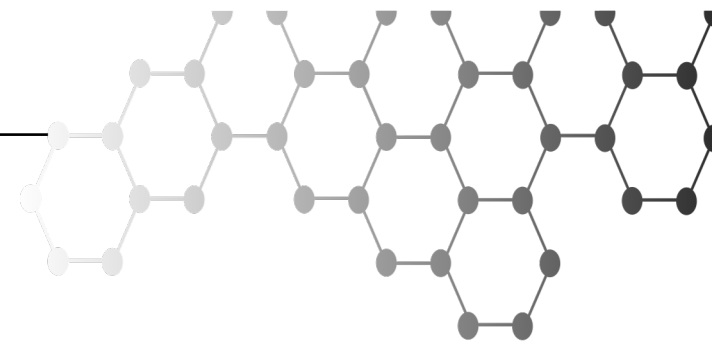


CHALMERS



CHALMERS



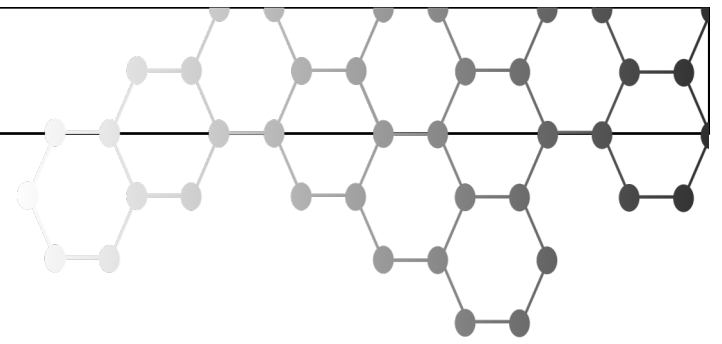


2nd International Conference on Technology in Higher Education
June 1-4, 2016, Marrakech, Marocko

THE INTRODUCTION OF DIGITAL EXAMS – EXPERIENCES FROM A PILOT STUDY

DAN PAULIN AND KAJ SUNESON

**CHALMERS UNIVERSITY OF TECHNOLOGY, GOTHENBURG,
SWEDEN**



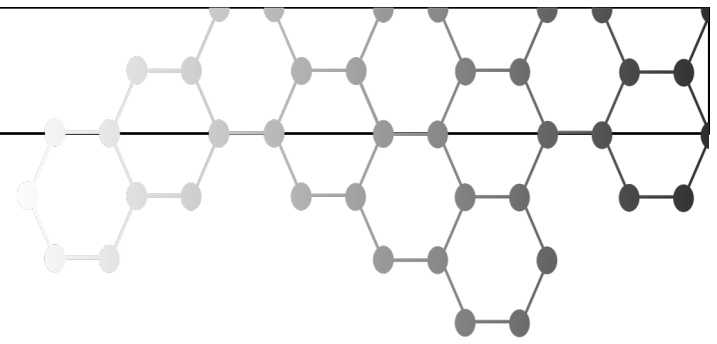
PRESENTATION STRUCTURE

Background

Digital examination pilot project

Observations

Recommendations



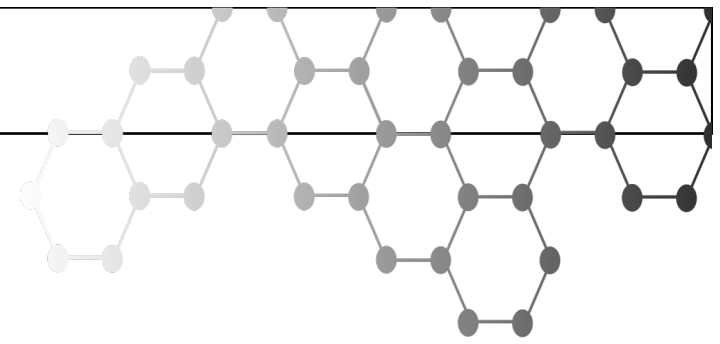
BACKGROUND

Driving forces – External

New national quality assurance system

Nationwide project – Digital Examination

Denmark ahead – Norway similar – Finland similar



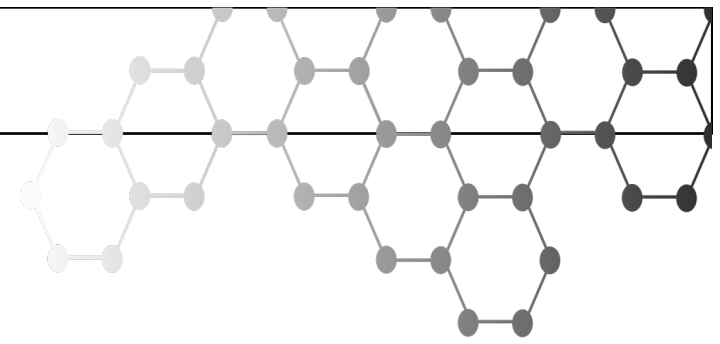
BACKGROUND

Driving forces - Internal

Students expect to use their own computers/tablets during exams

Improve exams as learning opportunities

Quality assured administrative processes



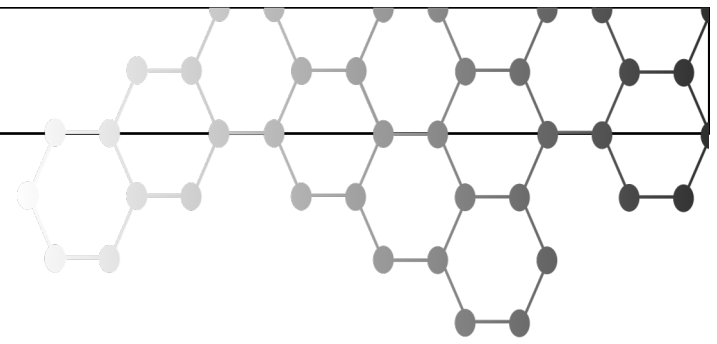
DIGITAL EXAMINATION PILOT PROJECT

Three management courses, BSc level

Two different webbased examination systems

130 students and three teachers

Evaluation through questions during the exams, the regular course evaluation surveys, a workshop and individual interviews



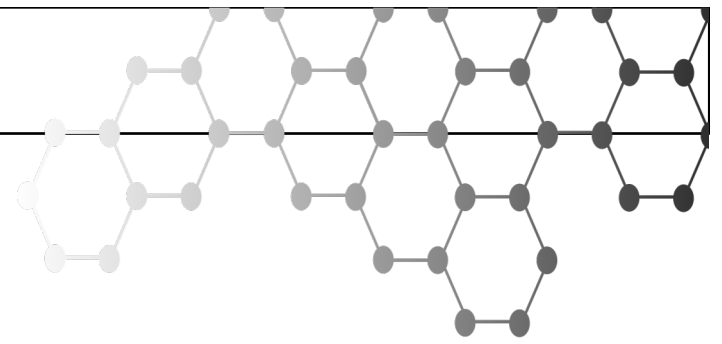
OBSERVATIONS - STUDENTS

Generally very positive

"Practicalities need improvement"

Demand equal conditions regardless of
examination system used

Combination Computer – Paper wanted



OBSERVATIONS - STUDENTS

Advantages

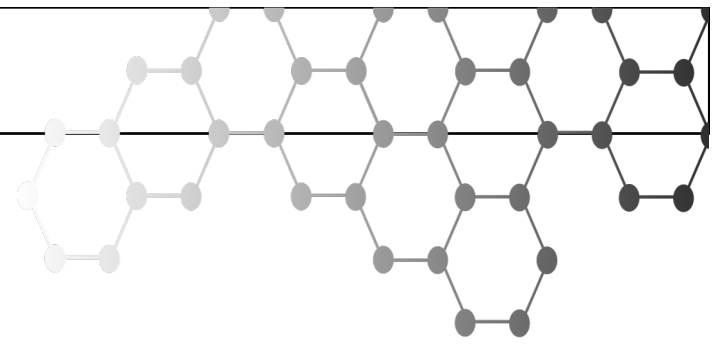
Own computer! "We are not used to write with a pencil"

Editing their answers

Improves anonymity for exams

Better for the environment

Improved teacher feedback



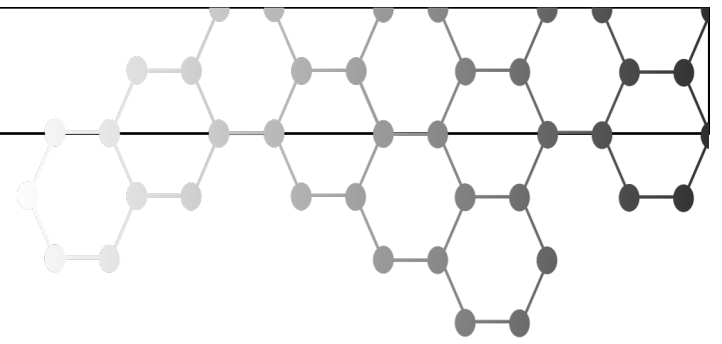
OBSERVATIONS - STUDENTS

Disadvantages

Tiring to sit in front of a screen for hours

Noisy

Worries about system failure

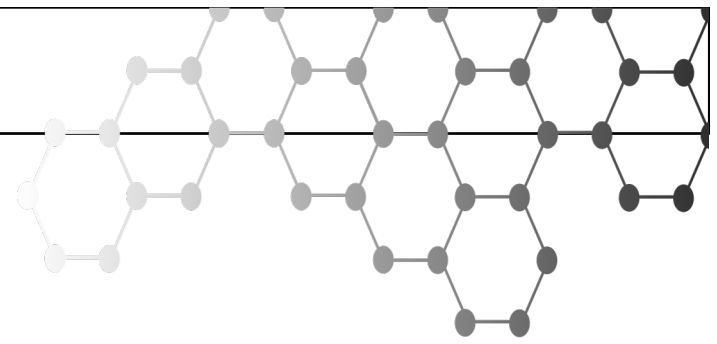


OBSERVATIONS - TEACHERS

Generally positive

Important to ensure that the examination tests the right things

Dual systems (computer and paper) is complex



OBSERVATIONS - TEACHERS

Advantages

- Test bank development

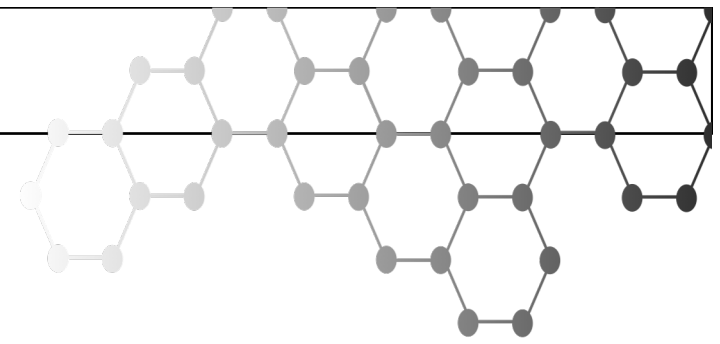
- Automated grading possible

- The exam becomes a learning activity

- Grading can be done anytime and anywhere

- Grading takes less time (-33%)

- Enables the use of films/simulations during the exams



OBSERVATIONS - TEACHERS

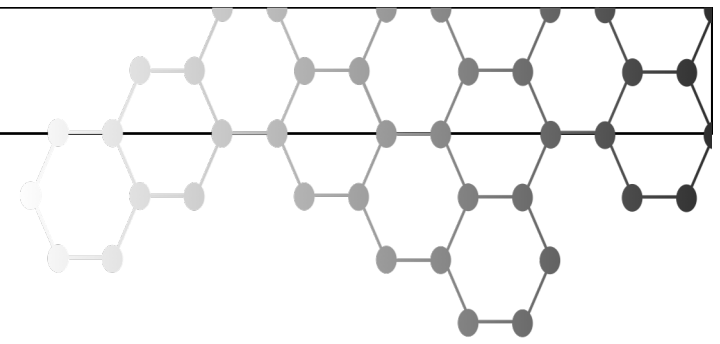
Disadvantages

- Risk of simplicity before proper examination

- Old exam questions may be reused more often

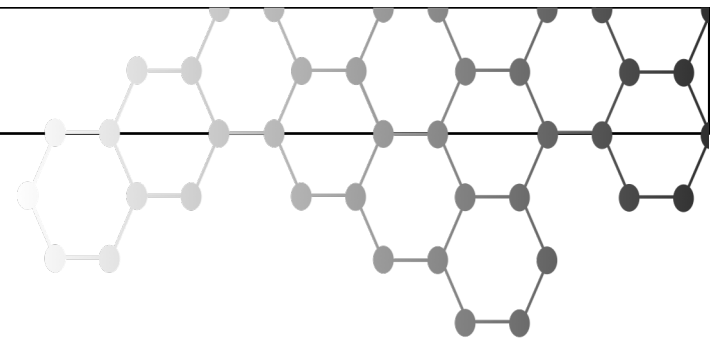
- Extended student feedback takes time

- Perceived as "easier to cheat"



OBSERVATIONS – ADMINISTRATIVE STAFF

Administrative processes are facilitated
Routines important for everyone
Education needed

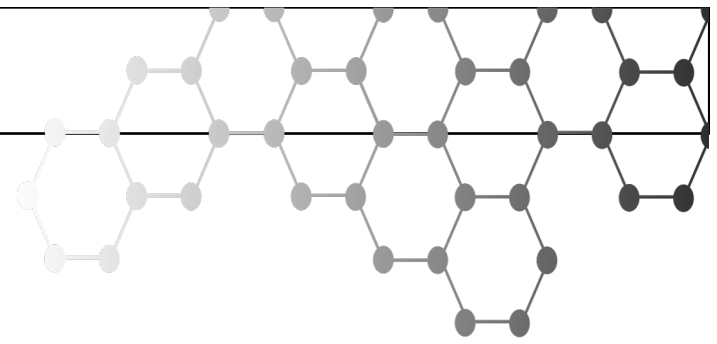


OBSERVATIONS – ADMINISTRATIVE STAFF

Advantages

- Decreased use of paper

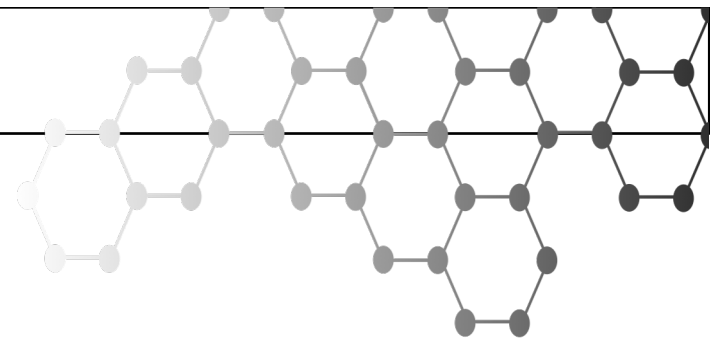
- Simplifies the grading when multiple teachers are involved



OBSERVATIONS – ADMINISTRATIVE STAFF

Disadvantages

Current examination process cannot deal with the new situation



GENERAL OBSERVATIONS – ALL GROUPS

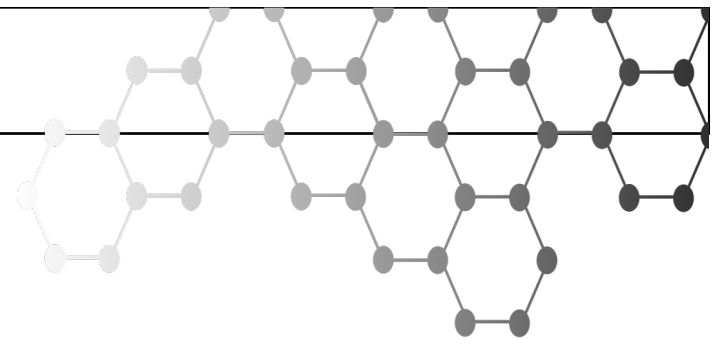
Generally very positive / positive

Saves time during grading

Demands a resource demanding hands-on approach initially

Education for all three groups necessary before implementation

Facilities are not adapted for digital examination



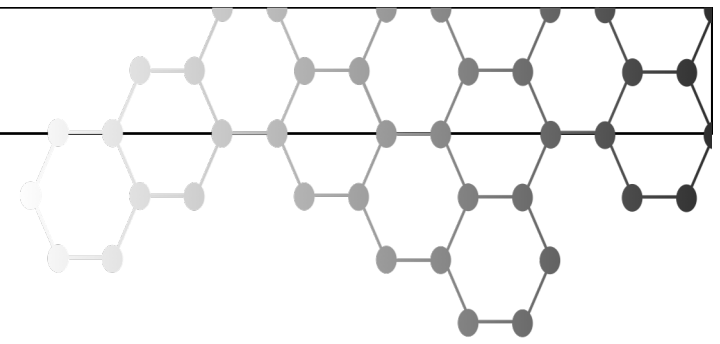
RECOMMENDATIONS

Continue to implement – "It will happen whether we like it or not"

Ensure that digital exams capture the desired knowledge

Products on the digital examination system market are immature

Support processes need to be adapted to digital examination



Thank you for your attention!

