

Student Attitudes toward Technology Use in Math Education

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In the Faculty of Business and Economics at Schmalkalden University, the matrix algebra course of the bachelor program has been taught in the PC lab for many years (one or two students in front of a PC, instructor's PC connected to a projector). A Computer Algebra System (CAS) is used throughout the course. Students can install the CAS on their private PCs, and have access to it during the final exam in the PC lab (then, naturally, only one student per PC). Other courses, like Introduction to Mathematics, and Introduction to Statistics, are still taught in a traditional classroom setting (blackboard, overhead projector, and pocket calculators). At the beginning of the 2010/11 winter semester, a survey was carried out to investigate whether the students preferred traditional or technology-based courses in mathematics, and how well they coped with the technology. During the 2015/16 winter semester, a similar survey was carried out to check whether students' attitudes toward the use of technology in the teaching of mathematics have changed over time. In this presentation we will look at the key questions of the questionnaire, display descriptive statistics as well as charts of the variables generated from the gathered data, and analyze the effect that certain characteristics of the students (e.g. male vs. female, or students who like math vs. those who do not) have on their answers. The new results will be also compared to those found five years ago.

Keywords: Student attitude toward CAS, Survey of students, Changes over time

Mathematics Subject Classification 2010: 97D40, 97U70

References

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