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Editorial: Generic skills in higher education

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Editorial on the Research Topic Generic skills in higher education

Over the past decade, the importance of generic skills, such as collaboration, critical thinking, problem solving, and communication skills has gained increased interest in educational policy discourses and in practice of higher education. Previous research has shown that generic skills are related higher education students' learning processes, academic achievement as well as learning of disciplinary knowledge and skills (Arum and Roksa, 2011; Tuononen et al., 2017; Hyytinen et al., 2021). Students need generic skills to construct and apply of their domain-specific knowledge and understanding (Hyytinen et al., 2019). To take an example, communications skills, enable students to make their ideas and conclusions visible to others (Braun, 2021; Kleemola et al., 2022). Together with domain-specific knowledge, generic skills are also vital in working life (Tuononen and Hyytinen, 2022; Iqbal et al., 2023). In transition to working life, generic skills are found to be related to development of expertise (Tuononen et al., 2017).

Although there is a growing consensus on the importance of generic skills, there is evidence many higher education students face challenges in generic skills. There is also a large variation in students' level of generic skills. Students' level of generic skills are associated with prior academic performance and by their socioeconomic background (Arum and Roksa, 2011; Kleemola et al., 2022). Surprisingly little is known to what extent and how these skills develop during higher education studies. Furthermore, there are no consensus the processes of implementing generic skills in teaching and learning in programmes (Hyytinen et al., 2019). Additionally, there is no unanimous agreement about what is meant by the concept of generic skills in the research community (El Soufi and See, 2019). Therefore, there is a wide variety of definitions and skills that researchers consider generic skills.

This Research Topic with twelve articles from different countries and research projects advocates better understanding about learning and teaching generic skills at the context of higher education. The aim of this Research Topic is to bring together research papers covering different aspects of generic skills, including theoretical or empirical papers that explore and outline the development of generic skills in various fields of education, empirical papers that investigate the learning and teaching environments that support the learning generic skills, papers that focus on the assessment of generic skills, and systematic review related to the topic of the Research Topic. Thus, the rationale for this Research Topic is to strengthen the current state of international research on generic skills with a view to the fundamentals established so far and to bring new insights into research on generic skills. This Research Topic also contributes to discussions about the importance of generic skills in the higher education.

In this special issue, theoretical, conceptual and methodological aspects and topics are addressed, including issues related to the validation and adaptation of a performance-based assessment of generic skills (see paper by [Ursin et al.](#), [Nagel et al.](#)) and value of assessing tertiary students' ability to reason relationally ([Alexander et al.](#)). Furthermore, this Research Topic includes a review study that examines theoretical, methodological, and empirical viewpoints on learning generic skills and synthesizes the current empirical evidence about the factors that enhance and impede student learning of generic skills (see [Tuononen et al.](#)). The majority of the articles in this Research Topic focus on learning and development of generic skills as well as what kind of role of teaching and learning environment and different learning experiences play in learning generic skills (see papers by [Nielsen et al.](#), [Räsänen et al.](#), [Virtanen et al.](#), [Lee and Lee](#), [Muukkonen et al.](#), [Slišāne et al.](#)). The Research Topic also offers insights into the variation and challenges in generic skills ([Kleemola et al.](#)) and the fit between learning opportunities for generic skills available at universities and skills required in working life ([Lohberger and Braun](#)). The studies use various methods from a small-scale qualitative analysis of think-aloud data to the quantitative analysis of follow-up data.

Taken together, this issue of generic skills will serve a reference for articulating future directions in research and practice in the context of higher education. The papers included in this Research Topic also highlight new perspectives for the future research. For example, intervention and longitudinal studies focusing on the development of generic skills are needed. Moreover, in order to become more coherent research field new valid research instruments to measure generic skills are required.

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