Digital Competence of Future Educators: Assessing the Skills of Teacher Training Students

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Abstract

Our research has focused on the digital competence of teacher training students since 2015. Although these students belong to the digital generation and frequently use digital devices, earlier findings showed that most do not utilize digital technologies skillfully. They rarely engage in collaborative knowledge sharing or interactive content creation. This study presents the results of a longitudinal research project. Over three academic years, we assessed whether students entering teacher training in 2021/22 possessed the digital competencies required to convey subject knowledge and foster key competencies as future educators. The research consisted of three phases. First, we administered a questionnaire based on the DigCompEdu and DigComp 2.1 frameworks. In the second phase, we examined students' perceptions of the importance and necessity of various digital competencies. In the final phase, task-based assessments were used to evaluate actual skills and identify areas for improvement. Findings indicate that while students show partial awareness in information and data literacy, digital communication, collaboration, and safety, significant gaps exist in digital content creation and problem-solving. These results underscore the need for targeted development within teacher education programs. Our goal is to design and implement specific learning tasks to enhance these skills and better prepare students for digitally supported teaching and learning.

Keywords: competence development, DigComp 2.1, DigCompEdu, longitudinal study, teacher training students