

Swedish participation and activities in the National e-Learning Centre (NeLC) Project during 2009

Summary report

A brief summary of activities where Swedish resources have had main role in the NeLC project during 2009.

PhD program

Ms. Thushani Weerasinge and Mr. Hakim Usoof continued their studies at Stockholm University and Umeå University respectively. Their studies are on schedule and they both plan their PhD seminar by mid 2011.

Prof. Brian Hudson, supervisor of Hakim Usoof has moved from Umeå University to University of Dundee. However, he will remain as Hakim's supervisor and his new position in Dundee should not affect Hakim's time-plan.

A new PhD student also started during 2009, Hiran Ekanayake. Hiran will do the main part of his studies at Skövde University, however enrolled at Stockholm University where he will also graduate. Hiran's MPhil dissertation was named "Cognitive-Emotional User Correction for Multimedia Interactions". For his PhD, Hiran will stay two consecutive years in Sweden and the remaining studies will be made at UCSC. His final PhD seminar will be held at Stockholm University, planned for 2012. Hiran's supervisors are Prof. Robert Ramberg at Stockholm University and Prof. Tome Ziemke, Skövde University. Hiran arrived in Sweden in September 2009.

Mini-split and study visits

Researchers and senior lecturers from Stockholm University supervised the following UCSC MPhil students during 2009:

- S.P.K Ranatunga
Plagiarism detection
- Kenneth Thilakarathna
Peer group learning using information technologies
- Chaturi
Study on applicability of e- Learning in the secondary education sector in Sri Lanka
- Madhavie Mudalige
Study of Digital library

Ranatunga and Kenneth made a study visit to Stockholm University during 2 months, May and June 2009. During their study visit they met with several researchers at SU and participated in a series of seminars. They both also started a reading course, Research methods and theories (7,5 credits), under the supervision of Henrik Hansson, Ass. Prof

while in Sweden.

Research and development project

Swedish as well as resources from other European countries have been involved in a number of R&D projects aiming to support e-learning development. Several research papers have been published as a result of these activities.

eNosha

Learning objects are fundamental building blocks for sustainable learning design and efficient development of digital content that support technology enhanced learning. Open educational resources and repositories that allow sharing and continue development of someone else's work could substantially enhance content development efficiency. I.e. systems that can support the internal content development process as well as work as a repository for external dissemination of open content are therefore vital tools in managing technology enhanced learning. To address this the eNosha project was initiated.

The eNosha project has resulted in an open source Learning Object Repository (LOR) to store and make possible the reuse of learning content. The repository should also be able to distribute some of UCSCs learning material as open content (OER). The specific project output during 2009 have been (a) systems design, (b) development as well as design of information structures and metadata models and (c) a production version of eNosha.

A three week visit took place mid 2009 to finalize the development of a production version of the eNosha system (<http://www.e-learning.lk/enosha>). The version released in August 2009 was made available to the eLearning centre staff.

An usability study was carried out in October through December 2009 and during a visit in December 2009 NeLC staff in the content development team were interviewed about their experiences of the system.

The project is a collaboration between UCSC, Stockholm University and Orebro University, Sweden.

Visualization

A researcher from University of Joensuu, Finland, held two workshops on tools used for compelling visualizations and animations of programs, algorithms and data structures. The workshops resulted in knowledge transfer regarding the possibilities to work with visualization tools as well as a discussion about its' relevance and adaptation of visualizations tools to the local context. Focus was on Jeliot 3, a programming animation system developed at the University of Joensuu, however, other tools were also considered.

Rural telecentres as hubs for e-learning

Two field studies were performed under 2009 both looking at the impact from telecentres on rural regions from an educational perspective. Rural telecentres often serve as technology hubs where people can access the Internet and modern communications. Since many universities provide courses and learning materials on-line and through Internet these hubs become important links to educational resources for the

local community.

[Place summaries of Henriks articles here...](#)

Review of on-line courses

A review was made of three on-line (NeLC) courses:

1. English for communication and IT
2. Mathematics for ICT
3. Fundamentals of ICT

The scope was to assess (i) the syllabi and stated learning outcomes, (ii) the effectiveness of the digital learning resources, (iii) its structure in the LMS, (iv) the relevance of the learning activities and assessment methods which go with the on-line material and, (v) the level of collaborative learning, peer support and facilitation. The review report aimed to provide guidance to UCSC for revisioning the courses.

Social learning

Taking full advantage of the group dynamics and the institutional memory that exists in R&D in order to create a knowledge organisation is not the most easy task. One way to facilitate and nourish a knowledge organisation is by open up for efficient interpersonal communications, maintaining transparency and leverage on know-how about your fellow colleagues by introducing a social network. The project has introduced an on-line social community during 2009 with the aim to support the wider NeLC knowledge organisation.

eAsia2009 conference

The eAsia2009 conference held in Colombo 2-4 December 2009 was indeed successful. The local NeLC project management staff made a remarkable job in planning the Digital learning track of the conference.

The following conference presentations were sponsored by the NeLC project (Swedish side).

Ass. Prof. Bert Geers

Delft University of Technology

Keynote: Changes in the Learning Process and the Impact on Education

Prof. Brian Hudson

University of Dundee

Keynote: Educational Design to Support Technology enhanced Assessment for Learning in Higher Education

Dr Henrik Hansson

Stockholm University

Keynote: Technology Enhanced Learning, Teaching and Validation of the Scientific Process and Outcomes - Sci-Pro

Prof. Robert Ramberg

Stockholm University

Keynote: Determining plagiarism: Assuming a pedagogical approach

Peter Mozelius

Stockholm 21 January 2010
Lars Glimbert, DSV

Stockholm University
Presentation: eNosha Design and development of a Learning Object Repository
(Article based on Action Research done during 2009 in the NeLC project).

Mathias Hatakka

Örebro University
Presentation: A Model for a Learning Object Repository Metadata Set
(Article based on Action Research done during 2009 in the NeLC project).