking education policies to productivity. *Education Economics*, 32(6), 745–761. <https://doi.org/10.1080/09645292.2024.2318221>

Gallegos, Sebastián & García, Jorge Luis, 2024. "Childcare and parenting in the production of early life skills," *Economics of Education Review*, Elsevier, vol. 101(C)

Gradstein, M., Ventura, L. Human capital, self-esteem, and income inequality. *J Econ Growth* 29, 515–541 (2024). <https://doi.org/10.1007/s10887-023-09235-7>

J. Delafontaine, K. Aesaert, S. Nijs. Effectively teaching students with special educational needs (SEN): A template analysis and comparison of mainstream and special education teachers in Flanders. *Teaching and Teacher Education*, Volume 151, 2024, <https://doi.org/10.1016/j.tate.2024.104760>

Jont Research Center. Skills shortages in the EU: what difference with non-EU firms and how to adjust? https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/skills-shortages-eu-what-difference-non-eu-firms-and-how-adjust-2024-09-13_en

Joyce Aguiar, Orlanda Tavares, Cristina Sin. Impact of international student mobility in rural Portuguese regions. *International Journal of Educational Research*, Volume 127, 2024, <https://doi.org/10.1016/j.ijer.2024.102439>

Judith Kehl, Priscilla Krachum Ott, Maja Schachner, Sauro Civitillo. Culturally responsive teaching in question: A multiple case study examining the complexity and interplay of teacher practices, beliefs, and microaggressions in Germany. *Teaching and Teacher Education*, Volume 152, 2024, <https://doi.org/10.1016/j.tate.2024.104772>

Kjeldsen, C.C., Strietholt, R. Exclusions and non-response in contemporary international large-scale studies. (2024). <https://doi.org/10.1007/s11092-024-09441-w>

Lee, H., Lee, JW. Educational quality and disparities in income and growth across countries. *J Econ Growth* 29, 361–389 (2024). <https://doi.org/10.1007/s10887-023-09239-3>

Luc Vieira, Odile Rohmer, Mickael Jury, Caroline Desombre, Marine Delaval, Nadège Doignon-Camus, Anne-Clémence Chaillou, Claire Goulet, Maria Popa-Roch. Attitudes and self-efficacy as buffers against burnout in inclusive settings: Impact of a training programme in pre-service teachers. *Teaching and Teacher Education*, Volume 144, m2024, <https://doi.org/10.1016/j.tate.2024.104569>

Malik, A., & Fürstenau, B. (2024). Representational visuals of abstract financial concepts: A means to foster financial literacy. *Citizenship, Social and Economics Education*, 23(3), 144-164. <https://doi.org/10.1177/14788047241277768>

Mašek, F., Potužák, P., & Serenini, R. (2024). The economic knowledge of Czech high school students: Analysis of the Economics Olympiad. *The Journal of Economic Education*, 55(3), 205–215. <https://doi.org/10.1080/00220485.2024.2325387>

Mizzi, E. (2024). Pedagogical content knowledge in school economics. *Citizenship, Social and Economics Education*, 23(3), 127-143. <https://doi.org/10.1177/14788047241276192>

Nika Hendriksen, Albert Logtenberg, Hanna Westbroek, Fred Janssen. Exploring teachers' agency in inclusive education: Secondary education teachers navigating their projects in responding to the diversity in students' sociocultural backgrounds. *Teaching and Teacher Education*, Volume 149, 2024, <https://doi.org/10.1016/j.tate.2024.104731>

OECD. Education policy outlook. https://www.oecd.org/en/publications/education-policy-outlook-2024_dd5140e4-en.html

OECD. Educational attainment and labour market outcomes are improving but more is needed on equality of opportunities. <https://www.oecd.org/en/about/news/press-releases/2024/09/educational-attainment-and-labour-market-outcomes-are-improving-but-more-is-needed-on-equality-of-opportunities.html>

Olympia Bover, Laura Hospido, Ernesto Villanueva. The Impact of High School Financial Education on Financial Knowledge and Saving Choices. *Journal of Human Resources* Jan 2024, 0720-11049R2; **DOI:** 10.3368/jhr.0720-11049R2

Polixeni Tsiaousi, Vana Chiou. Teacher voices on teaching students with a refugee background in Greece, *International Journal of Educational Research*, Volume 127, 2024, <https://doi.org/10.1016/j.ijer.2024.102432>

Susana Nieto-Isidro, Fernando Martínez-Abad. PISA Maths-Reading index and its relationship with gender and levels of performance. *International Journal of Educational Research*, Volume 127, 2024, <https://doi.org/10.1016/j.ijer.2024.102440>.

Teig, N., Steinmann, I. Leveraging large-scale assessments for effective and equitable school practices: the case of the Nordic countries. *Large-scale Assess Educ* **11**, 21 (2023). <https://doi.org/10.1186/s40536-023-00172-w>

UNESCO. Global education monitoring report, 2024/5, Leadership in education: lead for learning <https://unesdoc.unesco.org/ark:/48223/pf0000391406.locale=en>

Yanzhen Lan. Through tensions to identity-based motivations: Exploring teacher professional identity in Artificial Intelligence-enhanced teacher training, *Teaching and Teacher Education*, Volume 151, 2024, <https://doi.org/10.1016/j.tate.2024.104736>

York, E. A. (2024). Using LinkedIn in the economics curriculum. *The Journal of Economic Education*, 55(3), 263–275. <https://doi.org/10.1080/00220485.2024.2338123>

Zoltán Hermann, Hedvig Horváth, Dorottya Kisfalusi. Are separate classrooms inherently unequal? The effect of within-school sorting on the socioeconomic test score gap in Hungary. *Economics of Education Review*, Volume 103, 2024, <https://doi.org/10.1016/j.econedurev.2024.102582>



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