



THE STOCKHOLM INSTITUTE OF EDUCATION

**A CASE STUDY IN OPEN EDUCATIONAL RESOURCES PRODUCTION
AND USE IN HIGHER EDUCATION**

April 2006

TABLE OF CONTENTS

BACKGROUND	3
WHY THE LHS WAS CHOSEN	5
STATE OF THE ART	6
OPEN SOURCE SOFTWARE USE.....	6
<i>Conference System</i>	6
OPEN CONTENT USE	7
OPEN CONTENT PRODUCTION.....	7
<i>OER policy</i>	7
<i>Learning resource development</i>	8
CONCLUDING REMARKS	10
ANNEXES	11
LIST OF INTERVIEWEES	11
USEFUL LINKS.....	11

BACKGROUND

1. The Stockholm Institute of Education (in Swedish: Lärarhögskolan i Stockholm – LHS) started in the mid-1950s. It has Sweden's most comprehensive degree programs in education, enrolls almost 15 000 students and has a staff of some 600 people. The division of students and staff in different categories is shown in table 1 and 2.

2. The LHS is the only independent specialized institute of education in Sweden. It offers teacher education programmes for teachers in pre-school to adult education, a Study and Careers Counselling programme, a supplementary programme for special needs education and independent courses in a range of subject areas. A number of courses and certain study programmes are offered partly or entirely as distance studies. The LHS also offers a graduate programme.

3. Swedish teacher training is three and a half to five and a half years long and has a rather complex structure since it involves both studies in separate disciplines, often conducted during three to five semesters at the nearby Stockholm University or other universities, as well as workplace (or school) based education. 30 ECTS credits¹, which correspond to a full 6 month semester, are to be workplace based education. This should not be organised as a separate semester of practice at the end of the programme. Instead it is merged into other courses with the idea of blending theory with practice. The student should visit several different schools with different age groups during her studies. During the workplace based education she should work on tasks from her teacher trainer as well as bring up questions and problems of her own in discussions with fellow students.

4. The LHS is organized in three departments, nine administrative offices, a Learning Resource Centre and a department for Public Contact and Communication. The departments have slightly different focuses on learning: one is focusing on the individual's interaction with society, another on a societal and sociological perspective on learning and the third on didactical problems in the classroom context. The Learning Resource Centre provides learning and research environments through three sections: the university library, media production and ICT development.

5. The LHS has a very good basic IT infrastructure. It has an IT unit of some 20 staff which is responsible for the management and daily operation of the wireless network that is accessible all over the campus, an intranet for all staff, a student portal and e-mail accounts and helpdesk for both staff and students.

¹ ECTS is the European Credit Transfer System. It was founded by the European Commission in order to provide common procedures to guarantee academic recognition of studies abroad. It provides a way of measuring and comparing learning achievements, and transferring them from one institution to another.

Table 1: Number of students (2003)

Teacher Education programmes (including Practical educational program)	6 714
Special Education programme	607
Study and Careers Counselling	295
Advanced Education in Caring and Nursing	68
Commissioned Teacher Edu. Prog. (SÄL)	1 186
Single subject courses	5 943
Research Education	97
Total	14 948

Table 2: Number of employees (2003)

Lecturers/ Researchers	371
Technical staff and Administrators	238
Ph Doctors with professorship	17
Total	626

WHY THE LHS WAS CHOSEN

6. The LHS was chosen as one of the cases to study, above all, for three reasons:
 1. The institution fulfils three of the criteria listed in the guidelines which mean that they (a) use open educational resources (OER), (b) produce OER and (c) use open source software (OSS).
 2. In an international setting the LHS is a relatively small institution and the OER study will probably benefit most if the case studies cover a variety of institutions, not only large ones.
 3. As an institute specialised in education and teacher training the LHS has a natural focus on pedagogy and learning. Teacher training is not only about teaching students as such, but training them in such a way that they are able to use the tools that the information technologies offer to facilitate the learning for new generations of children. It is of particular interest to study how LHS confronts this challenge.

STATE OF THE ART

Open Source Software use

Conference System

7. Being an educational institute, the LHS has a well thought through pedagogical approach to the use of IT in teaching and learning. They have adopted the idea of collaborative learning, a social constructivist theory stressing that students should develop their knowledge in collaboration with others, not at least peers. For this philosophy to permeate the programmes a lot of emphasis needs to be put on good communications, particularly since relatively much of the studies in the teacher programmes are carried out as workplace based education in several hundred partner schools all around Stockholm. In technical terms this means the LHS have to rely on a good electronic conference system. For the last five years an OSS conference system, called LearnLoop, has been used.

8. About two years ago the LHS participated with other Swedish universities in a benchmarking study regarding ICT infrastructure and security together with 11 institutions. The LHS received good marks for their user-oriented approach but got some criticism for not having an overall IT policy. It was also noted that they did not have an instance where user oriented and pedagogical issues could be discussed together with issues on IT infrastructure and security. Since then such a council has been initiated and an IT policy is under way. To mark the importance of the council the rector acts as chair. The lack of coordination between these two different perspectives could be said to be visible in the fact that, although the IT unit provides the basic IT infrastructure, they are not in charge of the conference system since that is considered to be a pedagogical application. Instead, it is the Learning Resource Centre that manages LearnLoop.

9. From 1996 and the following five years the LHS used a proprietary conference system called TopClass. When it was outdated in 2001 the Swedish open source system LearnLoop was chosen. The Learning Resource Centre does not have the competence to make new applications to or modifications of such a system, so it has been used and functioned well in its original format. But after five years it is considered to be a bit outdated and too small – it does not have the capacity needed for an ever growing number of users. The Learning Resource Centre is at the moment testing and evaluating two new conference systems, or rather Learning Management Systems, one proprietary Norwegian system and the open source system Moodle.

10. There exists no statistics on the use of LearnLoop and somewhat conflicting views were given as regards the number of users. The person responsible for the system thought that more or less all teacher trainers and students use LearnLoop at least to some extent. The reply from LHS to the CERI questionnaire and some of the other interviews suggests a slightly less positive picture. Nevertheless it is obvious that some teachers are extensive users and build their entire courses around it. Others might use the system less, but all students in the teacher programmes will at one point or the other use LearnLoop. It also seems to be true that at the moment electronic communications, discussion fora, common work spaces etc. are used more and are more important for the LHS than other kinds of digital content.

Open content use

11. The LHS have not developed any institutional policy regarding the production or use of neither digital learning educational resources in general or open educational resources in particular, but maybe the fact that substantial resources have been devoted to the Learning Resource Centre for almost six years could be said to show the importance it attaches to the use of IT in education.² This centre, which is jointly organised with the library, has 35 staff out of which approximately half is working in the library. It has a Media Production Unit, a Media Workshop and a Student helpdesk. The Centre acts as a support unit and facilitator in pedagogical IT issues for both students and staff. It runs courses and workshops, carries out competence development for teacher trainers and produces digital material, online tutors and online instruction videos themselves. Teacher trainers can ask for help to make lectures available online for students, which means that the Learning Resource Centre takes care of the whole production and can also support with pedagogical tips on how the media is best used during the session.

12. Although the infrastructure and support systems for teacher trainers must be considered as excellent, the involvement of teacher trainers in the production and use of digital learning resources is variable. Some teachers are heavily involved and act as pioneers in finding new ways to utilise the new technologies, at least teacher trainers in the area of special needs education, but the majority are still in a nascent state regarding their IT use within teaching. This is not a unique situation for the LHS. A study carried out in 2003 regarding use of ICT in teaching showed that one third of the teacher trainers in both Norway and Sweden considered that they used IT as an integrated part of their own teaching to a very limited or limited extent.³ A slightly lower percentage of the trainers said they used IT extensively. For administrative purposes, on the other hand, IT is almost exclusively used both by students and teachers.

13. The LHS offers distance education to roughly 2 500 students a year. These studies are partly online. Students typically read text books, but get assignments online and report and discuss these together with fellow students online. It has occurred that the LHS have used lecturers giving lectures at a distance, mainly when courses are taught in collaboration with other teacher training institutes. But this is not very common.

14. The use of digital learning resources seems still to be nascent for most teacher trainers at the LHS. Teacher trainers in special pedagogies are seen as pioneers and champions in using ICT. The main obstacles for further use are seen as lack of knowledge among teacher trainers, lack of time for experimenting and the absence of a reward system for staff members devoting time to OER production and use.

Open content production

OER policy

15. Although quite a number of digital learning resources are created at the LHS each year, not very many are offered freely to the general public. Most resources are only available for teacher trainers and students enrolled at the LHS. This seems to be due to two reasons:

² Approximately 6% of the overall budget for the LHS is devoted to The Learning Resource Centre

³ Hylén, J et al: "IT i lärarutbildningen", KK-stiftelsen (2004)

1. “Lärarundantaget” – by custom instructors and researchers employed by Swedish universities hold the intellectual property rights to all material they produce. The same is true for patent rights to innovations. This means that no digital resources can be made open without the consent of the individual instructor.
2. A lack of awareness of possible benefits for the institution as well as for the individual teacher of offering some or all of the learning resources openly. This unawareness has so far meant that there have been no discussions at the LHS, and thus no deliberate decision, on which resources should be offered openly and which should not.

16. According to my interviews many teacher trainers at LHS state two reasons for not sharing their resources openly: (a) the fear that resources might be used improperly and (b) the uncertainty of the quality of the resources. The possibility for teachers to offer their resources openly but still keep some control by using open licenses like Creative Commons seems to be quite unknown, but the LHS is currently looking into Open Access and Open Archives issues, which will probably mean that the awareness regarding open licenses will soon be higher. In the interviews the need to develop better quality assurance systems for digital content were also mentioned.

17. When asked, some people believed that making more resources openly available could both be a way to attract more students and to create new business opportunities for the institution, as well as being a good way to leverage taxpayers money. It was said that it could strengthen the image of the LHS as a centre for expertise in this area and a resource for school teachers and municipalities in the region.

Learning resource development

18. Regarding the kind of resources developed by the LHS there seem to be three varieties that dominate. One is video filmed lectures, which are made available online as streaming media. Some lectures by the most well known professors are made publicly available, but again – which resources are open and which are closed seems not to be a strategic decision. Instead these decisions appear to be taken on an ad hoc basis. The Learning Resource Centre is in the process of digitising and creating an archive of old lectures on video film, dating back to 1968. The long term plan is to make the most of these resources available online for free use.

19. A second type of digital resources is the online fora and common work spaces used by many teachers for discussions, reflections and group work. All courses at the LHS are given a unique webpage, but this is mostly used for one way communication from the instructor to the students regarding times and places for lectures, assignments etc.

20. A third variety of digital learning resources produced at the LHS is digitised guidelines and tutorials for teachers and students on how to use different equipment, ICT tools and the library, which are supposed to relieve other staff from answering the easiest questions, leaving them to concentrate on more demanding tasks and questions from students and staff.

21. The Learning Resource Centre is also involved in the development of a more advanced learning resource together with the Royal Institute of Technology in Stockholm. It is a digital chemistry lab that will allow chemistry students to perform labs either too costly or too dangerous to perform live. At the LHS the resource will be used as a showcase and inspiration for instructors and students inspiring them to use and produce new learning resources.

22. As described the Learning Resource Centre support individual teachers in the production of digitised lectures among other things. Although the initiative rests mainly with the departments and instructors to ask for this kind of help, the Learning Resource Centre sometimes proposes to introduce new methods to teachers. Still the Learning Resource Centre lacks the opportunity to be involved already on the planning stage of the course and have the opportunity to participate in taking a comprehensive view on the course, to have a discussion which parts could be done online, which parts could be a reuse of earlier digitised resources and which parts are best carried out face to face. Strategic discussions on whether or not an investment in time and efforts to make digitised productions could save time and money at a later stage seem to be very rare. The Learning Resource Centre experiences a growing demand for their services but still believe there is a huge potential both pedagogically and economically that is under-used by the departments.

CONCLUDING REMARKS

23. The decision on which resources should be open and not seems to be done ad hoc at the moment and there have not been any strategic discussion regarding these issues on any level so far. The relatively new ICT and Learning Resource Council will probably provide the best arena for such a discussion. The implementation of a new publishing system and the need to discuss licensing issues related to this will probably also create a growing awareness of the existence of different kinds of open licenses. Hopefully a growing awareness among faculty will lead to a more open approach to sharing digital resources as well as research papers.

24. The extensive use of the conference system LearnLoop as a part of the education process shows the difficulty of making a clear distinction between digital “content” and “tools”. Although it was not mentioned in the interviews as a practice, presentations and other kinds of digital artifacts done by students could very well be used as learning resources for other students. This shows the blurred borders between production and use of digital learning resources.

25. As mentioned earlier some teachers state an uncertainty regarding the quality of the digital resources they have produced, as a reason for not make them publicly available. The same comment was given regarding publishing of resources made by students. A quality assurance system or process of some kind could hopefully contribute to making more resources openly available.

ANNEXES

List of interviewees

- Dr. Eskil Franck, Rector of the Stockholm Institute of Education
- Dr. Birgitta Sandström, Pro-rector of the Stockholm Institute of Education
- Dr. Lena Olsson, Director of the Learning Resource Centre,
- Mr Bengt Göthammar, Head of Department Media Production
- Ms Eva Edman-Stålbrandt, Lecturer and Pedagogical ICT Advisor
- Ms Annika Hössjer, Lecturer
- Mr Mattias Rosenqvist, Student

Useful links

- LHS, www.lhs.se , http://www.lhs.se/LHS/Templates/Page___178.aspx
- LÄRUM, <http://www1.lhs.se/larum/eng/>
- Lear Loop, <http://learnloop.lhs.se/learnloop/>