

# INTERPRETATION AND IMPLEMENTATION OF THE L97'S MATHEMATICS CURRICULUM

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*The mathematical part of the curriculum, L97, in Norway reflects a constructivist view on learning and also a view based on socio-cultural theories. The curriculum describes different working methods in all subjects in general and in mathematics in particular. According to my interpretation of the curriculum, it encourages an investigative approach to teaching.*

L97 stresses that the pupils shall be active in the learning process. They shall be experimenting and exploring and through collaboration with each other acquire new knowledge and understanding. A research study suggests that the curriculum is not implemented as intended. Studies comparing pupils' performance on tasks before and after Reform 97 show that both in grade 7 and in grade 10 pupils perform generally lower in 2001 and 2002 than in 1995 and 1994 respectively (Alseth et al, 2003). This is especially visible within *procedural knowledge*. There is no remarkable decline within what is described as students' *conceptual knowledge*. In my research I am working with 4 mathematics teachers to explore how they are interpreting the curriculum, both in terms of how they are thinking about it and expressing themselves in focus groups and interviews, and also in terms of what they actually do in the classroom. The relation between teachers' interpretation of the curriculum and their implementation of it is a main focus of my project. The methods I am using are fitting largely into an ethnographic approach (Bryman 2001). I immerse myself into mathematics classrooms and I make regular observations of the activities of teachers and students. I use field notes, mini disk recordings and also interviews to probe for beliefs about the nature of mathematics teaching seeking to identify what aspects of mathematics are important. This allows me to gain information that is not observable. I have also used a focus group method to get information about what the teachers said about L97 and how they related their teaching to what is said in the curriculum. According to Krueger (1994) focus groups are useful in obtaining information that might be difficult or impossible to obtain by using other methods. In my presentation I will present findings from analysis of my early data.

## **References:**

Alseth, B. Breiteig, T, Brekke, G.(2003) *Endring og utvikling ved R 97 som bakgrunn for videre planlegging og justering*. Rapport Norges Forskningsråd 2003.

Bryman, A.(2001) *Social Research Methods*. Oxford. Oxford University Press.

Krueger, R.A. (1994): *Focus Groups. 2<sup>nd</sup> edition. A practical guide for applied research* SAGE Publications, London