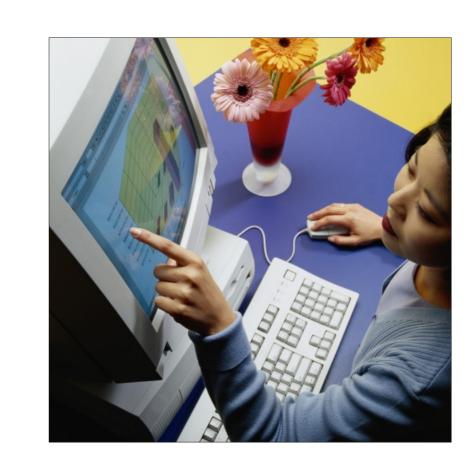


ON-LINE FORMATIVE ASSESSMENT

IN HIGHER EDUCATION

1. From elite to mass education

- Increasing number of students
 - ◆ In the 1940s 11 000 students studied at universities and institutes in Sweden
 - ◆ At the end of the millenium there were more than 300 000
 - ◆ During the last decade the number of students have increased by more than 50 percent

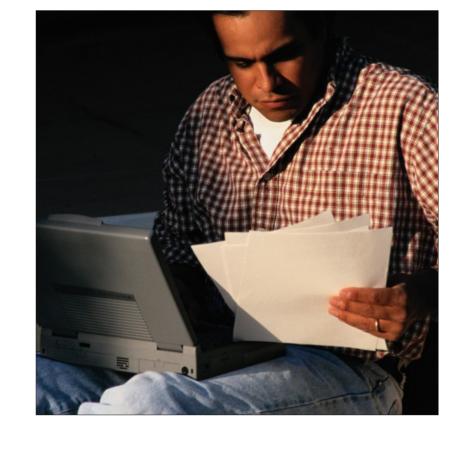


2. Crisis in higher education

- Increasing student-staff ratios
 - ◆ In the 1990s student/staff ratios increased from 10:1 to 15:1
- Consequences
 - ◆ Students are taught in large classes and big lecture halls
 - ◆ Possibility for students to ask questions is limited
 - ◆ Difficult for teachers to return individual feedback to the students
 - ◆ Difficult to promote student learning
 - ◆ Stress
 - Fatique

3. Solution of the crisis?

- Much attention is given to ICT
- More than 50 percent of the Swedish people have access to the internet
- Sweden tops the IT-league
- Can new technology promote student learning?

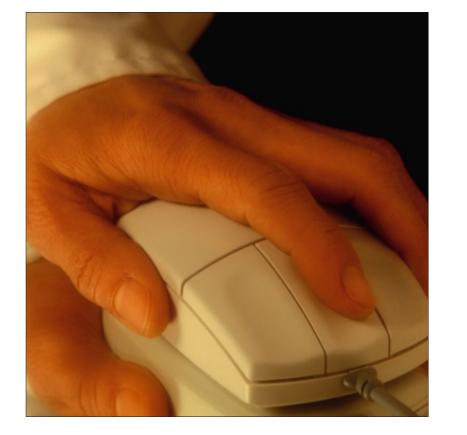


4. Formative low-stakes assessment

- Methods of assessment are determined by our beliefs about learning
- Can assessment support learning as well as measure learning through internet based processes?

5. Exploration of these possibilities

- Execution of the Umeå Study
 - ◆ Staff training
 - ◆ Implementing on-line assessment
 - ◆ Interviews and surveys undertaken

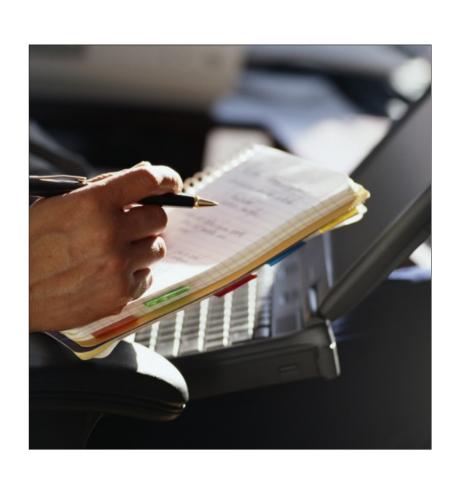


6. Teachers view of on-line formative assessment

- Worth repeating
- Time-saving
- Item analysis possible
- Performance data
- More sophisticated feedback

7. Students view of on-line formative assessment

- Speedy feedback
- Good support
- Time friendly
- Easy access
- Preferable over pencil and paper



Bertil.Roos@pedag.umu.se Bertil.Roos@cut.umu.se

8. Future research

- Analysis of qualitative changes in students learning
- Time and cost-benefit analysis