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Turning the library into a place for learning and networking.
The library as a part of a Learning Resource Centre.

Introduction

Libraries have always been places for learning and reflection. Picture the silent reading rooms of all the grand research libraries. Today the learning processes and social habits of our students have changed and their learning is more collaborative, problem-based as well as online and flexible. Time and space for learning has to be revised. New media forms are used as expressions of knowledge. New literacies have to be supported, such as information literacy, media literacy and technical literacies. Libraries need to adapt to and support the new needs, learning patterns and development of literacies of our students and teachers.

When building the new campus of Stockholm Institute of Education in 2000, the architects together with library staff focussed on the design of the learning environments for students as well as new teaching possibilities for teachers. An important driving force was the information and communication technology, ICT, which offered new learning and teaching possibilities. ICT related factors were the life-long learning issues, the Swedish legislation for higher education which demanded information and media literacies for the students, and not least the competition for the enrolment of students by new e-learning and distance education possibilities. At the same time there was an increasing demand for information and technology literate teachers in Swedish schools.

The planning process

Early in the planning process for a new site for Stockholm Institute of Education the library was a key target as the “heart of the campus”. The librarians, architects and the vice-chancellor were all aware of the changing landscape of learning and knowledge building. A task force which aimed at a proposal for a new organization was set up and was headed by the library director. In the process the department for media production joined the venture. This broadened the scope of the task force and gave us more possibilities to design future services.

The following questions were on the agenda of the task force:

- How could a new support organization be designed to contribute to the learning processes of 12000 students and the teaching efforts of 500 teachers?
- What should the task of a new kind of organization be?
- What physical conditions and resources would be appropriate?
- What role should ICT play?

The needs of the university college were analysed and discussed with representatives for the departments. When we examined IT use it became evident that the departments had disproportionate resources and opportunities to use ICT in their learning. There were still

teacher trainers who refused to use any digital technology, including e-mail and few were proficient in using learning platforms or even presentation programs such as power point. The skilled users were found by teacher trainers who administered distance education courses. It further became apparent that no teacher trainer would accept the use of technology for its modernity as such or as a novelty per se. The starting point for ICT in employing in teaching and learning had to be the pedagogical or didactical use.

To plan the physical space, working groups of architects, librarians and media producers and a few teachers were organised. The building space for the library was already decided on, but there were still possibilities to influence the design of open spaces. These spaces could be used for socially attractive meeting places or group work areas. We were interested in creating adequate working and production spaces where student communication and collaboration would be possible. To gain insight and new ideas, the planning groups received funding and went on study tours to England where several Learning Resource Centres were built with dedicated spaces for students learning. The idea of the English Learning Resource Centres were inspired by political educational strategies which aimed at stimulating students from low income families and “working class “ traditions to embark on higher education. For this reason universities such as Sheffield Hallam University and Teesside had built large spaces with computers available 12-16 hours a day. Learning with ICT was supported by special departments. User education and the design of manuals for computers as well as internet searching were high-ranked services. As a result traditional library services i.e. acquisition of books and cataloguing got a somewhat lower priority.

The lessons learned from the study visits were that the licenses for software and computer equipment was quite costly and that the English universities managed a large-scale operation. We had to do with less computer power, but would on the other hand get high-quality equipped spaces as is the tradition of design for Swedish public spaces. We also found that a large number of group spaces, were needed as well as support spaces. A lot of effort went into the planning of service points in our new building. The library was to be housed in a centrally placed building the Ellen Key, together with the big auditorium and a restaurant. An old villa from around 1920 was to be connected to the new building by a glass corridor. The villa had 16 rooms of various sizes which could be used for group work and user education lectures.

Our plan aimed at a new kind of student learning in the library with 130 computers and spaces to hook up laptops. This was to be a new kind of social study environment, where students worked on computers or collaborated on group tasks chatting away or getting support from staff. It was planned as a social and lively space used for collaboration. There was also a need for an antipode a totally silent space without the clatter from key-boards. This space we planned as a traditional reading room for reflection.

To meet the new requirements of developing and supporting new literacies a special laboratory for media production was planned together with a media-café and a special support desk.

As a task force we proposed that the library should merge with the media production department and a unit for project development should be added, with the purpose of involving teachers in learning projects. The organisation would be a Learning Resource Centre rather than a transformed library. This was supposed to better meet with the requirements for learning. Such an organisation would be easier recognised as a learning support organisation

more so than a traditional library. The proposal was reviewed by the departments and got a very positive response.

In 2002 a Learning Resource Centre (LRC) was decided on by the Vice-chancellor and set up 2002 as a means of introducing and supporting the use of ICT in education and research and thus strengthening the competencies of future teachers. At the same time the new organisation moved into the new building.

The task

The task of the LRC, which is named Lärum, was

- to use new pedagogical models, ICT, new media and new library models to generate creative environments for information handling, teaching and learning
- to have an initiating, coordinating and developing role concerning ICT and its use in education and research
- to provide, develop and synchronize flexible learning environments, to create a virtual university setting and develop support for distance education in cooperation with other responsible departments
- to be responsible for net university course administration

The University college library merged with the media production department and a unit for ICT pedagogical support was formed. The staff encompasses professional librarians, media producers, teachers, technicians, web designers. This mix of know-how makes it possible to give adequate support, training and competence development.

We interpreted the task of Lärum into the following actions:

- to provide physical and virtual learning environments for information handling, learning and teaching to a majority of students and teachers
- to offer competence development with ICT which give them confidence to develop their teaching and learning abilities
- to provide excellent support and help develop pedagogical and knowledge based work

The Environments and their implementation

Our first strategy to accomplish these tasks was to provide students and teachers with technologically well functioning and appropriate physical and virtual learning environments. The physical environments are the different spaces in the library, the media lab, the group spaces as well as a training oriented environment for dynamic school-work called “the Classroom of the Future. These environments are equipped with computers, groupware, smart boards and adequate software for communication, video-production, presentation, pedagogical games etc.

Searching for information in the library



Students working in the library



Students at work in the Media lab



Learning activities in the Classroom of the Future

Communication and learning platforms had been used at since the late 1990's by proficient users. A breakthrough for a more advanced use by a majority of the faculty and the students came with the introduction of Moodle 2004. Moodle is an open source platform. The introduction of the new platform was accompanied by instruction courses for the faculty. Moodle was introduced for course administration, distance education and as a tool for collaboration and documentation such as e-portfolios.

A website for the LRC was designed and developed. The guiding principle for the website was to support student work and their use of information sources for searching, studying, learning, and reading/writing. It became the mostly used site at the University College. Web support for extensive distance education was further developed containing more interactive tools. The web was then revised according to Web 2.0. A new version of the web was designed when the university college joined Stockholm University 2008, (www.larum.su.se) This website is not yet fully developed. An interactive website was built with access to the library catalogue, booking of physical spaces, interactive tools from the media lab etc.

All the physical learning and working spaces have wireless connections. Net communication systems like Marratech as well as video streaming are available.

The physical places and virtual learning spaces were introduced and supported. Support is provided by professional staff that also encompasses knowledge in video production and the use of software for esthetical or special education. A special support function was introduced in the library. The service idea is that a user may ask questions concerning technology, information searching, text editing etc and the answers are provided at the same desk. The desk is manned by IT technicians as well as librarians.

The implementation of the environments was performed gradually. The efforts of creating adequate and successful use of learning environments were initially met with reluctance and problems. However we found that users who have made long term use of communication platforms are more willing to adapt to new ICT tools. Taking departure from a theoretical framework helped analysing use and needs for change. The support functions which were introduced side by side with the environments were essential to get some of the tools used.

The second big task of the LRC is competence development. The main idea is to deliver competence development programs with ICT to give students and teachers confidence to develop their teaching and learning abilities by pointing to best praxis. These programs are performed according to the principle of integrating learning with task performance. Another aim is to help student and teachers to develop key information and digital literacies. The competence development program and its activities have been described elsewhere. (Olsson

Some specific tools or features were designed to help using the environments and use standard software i. e .the self-test program which is also a learning tool. This tool is a test which indicates the student's level of ICT or computer proficiency. Another feature is the creation of learning objects, which interactively describes i.e. a concept, a process or can be part of a lesson.

Theoretical framework

Although our primary task is to provide support and stimulate ICT use we still believe it is important to take departure in a more thorough understanding of learning processes. Our formula for designing learning environments is to integrate traditional bodies of collective memories such as the library with learning spaces for social interaction and ICT tools for mediating new knowledge. Students' interaction with tools.... Our approach to students' learning is to try to stimulate explorative and or collaborative learning. Our planning further emanates from the assumption that learning is a social activity and that learning is situated.

We have a view of the learner as being actively involved in using tools/ICT; and of the learner as a part of a collective. According to Vygotsky (1978) social interaction plays a fundamental role in the development of cognition. Learning appears first on the social level and then on the individual level. Learning as a social phenomenon is understood by looking at the learner as situated in a context which he interrelates to. It involves our experience of participation. Learning thus requires social interaction and collaboration.

The idea that learning is situated means that learning and production of knowledge is always embedded or situated in a context. This implies that learning as it normally occurs is a

function of the activity, context and culture in which it happens. This contrasts with most classroom learning activities which involve knowledge which is abstract and out of context. The principles are that knowledge needs to be presented in an authentic context, i.e., settings and applications that would normally involve that knowledge. (Suchmann,1987; Lave & Wenger,1990) Our learning space “the classroom of the future” is an almost totally flexible space which adapts to the learning situation. Tools and material for the learning process can be chosen in order to create a new product or a new context .(Olsson & Koroma, 2008)

Evaluation

The use of the learning environments was indicated by the amount of registered users. 2006 the use of the library and media lab increased by 150 % since the opening 2002 Assessment was also performed by web enquiries with a few questions which indicate a high level of satisfaction

The effects of the environments on the learning processes are still under evaluation and research. The ratio between students and teachers use is for communication platforms, net meeting and video streaming teachers 70%, students 30%; for media laboratory, library and groupware 20% teachers, 80 % students. The use of learning environments has a great extent been performed as *learning by doing* which helped develop technology literacy as well as media creativity. These new proficiencies were to a certain extent confirmed by web-quests. For a limited number of users evaluation was made by scaffolding.(Edman-Stålbrandt

The performance of the Learning Resource Centre and library was evaluated by external experts 2006 and was found having excellent performance. An important weakness was still the lack of involvement from some potential users. Another problem was that the strategic value of the LRC was not recognized. The LRC could i. e. have been used as a tool in the competition for recruiting new students.

2008 Stockholm institute of Education was merged into Stockholm University. The challenge is now to pass on experience and strategies into a new organization.

Some of the environments and ideas have been produced as short films (in English) which be part of an eventual presentation at IFLA.

Conclusions

Due to thorough planning processes where architects, librarians and media producers together worked together in designing learning environments the early ideas met later with success. The implementation met at first with some difficulties but gradually the new environments were used and accepted. Students recognition was immediate bur teachers' recognition was more slow. Having set a theoretical framework helped analysing the environments, and also the revising and improvement. Support functions were extremely important to get adequate use.

Literature and other sources

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