

Doctoral thesis: Supporting the development of digital competence in teachers requires compromises

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The purpose of assessing a teacher's digital competence is not just carrying out an assessment, but it is important for the process to be

supported and transparent for the stakeholders involved. Self-assessment alone does not provide a comprehensive overview of a teacher's digital competence, and it is important to implement systematic approaches that support the development of digital competence, found Linda Helene Sillat in her doctoral thesis.

Assessment processes, including the assessment of digital competence, are viewed as the first stage in the [professional development](#) of educators, where the conceptualization of the assessment and the follow-up activities planned on this basis play a key role.

At the same time, today's assessment of digital competence is not meaningful for the educator for various reasons, such as the sustainability of assessment instruments, low level of a meaningful process and feedback, lack of change management practices in [educational institutions](#), or lack of systematic planning at the national level.

It is therefore important to understand alternative ways and interventions for the assessment of digital competence, involving different stakeholders in the education system—teacher, student teacher, school leader, educational technologist, teacher trainer, member of the qualification examination committee, and researcher.

The assessment and development of the digital competence of educators, and more specifically teachers, is a multifaceted problem, which requires, on the one hand, consideration of alternative assessment methods when assessing the digital competence of educators, including diagnostic, conclusive, formative, and authentic assessment, so that the teacher can choose an approach that is meaningful to them.

On the other hand, it is necessary to understand the profiles, needs and specificities of all the beneficiaries engaged in teachers' digital

competence assessment process, which means that in the context of assessing a teacher's digital competence, we cannot claim that any single method or approach to assessment is the most appropriate. This knowledge is created by the teacher in accordance with the goals set for their professional development.

The focus of the Doctoral thesis research was the applicability of assessment instruments based on the DigCompEdu digital competence framework for educators.

Although there are many tools and approaches to assessing digital competence, the Doctoral thesis focused mainly on [self-assessment](#) and portfolio-based assessment. Based on the research self-assessment remains the most used and cost-effective approach, but the assessment results are often subjective and may not accurately reflect digital competence and related skills or knowledge.

At the same time, self-assessment is the most effective approach for those stakeholders who focus on mapping the state of digital competence in order to provide support, for example, in the form of training programs and materials supporting professional development. In addition, it can be argued that self-assessment is useful for teachers to analyze and reflect on their own teaching practices, as a result of which it is possible to identify areas of digital competence that require improvement.

The results of the portfolio-based digital competence assessment showed that authentic assessment is meaningful for educators when it is systematically integrated into their professional development activities (including initial teacher training) and the portfolio creation process as a whole is supported. Still, portfolio-based digital competence assessment is the most time-consuming approach and requires a significant amount of human resources and cannot therefore always be considered to be a

sustainable approach.

The assessment of the digital competence of educators is not only related to one specific teacher involved in the assessment process, but to a wider circle of interested stakeholders. The needs of stakeholders highlight factors at the national, organizational and teacher level.

It can be said that, to date, digital competence assessment instruments, approaches and tools have been developed mainly to support an individual teacher in the assessment of digital competence, rather than focusing on a larger group of educators to enable evidence-based decision-making.

In addition, existing approaches and tools provide limited feedback, which hinders the planning and activities of professional development. At the same time, high-quality feedback is important for all stakeholders, be it personalized or generalized feedback.

It is important to note that stakeholders who are involved in decision-making processes at the organizational or national level (including school leader, educational technologist, teacher trainer, member of the qualification examination committee, and researcher) have a deeper understanding of the process and concept of digital competence assessment.

However, the stakeholders who reflect the needs of teachers (student teacher, teacher, and ICT [teacher](#)) are not aware of the meaning of the concept of digital competence and thus do not understand the long-term benefits of assessing digital competence.

Based on the research carried out as part of the Doctoral thesis, it can be said that there are aspects of the assessment of digital competence that can be described through the dimensions of trade-off, which are

reflected in the tools for assessing digital competence as well as in the needs of stakeholders.

The dimensions of the trade-offs are based on the one hand, on the characteristics of the assessment instrument, tool and approach and, on the other hand, on the activities that take place before and after the assessment of digital competence. The dimensions of the trade-off model make it possible to link the assessment process itself with the professional development of an educator, the digital maturity and development of an organization as well as with initiatives at the national level.

The developed trade-off model is a tool to help stakeholders understand the characteristics of the various existing digital competence assessment instruments, approaches, and tools. In addition, it allows choosing the appropriate method of assessing digital [competence](#) based on the objectives set.

More information: Thesis: [A Trade-off Model for Evidence-informed Decision-making to Support Educators' Digital Competence Assessment](#)

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