Learning studies in Sweden

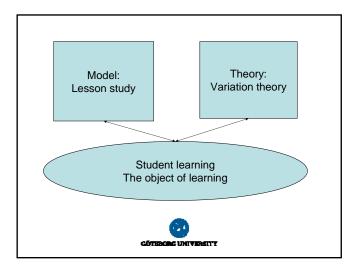
U Runesson



What is a Learning study?

- Similar to lesson study but grounded in a theoretical framework
- Focus on the object of learning: What is critical for learning?
- Variation theory as a guiding principle for planning and evaluation
- Student understanding the point of departure
- Systematic planning, evaluation and feedback

COMPANY UNIVERSITY



Learning study first phase

- Combining research and school developmental work (Funded by The Swedish Research Council, Committee for Educational Science) 2003-2005.
- Primary, lower secondary (mathematics, Swedish & English) Higher education (economics)
- · Researching critical aspects for learning



Learning on three levels

- Learners
- Teachers
- Researchers e.g. Runesson (in press); Kullberg, & Runesson, (2006); Kullberg, (2007); Holmqvist (Ed.) (2006)



- Carefully examining student understanding before and after the lesson
- Detecting differences in learning outcomes and relating to differences in the lessons
- · Identifying critical aspects for learning



Are there numbers between .97 and .98? Critical aspects for learning (Kullberg, 2004)

Simultaneous discernment of:

Different

representations of 97%

rational numbers 0,97

Part-whole relation



97/100

Learning study second phase

- i) Development and testing research results
- ii) Teacher driven school development



Learning study second phase Development and testing research results

- Can lessons be replicated/reproduced?
- Are results from Learning studies sustainable?
- What is a lesson? How could a lesson be described and communicated?



· Research design, an

example: (Kullberg, 2007)

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Teacher	T 1	T 2
/Lesson		
design		
D1		
D2		



Lesson design

- · Critical aspects
- · Pattern of variation and invariance



 How can results from Learning studies in Hong Kong be used as a resource for Swedish teachers?

Teachers/	T1	T2	T3	T4	T5
Design	1	1	1	1	1

Learning study second phase Teacher driven school development

- Courses in Learning study at two universities
- Swedish national department of school development supporting Learning/lesson studies in mathematics
- Planned: an Internet based network, national conference



Thank you!

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