

TITLE:

Mathematics Education with a Handheld CAS – The Students' Perspective

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ABSTRACT:

Between 1999 and 2003 a project was carried out in eight upper secondary schools in Thuringia (one of the 16 German states) to investigate the effects the use of CAS technology in mathematics education has on math skills. In 2002 a survey of all students (N = 1014) in the project schools took place. The main part of the one-page questionnaire consisted of eight statements – seven related to the effects of using a handheld CAS in math and science lessons and one general statement about math lessons.

Since 2003 each school in Thuringia can decide if a handheld CAS is used in mathematics education or not. One year later more than a quarter of all Thuringian upper secondary schools used CAS in mathematics classes. The 2002 survey was carried out again in 2005, this time with 1679 students.

Results of the two surveys will be analyzed and compared. Special focus will be on the question if certain characteristics of the students (e.g. their gender or how good they are in mathematics) influenced their answers.