

Nordic Graduate School in Mathematics Education NoGSME

Barbro Grevholm
Nordic Conference in Mathematics Education
NORMA08
Copenhagen 21-25 April, 2008



Theme for the NoGSME-workshop

The use of ICT in mathematics education –
neither salvation nor catastrophe?

What can we learn from research and what
are our conclusions?

The workshop programme

Introduction 14.45-16.00

Coffee break 16.00-16.30

Group work 16.30-17.30

Reporting back from groups 17.30-18.00

Closing general discussion 18.00-18.30

Three short lectures focusing on research results

Mette Andresen - Use of ICT in school mathematics

Per Eskil Persson - Use of graphic calculators in
school mathematics

Christer Bergsten - Teacher education and use of ICT
in mathematics learning

Questions or themes that can be treated in the groups

- Pre-school children use computers today without any problems. How will this influence the learning of mathematics in schools?
- Use of ICT in the pre-school - how and when is it done efficiently?
- Development work is going on where mathematics classes in upper secondary school only use one tool during lessons: the computer. What could be the consequences of that?

More questions

- Teachers need competence development in the area of use of ICT-tools in teaching and learning mathematics. How could this issue be resolved? And what kind of competence is needed?
- What are the characteristics of use of ICT in teaching and learning mathematics at university level, including teacher education?
- Different views on use of ICT and traditions in school mathematics and university mathematics seems to be the case? What problems or opportunities for the learners can be created by this fact?

More questions

- What are the most strengthening features and most threatening features in use of ICT in school mathematics learning?
- What kinds of questions about the use of ICT in mathematics education are meaningful to ask and possible to answer through research?
- What in mathematics is learnt more easily by the use of what ICT?

More questions

- Why is it that computers are generally still not much used in mathematics teaching?
- Why is it that use of (graphing) calculators in mathematics teaching is still at an *ad hoc* level?

Group leaders

- Mette Andresen & Paul Drijvers
 - Christer Bergsten
 - Mary Billington
 - Ingvald Erfjord
 - Hildegunn Espeland
 - Eva Jablonka
 - Gudny Gunnarsdottir
 - Per Eskil Persson

A glimpse of history on use of technology in ME

1978 The first stand alone computer alfa LSI in
Bergaskolan Eslöv
- a 30 year jubilee

1972 the first electronic calculator in my upper
secondary school
The NUMA-project

1956 The first tool allowed to me for mathematical
calculations