Digital assessment
A National coordination project

Freddy Barstad, National coordinator Digital Assessment, eCampus UNINETT
SUNET - a short webinar about Digital eksamen in Norway - for Swedish universities

2015-11-27
UNINETT

UNINETT is the Norwegian NREN

Primarily serving higher education

300,000+ students

200+ customers

Providing several administrative services for our customers

Collaboration between NREN and customers

There are major changes in Norway’s higher education, universities are merging with university colleges, forming new larger, more attractive institutions for the students.

eCampus program (2012-2016)
Why Digital Assessment project?

- Digital assessment is about working smarter, moving from paper based assessment procedures to digital procedures, reducing the time and energy spent, and improving the quality of the old written assessments procedures.

- To change from paper-based procedures to digital procedures requires change in the operations procedures at the university, the assessment regulations at the university and the perception or understanding of the assessment processes, among both students and staff at the university.

- Students of today can’t write by hand anymore, they using PCs in their study, why can’t they use PCs on exams?

- There is no turnkey product, immature solutions from vendors, several promising solution but lacking features supporting workflow.
Digital assessment as a whole

- Technology UNINETT
- Pedagogical perspective
- Digital assessment for all
- Organisational change
- Legal issues
Assessment process: From manual to digital routines

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

Locality
Candidate Examination / questions
Medium

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

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

FS
Examination - registry
Digital
Preparation

FS
Examination
Digital
Examination

FS
Answers
Digital
Answers Status Info

FS
Grading
Digital
Grading

FS
Journal
Digital
Journal

FS
Feedback on grade and complaints
Digital
Feedback on grade and complaints

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

FS
Archiv
Digital
Archiv

In general:
- Must support digital and 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

by NTNU

Norwegian State Education Loan Fund
Ministry of Education (DBH)
Assessment process

Preparation

Examination

Grading

Finalizing
Eksempel:

For studenter:
Gjennomføre eksamen i
- Valgte løsning/verktøy
- Annet egnet verktøy, eks. MS Word for hjemme-eksamen

For forelesere/sensorer:
- Forberedelse, lage oppgave osv.
- Sensurere besvarelse
- Bagrunde
- Behandle klage
- Evt arkivere

For adm personell
- Håndtere eksamensavvikling, oppmøte, levering, arkivering osv.
Digital assessment process & IT-architecture
How is the Digital Assessment project organized?

- The digital assessment project is a part of the eCampus program.
- UNINETT has established a national project to ensure that students get access to digital examination.
- All universities and university colleges were invited to participate in the project.
- Created several working groups, with participation from the universities.
- Lots of coordination of existing activity.
- Facilitating exchange of experiences.
- Writing specifications (CBP).
Project organization

Development agreement

Pilot agreements

Pilot 1

Vendor 1

Vendor n

Vendor 2

Vendor 1

11 vendors

Samarbeidstiltaket FS (student data)

Task force – Digital workflow

Task force - IT-architecture

Task force – Client devices

National task force - digital assessment (Norgesuniversitetet og UHR)

Student democracy

BIBSYS

Universell

Task force – Integrations

Task force – Infrastructure

National project for Digital Assessment (UNINETTs eCampus-program)

Participation

Participating Universities

International

26 Universities/University colleges

UNINETT

GEANT

EUNIS

SUNET

JISC
Project deliveries

- Sharing knowledge
- Market development
- Pre-standardization descriptions (CBP-documents)
- Establish necessary infrastructure
- Risk analysis
- Prepare procurement(s)
Sharing knowledge

Seminar series; [https://www.uninett.no/digitaleksamen/arrangementer-om-digital-eksamen](https://www.uninett.no/digitaleksamen/arrangementer-om-digital-eksamen)

Web-site: [https://www.uninett.no/digitaleksamen](https://www.uninett.no/digitaleksamen)


Experience reporting: [https://www.uninett.no/digitaleksamen/status-mars-2014](https://www.uninett.no/digitaleksamen/status-mars-2014)

International collaboration jisc & [GEANT](http) & [EUNIS](http) (ELTF) & [SUNET](http)
Market development

• Pre-commercial Procurement (PCP)
• Dialog conference
• Vendors day at seminar
  https://www.uninett.no/seminar-om-digital-eksamen/leverand%C3%B8rer
• Development agreements
• Sharing results
• Establish and testing integrations
Pre-standardization descriptions - CBP documents

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

- UFS145/CBP 42 - Physical Infrastructure (Norwegian / English)
- UFS146/CBP 43 - Client devices (Norwegian / English)
- UFS147/CBP xx - Integrations (forthcoming)
- UFS148/CBP 44 - Digital assessment process & IT-architecture (Norwegian / English)
- UFS149/CBP 45 - Logging and monitoring in digital assessment (Norwegian / English)
- UFS150/CBP xx - Regulations & Cloud services (forthcoming)

Translation financed by GÉANT sponsored the European Commission.

CBSs are free, openly available documents available from the GÉANT website

(http://services.geant.net/cbp/Knowledge_Base/Pages/Home.aspx)

In Norwegian: https://www.uninett.no/digitaleksamen
Dr. Gill Ferrell: “Look out for our Assessment Toolkit due to launch in October 2015”
Workflow analysis
Applikasjonskart

Diagrammet viser forbindelser mellom ulike applikasjoner og systemer.

1. Studentportal, Innleverings-portal
2. Student-administrativt system (FS)
3. Ekstern oppgavebank
4. Autentisering (ID-porten, FEIDE)
5. Plagiatkontroll
6. Sak/arkiv (ePhorte, P360, DSpace)
Pre-commercial Procurement (PCP)
National pilot in the supplier development program
A practical guide to PCP

http://www.innova-eu.net/docs/pcp17.pdf
Gruppene for ROS-analyse digital eksamen er nå etablert.

En nasjonal risiko-og sårbarhetsanalyse av løsninger for digital eksamen skal gjennomføres høsten 2015

https://www.uninett.no/invitasjon-ros-analyse-digital-eksamen

Organisering:
ROS-arbeidet vil bli ledet av seniorrådgiver Øivind Høiem hos sekretariat for informasjonssikkerhet ved UNINETT

Arbeidsomfanget er berørt til deltakelse på to-tre samlinger i løpet av høsten 2015.

To arbeidsgrupper er nå etablert og består av følgende medlemmer:

**Arbeidsgruppe ROS Faglig & administrativt**

<table>
<thead>
<tr>
<th>Øivind Høiem (Leder)</th>
<th>UNINETT, Sikkerhetssekretariat</th>
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<td>Marianne Huse</td>
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**Første arbeidsmøte er den 2/11-15, 09:00-16:00, ved NTNU**

**Arbeidsgruppe ROS Teknisk**

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**Første arbeidsmøte er den 26/10-15, 09:00-16:00, ved UiO**
eCampus digital eksamen

UFS Infrastruktur
UFS Integrasjoner
UFS Klienter
UFS Arkitektur
UFS Logging og Monitoring
UFS Skytjenester
eCampus digital eksamen

UNINETT

2015

2020

UFS Infrastruktur
UFS Integrasjoner
UFS Klienter
UFS Arkitektur
UFS Logging og monitoring
UFS Skytjenester
Innkjøp
2015

- eCampus digital eksamen
- Innkjøp
- Digital eksamen fase 1

2020

- UFS Infrastruktur
- UFS Integrasjoner
- UFS Klienter
- UFS Arkitektur
- UFS Logging og monitorering
- UFS skytjenester

UNINETT
Sharing is caring

A mature HE-sector and a mature market

https://www.uninett.no/digitaleksamen