National snapshots
Norway
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About NTNU

• 14 faculties and 70 departments and divisions

• Approximately 39 000 studenter.
  – 33 000 students in Trondheim, 3 500 students in Gjøvik and 2500 students in Ålesund (round numbers).
  – 6553 graduated with a completed degree in 2014.
  – 6000 participants in continuing education courses with credit in 2014.
  – 3000 international students.
  – 340 doctoral degrees awarded in 2015

• 6500 employees
  – 4 053 FTE in teaching, research and outreach positions (39 % female)

• Norway’s largest participant in the EU’s Horizon 2020 (H2020).
  Participant in 38 projects, of which 2 are ERC projects and 10 for which the university is coordinator.

• Interim (28 IT departments) going to be one?
Kunnskap for en bedre verden
STRASTRATEGIC\n RESEARCH\n AREAS 2014–2023\n
ENERGY \nHEALTH \nOCEANS \nSUSTAINABILITY
2014 Nobel Prize

NTNU professors May-Britt Moser and Edvard Moser were awarded the 2014 Nobel Prize in Physiology or Medicine for their discovery of cells that constitute an “inner GPS” in the brain.
NTNU Teaching Excellence

an integrated and wide-ranging initiative
National snapshots - Norway
Drivers

- Technology drive
- Political drive for mergers
- Common legal regulations
  - Legal aspects of digital summative assessments
- Requirement for equal treatment
- Drive towards self service => digitalization of services

- Bologna-process, ECTS
- Shared learning objectives
  - National plans for learning
  - National exams
- Collaboration on curriculum
- Shared use of data across the sector

The drivers put heavy requirements BOTH to business and IT!
Initiatives and focus areas

• Personal Learning Environment (PLE)
• (National) Learning Object Repository ((N)(LOR))
• Electronic Assessment System (eAS)
• Next Generation Digital Learning Environment (NGDLE)

• Cloud Services within HED
• Information Security
• Standardization & Enterprise Architecture
• Universal design
• Innovation & PreCommercialAgreements
• National collaboration
Digital Assessment
Assessment process: From manual to digital routines

In general:
• Must support digital og manual routines
• Access to systems. People with loose connection to institution
• Digital signatures
• Clarify regulations
• Different forms of assessment
• Role of Learning Management Systems
• Hand over information to internal and national archives

System for register examinations
Formalities
Overview, e.g. language-variants
Shortage, reminders
Archiving: Need of history archiving.
Critical: Access

Digital
Locality
Candidate
Examination/
questions
Medium

Preparation

Systems for digital exam
Challenges:
• Control access
• Scaling
• Context
• Infrastructure
• Costs
• Competence
Critical: Stability

Digital
Examination

Digital
Answers

Digital
Grading

Digital
Journal

Digital
Archiving

Feedback on grade and complaints

Need for system support. Case management system integration with archive system

FS
System for digital censorship
- Process support
- Transparent censorship
Support for varying methodology

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Manual
Inform the students

Norwegian State
Education Loan Fund

Ministry of Education
(DBH)
Digital assessment for all

Technology

Pedagogical perspective

Organisational change

Legal issues

26 universiteter & Høgskoler, NSO, FS, BIBSYS, UNINETT, universell*
Pre-standardization descriptions – CBP documents

- The digital assessment market is immature. Current Best Practice (CBP) documents, and other reports as pre-standardization descriptions helps to generate commend understanding of needs and requirements for digital assessment.

- CBP documents gives us a common understanding of digital assessment, common definitions, and a common starting point for future work.

- CBP 42: Physical infrastructure for digital assessment

- CBP 44: Clients for digital assessment

- CBP xx: Integration for digital assessment

- CBP 44: Digital assessment process & IT-architecture

- CBP 45: Logging and monitoring of digital assessment

- CBP xx: Legal issues regarding use of cloud services

**EUNIS Learning and Teaching task force:**
Vendors – Digital assessment (Norwegian HighEd)

- ENOVATE

- Inspera assessment
  - http://www.inspera.com

- UNIwise (prefered)
  - http://uniwise.dk
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Poor</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Excellent</th>
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</thead>
<tbody>
<tr>
<td>Reliable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>To which the extent is the assessment consistent?</td>
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<td>Valid</td>
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<td>Does the assessment measure what it is purported to measure?</td>
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<td>Authentic</td>
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<tr>
<td>How does the assessment measure the candidate skills?</td>
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<td>Transparent</td>
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<td>How understandable is the assessment for all candidates?</td>
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<td>Equitable</td>
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<td>How just and fair is the assessment for all candidates?</td>
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Source: Vidar Gynnild, 2016
Welcome to NTNU and Trondheim!

NTNU: http://www.ntnu.edu/
Trondheim: http://trondheim.com/

Thank You for Your attention and remember:

Sharing ___ is caring

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