

Electronic learning and assessment–Evaluation of a large scale application

The University of Würzburg uses a system for case-based training and teaching which allows teachers to produce exercises and learning cases simply and efficiently. Started in 2007, the system (CaseTrain) is now used in 300 different courses by about 12000 students. Since 2010 the system also allows electronic testing on portable computers (BYOD) for the courses Statistics 1 and 2.

We report experiences from system development and evolution and present evaluation data for electronic exams in Statistics 1 (16 semesters, ca. 3000 participants), which show a clear correlation between the amount of training and exam results ($r=.66$), as well as a large student demand for training possibilities. If available, students invest up to 60 hours into training activities in addition to the required 90 hours of lecture and tutorials, but willingness to work through the exercises/cases strongly depends on perceived relevance. We discuss consequences for the design of e-learning systems and integration of exam content into courses.