

DEVELOPING THE REFLECTIVE COMPETENCIES OF THE MATHEMATICS TEACHER

Lisser Rye Ejersbo, Learning Lab Denmark

“The teacher will reflect on and actively develop teaching practices,” reads one of the professional ideals for Danish teachers formulated by the Danish Union of Teachers (Danmarks Lærereforening) in 2002. Reflection and the active development of practice seem to go hand in hand, but what influences mathematics teachers to reflect on their practice and subsequently actively develop it? What values control the way change is brought about? And what significance does developing reflective competence have for changes made in their teaching?

This presentation will give the preliminary results of an ongoing research on mathematics teachers who have participated in a specific in-service education course. The aim is to trace the influence of this course. The course focused on developing reflection on ones own teaching. Changing ones teaching is a challenging task, which can easily lead to insecurity, as M. Fullan describes in Pinar (1995:702).

The research project includes a series of interviews with teachers prior to and following their participation in the in-service education course. In the study I was looking for the point when the mathematics teacher acknowledges a need to make changes in his teaching, how this is realised in practice, and if the changes fulfil the expectations placed on them. The challenges that come from the outside can seem uncomfortably intrusive and disturbing, because unaccustomed actions can easily result in insecurity and anxiety on an individual level. It is therefore relevant to discuss which changes are beneficial and for whom.

My preliminary conclusion about the course and the interview is that there is a need for mathematics teachers to be influenced in a disruptive manner. They must become aware of what values control their teaching and, not least, how to achieve a competency of action for developing mathematics teaching in relation to those values. The development of reflective competence, however, must go together with the tools needed to carry out the required changes.

References

- Ball, D.L. (1988). Unlearning to teach mathematics. *For the learning of mathematics 8, FLM Publishing Association*, Montreal, Quebec, Canada, 40-48.
- Jaworski, B. (2001). Developing mathematics teaching: Teachers, teacher educators, and researchers as co-learners. In F.-L.Lin & T.J.Cooney (eds.), *Making sense of mathematics teacher education*. (pp. 295-321). Dordrecht: Kluwer Academic Publishers.
- Pinar, W.F. (1995). *Understanding Curriculum*. New York: National Academy Press.
- Schön, D.A. (1983). *The reflective practitioner*. USA: Basic Books, Inc.
- Thyssen, O. (1997). *Værdiledelse*. Copenhagen: Nordisk forlag A.S.