The 2008 Annual NOVA Seminar, Helsinki, April 24-25, 2008.

NOVA - implementing ICT - with focus on distance learning -

The aim of this seminar is to give the participants an insight into the current status of the use of ICT (information and communication technology) in distance learning, from a technological as well as pedagogical point of view. The audience we seek is, besides NOVA officials, teachers and students that are curious about the status and the possibilities, and want to get information and discuss their own options. You will meet professional e-learning experts as well as teacher colleagues with experience from different NOVA projects, and even some with an international view beyond the Nordic region. Welcome.

On the pages following this, you will find

Abstracts for the presentations and workshops listed below and list of members of the panel for the panel discussion

Day I - April 24 (Chairman Lisa Sennerby Forsse)

13.20 – 15.00 Presentations

1. Future of ICT and distance learning – Inspirations
   Dan Lineberger, Prof of Horticulture, Texas A&M University

2. Presentations from NOVA and BOVA activities

   a. Leon Brimer, LIFE - NOVA Pedictnet

   b. Mike Moulton, UMB

   c. Anita Monty, LIFE

   d. Alvidas Sarlauskas, BOVA

Day II - April 25

08.30 - 10.30 Workshops

1. Experiences from NOVA network projects I (Anders Kiessling, Mike Moulton, Aquaculture)

2. Experiences from NOVA network projects II (Per Magnus Ekö, SLU)

3. Working with ICT support systems (Anita Monty and Søren Larsen, LIFE)

4. Aggie Horticulture - webbased education (Dan Lineberger)

Day I - *Presentations*

Future of ICT and distance learning – Inspirations

Evolution of Higher Education in the Agricultural Sciences

Role of the World Wide Web

R. Daniel Lineberger

Department of Horticultural Sciences, Texas A&M University

College Station, TX 77843-2133 USA

The development of the World Wide Web changed the nature of education at all levels, but its effects have been most dramatic in higher education. The University environment always has supported early adoption of technology and innovative approaches to meeting societal needs. Much acclaim initially was focused on the Web as a tool for meeting the needs of "distance" students, those who were "place-bound" at a distance from the University because of location or employment status and could not attend "traditional" classes on campus. Most Universities have developed programs to address the needs of these non-traditional students, and private, for-profit educational enterprises that employ the "virtual campus" model are evolving at a rapid rate. However, the most dramatic impact of Web-delivered education has been on the methodology used to teach the traditional student at all levels, especially at the University level. The modern classroom employs a host of technological devices (Web-enabled computers, data displays, "white" boards, video-conferencing equipment, video/audio recorders, wireless responders) that allow the teacher unparalleled access to the archive of information stored on the Web that can be delivered in a variety of digital formats from PowerPoint slides to podcasts. The march of "technology-mediated" instruction into the classroom has been accompanied by challenges for both the teacher and student. Equipment and infrastructure costs have increased exponentially, and the life span of educational media has decreased proportionately. Early adopters of technology-mediated instruction were met with steep learning curves in the process of preparing and serving their educational content. Software advances have mitigated this problem, but the modern day University faculty member still must devote significant time to designing effective instructional methodology in addition to organizing current and compelling course content.

Technology-mediated instruction may be the solution that enables academic institutions to continue programs even in the face declining enrollments. Many disciplines in the agricultural sciences are threatened by decreasing enrollments that in turn result in more difficulty justifying large faculties. Faculty from different institutions can organize themselves into disciplinary "virtual programs" and maximize the impact of their Web-delivered courses. Students from many institutions can enroll in the virtual programs thereby increasing the enrollments in the programs and decreasing the cost per student. This emerging model for higher education in the agricultural sciences demands institutions *and* faculty who embrace technology, collaboration, and CHANGE.

NOVA – implementing ICT with focus on distance learning

*PEDICTNET ("NOVA **PED**AGOGICAL AND **ICT**-PEDAGOGICAL **NET**WORK")*

Leon Brimer

Department of Veterinary Pathobiology, Faculty of Life Sciences (LIFE), University of Copenhagen

The mission of PEDICTNET is to bring together university teachers, librarians, didactic experts, IT specialists and other relevant staff as well as dedicated students in a vibrant forum "the PEDICTNET" to discuss and work together on the further development of modern, stimulating and effective methods within the whole area of teaching and learning in a university setting.

When it comes to IT facilitated distance learning a number of PEDICTNET activities has, over the years, gathered more than hundred staff members representing all of the NOVA institutions, and for certain of the activities also BOVA members. Bottlenecks have been identified and discussed, and solutions proposed/worked out. The present presentation will in a very brief form present the activities and results obtained; i.e. as an appetizer to the more problem focused and detailed single presentations, and the workshops following. The presentation will also open the discussion about where NOVA shall go and how, to be further discussed during the "Panel Discussion" on day two.

The small steps count.

Experiences from a Pedictnet adviser

Mike Moulton

UMB, Aas, Norway

I will relate my experiences with assisting the Aquaculture and Agroecology networks. I will ask the question ”Can ICT be used strategically and practically to attain network as well as NOVA goals?” The answer is clear. I will give practical examples and suggest a strategy for continued work in this area.

The LIFE of e-Learning

Anita Monty

IT Learning Center, Faculty of Life Sciences (LIFE), University of Copenhagen

At LIFE an e-learning strategy was put forward in 2005 . The strategy focused on implementing e-learning at three pilot courses. This resulted in the development of a successful pedagogical model for running courses online. The faculty based IT Learning Center (ITLC) has a supportive role as it disseminates the best practices from the pilot courses and nurse lecturers in the development of new e-learning courses. We currently run 32 courses using e-learning in some form.

In fall 2007 a new course called Environmental Management In Europe (EME) was developed. At this course students were situated at different European universities. The course had a duration of 5 months and the challenge was to keep students motivated and active throughout the course. Several departments at LIFE were involved in running the course together with colleagues from around Europe. The experiences gained in the EME course could potentially be used for future NOVA online courses.

This presentation will include experiences from the pilot courses and the EME course. It's the story of how LIFE developed and implemented e-learning successfully.

LIFE has with the support of NOVA developed an online presentation of our pedagogical method for e-learning. Available at: www.nova-university.org/pedict/

Use of ICT means in joint education in the BOVA University network

Alvidas Šarlauskas

Lithuanian Veterinary Academy, Kaunas, Lithuania

Implementation and use of modern ICT means in joint education is one of the objectives stated in BOVA University network three year development strategy for 2006-2008. Use of ICT has been foreseen as one of supporting means for joint education having in mind a number of advantages as saving costs for travelling and board, raise of quality of course distance learning part, extending course credits, fixing course materials and making it easy to repeat the course after some time. However, implementation of ICT based teaching methods to the practise appears much more complex issue than it was assumed in the beginning. Almost all BOVA member universities have a good access to modern technical facilities including LMS platforms and video conferencing and recording facilities. All Baltic countries put a national priority to distance education and provide university teachers with appropriate education on the use of ICT means in education and significant financial resources to elaborate ICT based courses. On the BOVA University network, there were a number of events aimed to facilitation of the use of ICT in international courses and appropriate financial resources provided since 2004. Few kick-off seminars were organised together with NOVA UN inviting most perspective groups from academic networks providing them with latest knowledge on ICT based education. Despite of these efforts, the results are not satisfactory as teachers at almost all courses still prefer "old-shaped" distance learning part assigning reading and/or writing tasks for students before meetings and there was only one pure distance international course proposed in the BOVA University network. This show a number of still unknown reasons why development of ICT based distance courses being quite successful at national level do not accelerate when it comes to international education.

Day II - *Workshops*

Experiences from NOVA-networks in Aquaculture and Agroecology

Anders Kiessling and Mike Moulton

UMB, Aas, Norway

This workshop will focus on experiences from two NOVA-networks and give practical examples of how ICT has been used to help meet goals and strengthen cooperation within the networks.

1. Development of the NOVA Aquaculture Network – basis for cooperation, where we are, where we want to go and the role of ICT.
2. Mobility and flexibility – NOVA Agroecology Network as an example. New channels to students, credit sharing and a platform for European cooperation
3. Practical examples of virtual mobility, demonstration of Interwise (meetings and lectures via the Web). Discussion.

Experiences from NOVA network projects II

Per Magnus Ekö

Southern Swedish Forest Research Centre, Alnarp, Sweden

I would like to focus on what we have been doing at our department due to our international engagement and due to being situated 1300 km from our mother faculty in Umeå.

The headline for the event is "Workshops", it could therefore be an idea to start with some question to be discussed in smaller groups. Suggested questions are:

- Are there any incentives for using distance pedagogy in ordinary campus based education?
- What are the conditions and possibilities to implement such pedagogy?

(It is of course not possible to make any deeper analyses of these questions as it must be finished within 10 minutes. But a short discussion could perhaps serve as starters for my presentation, as it is the current issues that will be covered.)

Presentation

Background (5 min)
The situation at our department and why we have implemented distance courses in our curricula and elements of ICT and distance pedagogy in our other courses

The pedagogic discussion at our department, for and against distance leering and ICT.

How do we work? (30 min)
Two examples:

- A true distance course
- Implementation of distance pedagogy and ICT in our "campus courses"

Demonstration of how we work and design our courses, and of the technique we use. (Knut also suggested setting up a real Skype meeting, if you still consider it to be a good idea I will think more of how to conduct it).

Perceived difficulties, the future, our best tips and discussion (5 min)
How to handle reluctant teachers and students?
How to handle new, constantly emerging and "competing" techniques

Tip 1: Planning to introduce ICT and distance education? In that case educate the teachers preferable by letting themselves participate in a distance course as students

Tip 2: Use robust, user-friendly and well known (especially to students) tools and make sure that you can have as great control over them as possible.

From strategy to implementation: Working with a scaffolding model to increase interaction and learning in e-learning

Anita Monty and Søren Larsen,

IT Learning Center, Faculty of Life Sciences, University of Copenhagen

Previous attempts to do successful completely online courses at The Faculty of Life Sciences (LIFE) had problems with student activity and completion rates. In response to this IT Learning Center in cooperation with our lecturers implemented the e-learning model of Professor Gilly Salmon, University of Leicester, UK. The scaffolding five-stage model was modified to fit into a Danish context and aims at making the learning process of an online course both inspiring and focused by the means of so-called e-tivities: The driving factor of the five-stage model. E-tivities are provided by the lecturer and are "tasks" for the students to do in the virtual discussion room of the learning management system and stimulates them to take active part in the course.

In this workshop we will present the model of Gilly Salmon including examples of e-tivities from LIFE courses. Also, we will describe how to design targeted and meaningful e-tivitites.

Aggie Horticulture - webbased education (Dan Lineberger)

Technology-mediated Instruction for the AgriLife Sciences

R. Daniel Lineberger

Department of Horticultural Sciences

Texas A&M University

College Station, TX 77843-2133 USA

Developed near the end of the last century, the World Wide Web has evolved from its beginning as a platform- and distance-independent tool for sharing documents and images into something so different that it has been given the name “Web 2.0”. Video conferencing has evolved to the point that one could nearly duplicate the traditional lecture environment for students separated by both distance and time. Therein lies the problem—many faculty are using technology to deliver course content designed for the way they “used to teach.”

Modern Web technology supports a content-rich learning environment that can address the needs of students separated from the instructor by both distance and time but it demands new skills and a new approach to pedagogy in order to maximize learning potential. Today’s students are so inundated with professionally prepared digital content that they are easily distracted from educational media that were regarded as “avant-garde” only a short time ago.

The workshop session will present an overview of the teaching methods used in several courses I have taught at Texas A&M University. Many of these courses are in versions two or three, having been re-designed to account for improved instructional design as well as recent technological innovations. Useful software, critical design skills, and impending network management issues will be addressed.

Panel Discussion

Panel members (alphabetically after family name):

Lena Andersson-Eklund

(Prorektor, Swedish University of Agricultural Sciences)

Per Holten-Andersen

(Dean, Faculty of Life Sciences, University of Copenhagen)

Dan Lineberger

(Professor of Horticulture, Department of Horticultural Sciences, Texas A&M University, College Station, Texas, U.S.A)

Michael Kirby Moulton

(Senior Advisor, Norwegian University of Life Sciences)

Britta Cathrina Poulsen,

(NSF representative and student at Faculty of Life Sciences, University of Copenhagen)