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Editorial: Education for the future: learning and teaching for sustainable development in education

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Editorial on the Research Topic
Education for the future: learning and teaching for sustainable development in education

Education systems face numerous challenges, including inequalities in access to quality learning opportunities, digital technologies, and learning environments. These challenges necessitate research and innovation in teaching and learning, and demand novel approaches to enable achievement of the UN's Sustainable Development Goal 4 (SDG4), which advocates for sustainable development in education that is inclusive, equitable, and of good quality, offering opportunities for lifelong learning for all. The UNESCO (2021) report, entitled Reimagining our Futures Together, emphasizes the need for a new social contract for education to address injustices and transform the future: (1) the right to education and (2) a commitment to education as a public societal endeavor and a common good.

The Research Topic, Education for the Future: Learning and Teaching for Sustainable Development in Education, draws on the above premises. It is based on the abstract submissions from the Education for the Future conference, held at the University of Helsinki, Finland, on 15–16 August 2023 (https://gintl.org/events/jolii-gintl-global-conference-2023/), by the Global Innovation Network for Teaching and Learning (GINTL). GINTL is a network of 20 Finnish higher education institutions working with partners from India, China, and Africa to co-create knowledge to meet global but contextualized educational challenges, and to advance research and education development toward achieving SDG4.

The Research Topic features a selection of research-based approaches addressing localized educational challenges in the quest of achieving the SDG 4. Two articles focus on early childhood education and care; one article looks at language instruction from the quality perspective; two articles are framed in teacher education; and one in continuous professional development. The topics employ various methodological perspectives through international cross-cultural research cooperation.

In the article, Assessing the development of primary English education based on the CIPP model—a case study from primary schools in China (Chang and Wang), the authors examine the development of primary English education from teachers' and

students' perspectives. They present a theoretical framework for assessing the quality of English instruction in primary schools in one of China's provinces, using the goal-oriented Context, Input, Process, Product (CIPP) evaluation model. The study highlights improved teaching methods and diversified teaching equipment, but also persistent inequalities due to family backgrounds, geographical factors, and uneven allocation of resources. The article highlights the intertwined nature of quality, equality, and sustainability in education.

In the article, How to ensure the sustainable supply of childcare educators: factors influencing student teachers' career choice (Wang et al.), the authors investigate the career choices of student teachers majoring in childcare in China and analyze the factors influencing their career intentions. The study sheds light on understanding the factors causing the global teacher shortage, as noted in the UN (2022) Transforming Education Summit. The study reveals that while students have positive career intentions, these intentions are influenced by social factors, task perceptions, values, and fallback career options.

In the article entitled Transdisciplinary education for sustainability. Creativity and awareness in teacher training (Echegoyen-Sanz et al.), the authors present the outcomes of an innovative transdisciplinary educational proposal involving 176 primary teacher trainees in Spain. The innovation focuses on developing skills and knowledge for the promotion of sustainable development (SDG 4 target 7) by using artistic-cultural products. The authors suggest that this approach improves preservice teachers' motivation, concept learning, and perceived professional usefulness. The results emphasize the importance of advocating for transdisciplinary education for sustainability in initial teacher education.

In the article, Mentor, Observe, Support, Take Action (MOST): a model for continuing professional development of teacher leaders (Suryawati et al.), the authors discuss literacy competencies, self-efficacy, and technological pedagogical knowledge (TPK) among teacher leaders as foundational elements for assuming an effective role as a teacher leader. Teacher leaders are trained teachers to create change in schools and support their fellow teachers and students. Research results reveal that teacher leaders still require further enhancement in these competencies, and the authors recommend the MOST model (Mentor, Observe, Support, Take Action) as stages for professional development to implement the Emancipated Curriculum in Indonesia effectively, thus contributing to the achievement of SDG 4 target.

The authors of the article Blending pedagogy: equipping student teachers to foster transversal competencies in future-oriented education (Niemi et al.) investigate the integration of blended education and transversal competencies in a teacher education program at the University of Helsinki, Finland. The case study highlights the importance of developing critical and reflective thinking, interaction competence, collaboration skills, and independent and collective expertise among student teachers, as they should be able to guide and support their students in acquiring these future-oriented skills when assuming a teaching position. The authors highlight blended teaching and

learning, teachers, and transversal competencies in the future of education, in line with SDG 4 target 4 c. Like in the teacher education innovation in Spain, the authors note the role of embedding transversal competencies in the practice of initial teacher education and the opportunities blended learning may offer.

The article, A comparative study of early childhood education and care national documents between China and Finland (Niu et al.), provides a comparative analysis of key aspects, similarities and differences in national ECEC documents from China and Finland. Both countries place a high value on ECEC, emphasizing principles that shape the learning environment and use diverse pedagogical methods. However, nuanced variations exist in the approaches. The Chinese documents feature more specific guidelines tailored to different age groups, accompanied by detailed pedagogical suggestions, while the Finnish national core curriculum offers general guidelines for all preschool age groups, complemented by the unique feature of individual development plans for each child. The article provides insights into the implementation of SDG 4 target 2 in two distinct contexts.

Together, these articles showcase changes that are necessary in teaching, assessment, learning processes, teacher education and development, as well as education policies and guidelines. The articles offer some new perspectives and future directions for research, highlighting the potential and complexities of education development in global and local—global contexts.

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References

UN (2022). *Report on the 2022 Transforming Education Summit.* Available at: https://www.un.org/sites/un2.un.org/files/report_on_the_2022_transforming_education_summit.pdf (accessed August 3, 2024).

UNESCO (2021). *Reimaging our futures together: a new social contract for education.* International Commission on the Futures of Education. Paris: UNESCO. doi: 10.54675/ASRB4722