

Improving Student Learning: Measuring the Effect of Weekly Online Tests

Ronald Huisman, Helen Reedijk

Erasmus School of Economics (The Netherlands) reedijk@ese.eur.nl

In this paper we examine whether a specific setup of digital tests improves students learning. To do so, we study the results of students that followed the Mathematics course within the Bachelor 1 program of the Erasmus School of Economics between September and October 2011. During this course, lectures were provided by webcasts and students worked in groups making exercises assisted by teachers. On top of that, the students had the opportunity to participate in weekly tests provided on their digital learning platform. These tests consists of exercises with which they could test their knowledge. After doing the test, the students received automated individual feedback and could redo the test in order to apply the feedback directly. We find, while controlling for the students entry level of knowledge measured through a diagnostic test made at the beginning of the course, that students who actively participated made the tests obtained a significant higher probability of passing the exam and obtained a higher grade for the course.