

INVESTIGATING THE INTERPLAY BETWEEN DIGITAL AUTOMATIC-ASSESSMENT AND SELF-ASSESSMENT

¹Carina Tusche, ¹Daniel Thurm, and ²Shai Olsher

¹University of Siegen, ²University of Haifa

It is well established that digital formative assessment can support student learning, for example by means of digital automatic assessment of students' work (Olsher et al. 2016). At the same time self-assessment is regarded as important to support students' meta-cognitive skills and to support students' ownership of their learning (Andrade 2019). Yet, little is known about *combining* automatic- and self-assessment. Starting from this research gap, the "Interplay between Self-assessment and Automatic Digital Assessment" (ISAA) project (Olsher & Thurm, 2021) scrutinizes how to combine automatic-assessment and self-assessment in the context of Example-Eliciting-Tasks using the digital formative assessment platform STEP (Olsher et al. 2016).

In the present study we investigate a newly designed STEP-self-assessment-module in which students first assess whether predefined mathematical characteristics are present in their generated examples. Subsequently students receive three types of reports: A) an overview of their self-assessment, B) an overview of the results of the automatic-assessment of the same characteristics in their generated examples, and C) an overview comparing their self-assessment with the automatic-assessment that highlights conflicts between the self- and automatic assessment. We conducted a qualitative video-case study in which we observed 16 students working on a EET on quadratic functions ("What is the relationship between the linear functions and the product function? Create three examples that are as different from each other as possible to represent your answer", see Olsher & Thurm 2021). In our presentation we focus on how students use and interpret the different reports (A, B, C) - in particular we expect that conflicts between students' self-assessment and the automatic-assessment encourage students to investigate differences and promote student learning processes.

References

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