

# ADAPTED LEARNING WITH SPECIAL FOCUS ON THE ASPECT OF LANGUAGE IN MATHEMATICS

Leif Bjørn Skorpen

Volda University College, Norway

This contribution has its origin from a project concerning “The first years at school and adapted teaching”, consisting of five sub-projects. The project is composed of an observation and an action part. In the observation part, two different observers will each year observe ten classes from the first to the fourth grade. Each observer stay in three different classes each year, one week in each class. We are observing the teacher, a selected pupil (a new one each day) and the class. We use structured observation form and qualitative observation, as well as interview with the teacher. In the action part we are going to collaborate with the involved teachers in developing the first years at school.

The project will last for three years. No final conclusions are so far established. In this short presentation I will present some results from the first (02/03), and second (going on winter – spring 04) field study, and eventually try to establish some temporary conclusions based on these results.

My part of the project focus on the question: “Which areas of knowledge are emphasized, and how are these being used in mathematics in the first years at school?” In the observation part I try to observe how the work in mathematics is adapted to the individual pupil’s abilities, and which kind of working methods that are used. I try to identify which kinds of knowledge that are stimulated, for example: facts, skills, conceptions, structures of conceptions, strategies, processes or attitudes. Is the teaching prepared for wondering, exploration and experimenting? Are the pupils encouraged to express their thoughts and meanings through different modes of expression? Are they invited or challenged to explain their way of thinking?

The evaluation of the Norwegian compulsory school, “Reform 97” shows that drill, focusing on rules and algorithms, and fragmentary activities, still is attached importance (Alseth et al. 2003 and Haug 2003). This is one of the reasons why I, in the action part of the project, will focus on working methods concerned with the pupils’ activity, problem solving and working methods stimulated by the use of language.

## **References:**

- Alseth, B., Breiteig, T. and Brekke, G. (2003). *Endringer og utvikling ved R97 som bakgrunn for videre planlegging og justering – matematikkfaget som kasus*. Telemarksforskning, Notodden.
- Haug, P. (2003). *Evaluering av Reform 97*. Noregs forskingsråd.