Do Video Clips and Online Self-tests have Added Value in Educating Statistics?

A study among students at Wageningen University in the Netherlands

E.J.H. Korendijk, J. Hageman

Abstract

At Wageningen University all bachelor students follow an introductory course in statistics. A recurring issue with teaching statistics is that students vary in quantitative skills and interest in statistics, as well in learning style. For this reason lectures and seminars might not be equally effective for all students. Recently, to remedy this situation, video clips and self-tests have been added as an integrated part of the course. The clips have different goals. Some are for motivating students towards statistics while others are about explaining statistical methods or offer a deeper understanding for the more proficient students. The self-tests adapt to the level of the student to estimate their skills and knowledge.

The year previous to the introduction of the clips and self-tests, 550 students filled in a questionnaire asking them about their course experiences and motivation. After the introduction 660 students from the same fields of study were presented with the same questionnaire as their peers in the previous year, but with ten additional questions about the online teaching methods. In this talk, we present the effects of introducing clips and self-tests on students' motivation and course outcomes, together with lessons learned.

Biography

In 2005 Elly Korendijk got her doctoral degree in Psychology with a minor and major in statistics at Utrecht University. During the largest part of her study she has worked as a student assistant for the department Methodology and Statistics of the Faculty of Social Sciences.
Thereafter she got a position as PhD student at the before-mentioned department. The topic of her research was the robustness and optimal design issues for cluster randomized trials. In 2012 she successfully defended her thesis. During these years she was also involved in teaching statistics.
Since September 2011, she is appointed as lecturer applied statistics at the department of mathematical and statistical methods Biometris of Wageningen University.

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