

## THE MATTER OF CHANGE - BEEING RESPECTABLE

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In the last decade, studies on teacher change (e.g., Clark and Peterson 1986) have presented many aspects of the change process. One of the main interests has been to find out the conditions for change. Recent studies have suggested the complex nature of teacher change (e.g., Senger 1999). In Finland all teachers are educated at universities. Anyway, also to these well-educated teachers, it seems hard to meet changes in curriculum and education (Pehkonen, E. 1993). The aim of this paper is to understand the difficult question of change from the perspective of stability. What constitutes the good and stabile elements in school mathematics teaching and learning in the minds of teachers?

The data consists of theme interviews of nine competent elementary school teachers. They had teaching experiences from one year to seventeen years. The themes in interviews were: 1) The teacher's personal conception about the state of mathematics teaching; 2) The good and proper elements in mathematics teaching; 3) The elements in mathematics teaching which should not be changed in the case of any change. The data was analyzed qualitatively. The aim was to find out the stabile key elements most important to teachers and to interpret the prerequisites of change. The interpretation was later negotiated with the involved teachers.

Three key elements found in math teaching were: the math book, basic counting skills and teacher-centered classroom teaching. These were the elements most frequently mentioned in every theme. They were also seen, as the main elements not be changed in case of any change. Teachers do not object the changes, but they want to do their job properly. Teachers know the curriculum, textbooks, learning materials, teaching methods. They argumentate their action by explaining that they use best possible text books. Pupils seem to achieve what they are expected to achieve according to official standards and tests. Teachers could be satisfied.

But - however all teachers express their feelings of guiltiness. They know the trends of modern mathematics education, but they are not sure how to be able meet them. They are afraid that they have given up a part of their professional competence to the textbooks. Teachers are busy and teaching groups are very heterogeneous.

Teachers want to be respectable. They do not want to take too serious risks. They have experience-based evidence that their teaching meets well enough the set standards. But they do not have any evidence what happens, if they will spend their time on something else - for example on problem solving.

### References

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