

ELEMENTARY STUDENT TEACHERS' SELF-CONFIDENCE AS LEARNERS OF MATHEMATICS

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The paper will describe some of first results of the research project "Elementary teachers' mathematics", financed by the Academy of Finland for the years 2003–06 (project #8201695). The project concentrates on the development of elementary student teachers' view of mathematics in three Finnish universities (University of Helsinki, University of Lapland, and University of Turku).

View of mathematics is a large entity of a student's knowledge, beliefs, conceptions, attitudes and emotions. In the view of mathematics, one may distinguish at least two components: The view of oneself as a learner and teacher of mathematics, and the view of mathematics and its teaching and learning. More on view of mathematics one may find e.g. in the paper Pehkonen & Pietilä (2003). Self-confidence that pertains to the first component, has a central role in the formation of view of mathematics (cf. McLeod 1992).

Participants of the project are 269 elementary student teachers. In Helsinki there are two separate groups of students. All participants were measured in autumn 2003 with a 'view of mathematics' indicator, where one part was a self-confidence scale containing 10 items from the Fennema-Sherman attitude scale (Fennema & Sherman 1976).

Students' views of themselves as learners of mathematics differ from each other in different universities in the beginning of basic studies in mathematics. About one fifth of the students have a weak self-confidence. The normal student groups in Turku and Helsinki have the highest self-confidence, and the other two the weakest one. The difference is statistically significant only between the female students of Helsinki normal group and the additional group. Furthermore, there are small differences between the male students in Lapland and Turku, and between the female students of Turku group and the Helsinki additional group. In the case of men, the differences were not statistically significant – probably because of their small numerus.

References

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