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Trends and topics in next decade’s mathematics education

ABSTRACT
In the first part of the lecture, we will briefly address the current trends in mathematics teaching and learning in both secondary and higher education, which can be summarized through key words higher-order thinking, digital technology, and personalized learning. Next, we will present the case of an introductory university statistics course, in which two types of automated feedback were implemented. First, students could consult an inspectable student model, that provided an overview of the student’s current understanding of important topics in the domain of statistics. Second, students received stepwise feedback in tasks on hypothesis testing, which addressed the structure of hypothesis tests and the relations between steps. We will discuss didactical considerations that played a role in the design of both feedback types, as well as effects we found on the study behavior of the students.

CV
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