

4TU.AMI Conference

"Mathematics Education: the next decade and beyond"

André Heck (University of Amsterdam)

Automatic Computer Aided Assessment of Mathematics in Practice

Abstract

Assessment is a key component of teaching and learning. For many students it is a key driver of their activity. This presentation considers automatic computer aided assessment of mathematics in service education, using the SOWISO environment for learning, practicing, and assessing mathematics, and the experiences of teachers and students herewith. The main focus will be on the use of ICT for formative and summative assessment activities, and on the micro level of automatically assessing the student's answer to an individual question and providing relevant and helpful qualitative feedback. Examples are taken from mathematics courses in life sciences and computers science, and from summative assessments. They illustrate opportunities and limitations in task design.

Profile

André Heck is a senior lecturer and researcher at the Korteweg-de Vries Institute of the University of Amsterdam. His main education activities are course design, implementation, and teaching of introductory mathematics for life sciences, in particular biomedical sciences and psychobiology, and for computer science. He also coordinates the UvA summer course for students who have a deficiency in their math education and want to meet the enrolment requirements for their study of choice. His main research area is the application of ICT in mathematics and science education at upper-secondary and tertiary level.