

Empowering students through information literacy in the physical and virtual classrooms: Cross-institutional collaboration between library and faculty and between two Scandinavian university libraries

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The aim of this paper is to show how the library can contribute to student empowerment, with a focus on collaboration and partnership in the whole process of designing and implementing an information literacy (IL) user education programme. It is argued that information literacy is only one component in the overall learning process and the library is just one partner in empowering the students. True collaboration is thus essential to ensure student empowerment.

What is empowerment?

Harvey (2004) defines empowerment as the development of knowledge, skills and abilities in the learner to enable them to control and develop their own learning. Information literacy is a means of individual empowerment within today's information society (ALA, 1998). The library, as an integrating part of the overall learning arena in higher education, can contribute to user empowerment through information literacy education. In this context, empowerment can be defined as 'providing users with the necessary skills to find and exploit information that they need for work, study and leisure' (Hewer, 1999). User education that empowers students can no longer simply train them to perform specific tasks, but should help them '... to find and develop a range of transferable skills that are essential in the information age' (Fourie, 1999:383). Information literacy is thus not just a mean, but also empowering students to acquire skills.

Why should library user education aim at empowerment? Empowering user education facilitates learning within a knowledge-construction approach. It promotes the development of independent learning skills, that is "the learn-how-to-learn" approach, which is the basis for lifelong learning. In our knowledge-based economy, highly skilled workforce is required to have the capacity to learn (Andretta, 2005). As ALA (1998) puts it, "To respond effectively to an ever-changing environment, [...] people need more than just a knowledge base, they also need techniques for exploring it, connecting it to other knowledge bases, and making practical use of it. In other words, the landscape upon which we used to stand has been transformed, and we are being forced to establish a new foundation called information literacy."

In our knowledge-based society and economy, "(...) lifelong learning strategies will be necessary in order to face the challenges of competition and the use of new technologies and to improve social cohesion, equal opportunities and the quality of life" (Prague Declaration on Information Literacy 2005).

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In future more and more candidates may label themselves as knowledge workers in innovative companies and organizations. Candidates in the knowledge society may be able to gain a competitive edge through a series of characteristics such as being:

- academically skilled
- methodologically competent
- team worker
- creative
- information literate

These items comprise the characteristics of the innovatively competent knowledge worker. The candidate will be better equipped if she has become empowered during the study and in the study environment. Thus student empowerment facilitates personal engagement in the learning process. The awareness of a conscious choice of strategy towards becoming a candidate and potentially knowledge worker is a quality that reinforces the student's ability to learn how to learn, which is in essence what is required from an innovatively competent knowledge worker.

Using the definition of student empowerment related to the use of information given by Hewer (1999), where empowerment provides library users (students and academic staff) with the necessary skills to find and use information they need for school, study and leisure and equips them with transferable skills which they can use for all sorts of information retrieval and usage tasks enabling them to cope with the Information Age, we find that the concept we apply in our courses meets the requirements of this definition. First and foremost we emphasise that the user engages in her own development of a generic set of competences which are quintessential in her future life as a knowledge worker.

In what follows, it is shown how the library, as an active partner in the higher education environment, can contribute to student empowerment by promoting information literacy.

How can a user education programme for information literacy contribute to student empowerment?

This section will present three cases of how we apply IL education in our libraries. There are certain aspects which have been derived from a common platform and there are certain aspects e.g. regarding implementation of the specific solutions developed at each of the institutions.

A common ground stems from Kuhlthau (2004), who has described user education in information searching. The starting point of user education has traditionally been the retrieval of information from information resources. This can be very useful, but primarily when the problem is known. The traditional paradigm does not take into account that learning is characterised by uncertainty. Therefore she proposes a theory of the information searching process in which the learning process can be characterised by different phases and the corresponding information searching strategy requires that the student applies different information skills and methods. Moreover different aspects such as the affective level, the behavioural level, the strategic level and the cognitive level are taken into account. During these different phases of the information searching process and the learning process it is acknowledged that the uncertainty characterising a learning process and especially the starting phase can influence the student's choices in the given situation. We will elaborate below how this is applied in our concepts that searching and using information are processes that go hand in hand with the writing process in the students' wider process of constructing meaning.

UBL's Learning Object Set: *Søk & Skriv*

*Søk & Skriv*³ ("Search & Write") has been designed as a set of learning objects to promote students' information and digital literacy as they work with their academic projects. More specifically, students are guided through the information search and writing processes. Further, they are encouraged to reflect on the ethical, critical and creative use of information and to engage in a variety of activities that help them in the process of writing a research paper or a thesis. Searching and using information are presented as processes that go hand in hand with the writing process in the students' wider process of constructing meaning. The searching process helps the student narrow down their research question. By the same token, a gradually more specific research question enables the student to conduct searches for more pertinent information. It is important that contents of the learning objects take into account the students' situation in their learning process. The goal of the learning objects is to help students meet their specific needs. An example user education that combines of the information search process and the writing process at University of Bergen Library is found in Kavli & Mikki (2006).

AUL's multimedia user education program: SWIM

SWIM⁴ is a multimedia program which has been developed by Aalborg University Library. We have applied SWIM in our user education since 2002. The SWIM program as well as the concept behind our user education scenarios has been distributed to other libraries among others University of Bergen Library, where it has been customized to local needs and adopted. Hence this is one of the common factors in the background for our cooperation.

In short, SWIM is a multimedia program based on interactive video which we call a social simulation. The user has to reflect on and make decisions on information searching strategy in different dilemmas. The user of SWIM is placed in a narrative, where she becomes an active and communicating member of a project group at a higher education institution. The students work in groups with a problem-oriented orientated pedagogy. The students have to define and orientate towards the problem they are exploring during their learning process. The narrative is structured in such a way that the users' choices are decisive and creates the conditions for a final examination, where the supervisor of the project group and censor provide constructive feedback on the information searching strategy chosen by the user as the fourth member of the project group. After the evaluation where feedback has been provided, the user can move on to other elements of the system to elaborate on specific issues. These elements are provided in what we call information modules.

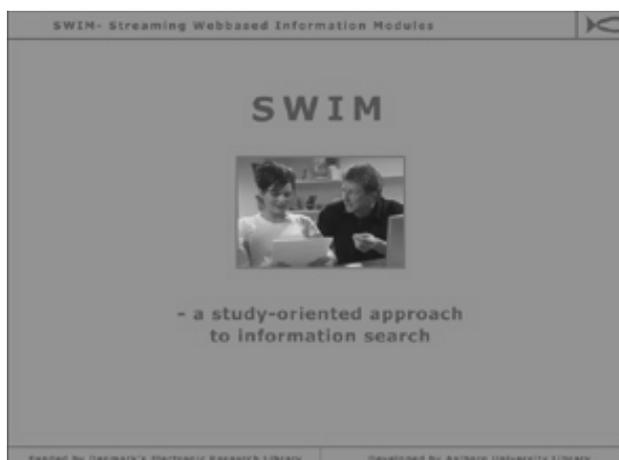


Figure 1: User interface in the social simulation SWIM

We stress that our user education must take its starting point in the user's situation and we have applied the points above as well as the common background from Kuhlthau as the basis for developing the narrative including the creation of drama,

³ *Søk og Skriv* is freely available on www.sokogskriv.no.

⁴ Streaming Webbased Information Modules. Available here: <http://www.aub.aau.dk/go/128>

and the tension among the students in the social simulator giving rise to the group dynamics which is often familiar to students.

The blended learning concept

We apply a blended learning concept where we aim at taking the stand of the learner and use the learner's actual situation as the starting point for the course (Blaabjerg, 2005). The courses facilitate reflection processes and the interaction between the learner and the information specialist (who is the teacher in this case) is dialogue based in order to promote reflection on the learners own experience and prior knowledge of information searching processes in the construction of knowledge. This way we move away from the bibliographic paradigm as Kuhlthau (1993, 2004) has termed the traditional provision of library instruction towards a new paradigm in which the students learning process is the starting point and the information searching process an integral part of learning. Our concept of IL-development is applied in various different scenarios in the two libraries's user education, which reflects that the concept itself is flexible and generic. Mainly we use three models:

- Self-directed learning: the student uses our online multimedia programmes for self-directed learning.
- Situated learning: courses provided for students in their learning context e.g. related to project work.
- Holistic counselling: Courses provided as in the situated learning scenario supplemented with individual coaching over a period of time and in a hybrid environment.

These scenarios of user education require that our librarians/information specialists are capable of teaching and coaching students in their learning process, hence knowledge of pedagogy and learning theory is a requirement as well as social skills are highly required. This change of paradigm and pedagogical shift calls for staff development: Student empowerment through IL is dependent on the information professional's pedagogical empowerment. The move away from a transmissional model of user education entails new roles for information professionals. Information professionals should act as and should be seen as "facilitators of learning" (Doherty et al., 1999), rather than sheer providers of information or information gatekeepers. Kuhlthau (2004) describes different levels of intervention. The most empowering intervention level is the holistic counselling approach, and this calls for both an internal process of competence development, but surely as well an external process of negotiation with partners in empowering the student.

True collaboration

Fourie (1999:383) argues that empowerment requires a total change of attitude from all parties involved. In terms of IL, this means that faculty, students and library must all understand and accept the importance of IL and the need for student empowerment in this regard. Empowerment calls for a willingness to empower and to be empowered, and it can only succeed if all parties are committed, positive and motivated. Empowerment thus calls for true collaboration, where all parties work equally for a specific common goal. This goal is to empower the students through providing teaching material and pedagogical methodology, which will help develop the student's skills and competencies related to future work requirements and life-long learning.

Traditionally, library and faculty have led separate lives, and the library has primarily worked as a document supplier for faculty. Academic libraries now look upon themselves as an integrating part of the higher education learning arena (Sætre, 2002). On a par with other university communities, they also regard themselves as teaching institutions which can assist students in their learning process. However, faculty is not necessarily aware of the library changing role, or of the importance of IL (Johnston & Webber, 2003). An approach to starting collaborating with faculty

could be entering in a dialogue about empowerment is in faculty's terms. Then when we have a common vocabulary, we can explain how the library can support the learning process with counselling of students regarding creative, critical and ethical use of information.

In what follows, we discuss the model of true collaboration that our institutions have been working on. The following points are essential in this model:

- True collaboration is based on shared goals which the parties have negotiated and made explicit
- True collaboration calls for a "contract" between the parties, or a strategy plan, where each party's responsibilities and competencies are made clear and recognised.
- True collaboration takes place at all levels within a higher education institution. Both a bottom-up and a top-down approach to true collaboration are necessary.
- Interlibrary collaboration makes a valuable contribution to true collaboration.

Collaboration between AUL and UBL

The collaboration between UBL and AUL has focused on two common interest areas: the design of web-based teaching material/learning objects and staff development. UBL started working on an information literacy education programme in 2003. We soon came to realise that inviting faculty to collaborate in developing empowering user education required presenting faculty with a product and a plan of action. AUL had at that point developed the first version of SWIM. UBL customised SWIM by translating the written text into Norwegian and slightly modifying some content. UBL saw the need to develop new learning objects dealing with "referencing and ethics" and "critical evaluation of sources" in order to be able to offer a product that covered the different components of IL (University of Bergen Library 2005a; Torras & Skagen, 2006) in a more comprehensive way, and which met the needs expressed by faculty in a better way.

UBL carried out a pilot to test our customised version of SWIM. A focus group interview of students was done, and the results of the pilot were reported to AUL. This data was used by AUL to further develop SWIM. Later evaluation of UBL user education based on SWIM has shown that the use of SWIM is satisfactory at bachelor level, but not at postgraduate level. For this reason, UBL started a new project to develop IL learning objects for postgraduate students. AUL was invited to formally join this project by becoming a member of its advisory committee. Likewise, AUL invited UBL to become a member of its advisory committee in their LOW project, which aims to produce a new version of SWIM. Our working meetings have focused on theoretical issues, course content development and implementation, as well as library staff development.

In both institutions development of their teaching materials and learning objects has been done through projects, and creating a sense of ownership amongst all the library staff members has been a common challenge. As an example of our strategic collaboration work, AUL staff was invited to hold a kick-off seminar for the UBL staff when SWIM was adopted in order to reflect on its implementation and encourage the sense of ownership.

Finally, AUL and UBL strongly believe that interlibrary collaboration can benefit other institutions. For this reason, we have jointly disseminated our common knowledge and experiences through conference participation.

Collaboration between library and faculty

To make true collaboration possible, it is important that the parties start by agreeing their roles and expressing what they expect from each other. In the initial dialogues with faculty, it is important to bring up issues of common interest or concern. In

what follows, we present how the library has gone about laying the ground for true collaboration. There is still a lot of work in progress in our institution to achieve true collaboration with faculty.

In UBL's case, we highlighted the importance of IL education to achieve the goals outlined in the Norwegian Quality Reform of Higher Education and the white paper "Culture for learning" ("Kultur for læring"), which focuses on the importance of digital literacy. At international level, the Bologna Process has also proved to be a common interest area. The Bologna process has contributed to several changes at faculty level. The higher education environment is being transformed by increased student numbers, greater focus on meeting student expectations, more emphasis upon widening participation, concern with development of lifelong learning skills, the emergence of new subject disciplines and decline of more traditional ones and increased use of technology in learning. In addition, greater emphasis is placed upon HE institutions as businesses (Payne, 2005).

Further, taking up issues related to students' academic performance, especially academic writing, has also raised interest in the library potential among faculty members. The aim of the library in these initial dialogues has been to put across to faculty that IL education based on faculty-library collaboration will help students intellectually access the information they need and use it critically, creatively and ethically. IL education can lessen the faculty staff's burden of having to deal with issues such as plagiarism, referencing and critical evaluation of information on top of their heavy syllabus content.

In the spring of 2005, UBL gave a presentation for the university's Vice-Rector of Education (prorektor for undervisning) on all the services it could provide, and amongst them IL education. The library was encouraged to send an invitation to the Office of Education (Utdanningsavdelingen) for closer collaboration between faculty and library. This invitation was formulated as a "Strategic plan for information literacy at the University of Bergen" ("Handlingsplan for informasjonskompetanse ved UiB") (University Library of Bergen, 2005b). This document was an invitation to the faculties to collaborate with the further development for learning goals in information literacy, educational materials supporting these goals, embedding information literacy courses in study programmes and implementing web-based courses in information literacy in the virtual learning environment. The IL education programme was outlined and justified. Different models of embedded learning currently used, and "examples of best practice" were discussed. Furthermore suggestions to subjects suitable for embedding library courses were made.

An important component of the strategic plan was the description of learning goals, course content and evaluation methods. This description was thought as a discussion material with the ultimate aim of negotiating with faculty who should be responsible for achieving which goals and how. An attempt was made to distinguish learning goals for undergraduate and postgraduate students. In our process of establishing these two sets of learning goals, we were inspired by the information literacy standards developed in the United States (The Association of College and Research Libraries, 2000; Middle States Commission on Higher Education, 2003) as well as in Australia and New Zealand (Bundy, 2004).

The letter was sent during summer 2005, and a dialogue was started with the Board of Education in December and with the faculties later on. The Board of Education has now asked the faculties to contact their branch library in order to discuss embedding of IL education in their degrees. The faculties are expected to report to the Board of Education about their efforts to integrate information literacy in the curriculum by autumn 2006.

At another level, the branch libraries have carried out a number marketing initiatives at faculty level. Presentations of the library IL education programme have been given at faculty seminars. Likewise, the faculties have been invited to the library to discuss user education. Gullbekk (2006) discusses these issues in detail and illustrates how integrating learning goals in a study programme can be achieved.

Examples of collaboration with faculty

Digital Literacy through flexible learning: information searching and use of information sources in writing thesis

The project "Digital Literacy through flexible learning: information searching and use of information sources in writing thesis" is one of UBL initiatives to strengthen user education in digital and information literacy. The project is financed by Norwegian Opening Universities, and the collaborative institutions in Bergen, Bergen University College and Norwegian School of Economics and Business Administration. It aims at developing pilot studies as examples for embedding and teaching information literacy in the virtual learning environment. Collaboration between library and academic staff is an essential condition for successful embedded digital and information literacy education. For this reason, the project counts with an advisory committee assisting the project members in the tasks of developing the learning objects and planning the pilot studies as well as designing the evaluation of the learning objects. The committee consists of academic and library staff members as well as students.

Two pilot studies were initiated. New learning objects, *Søk & Skriv*, are integrated in the virtual learning environment of two different distance education degrees at post-graduate level: health promotion (University of Bergen) and midwifery (Bergen University College). These health promotion and midwifery degrees are based on a blended learning model. Students attend both virtual and on-campus classes. These two degrees highlight problem-based learning and evidence-based research. At the time the students participate in the pilot studies, they are at the initial stages of writing their thesis. The teaching which has been planned for the pilots, and where *Søk & Skriv* has been integrated virtually, aims at assisting the student in the totality of their research process by promoting both information literacy and academic writing skills.

The collaboration between academic and library staff members when designing the pilots has been fruitful for a number of reasons. It has been easier to find ways to achieve the established learning goals, whether they were the faculty's or the library's main responsibility. The academic staff has helped decide on what course content and timing was best suited to the students' specific learning needs. Last but not least, through this project, new communication channels have been opened between faculty and library for further collaboration.

The integration of the library in the learning environments in the development of the students information literacy

In the winter of 2004 Aalborg University Library initiated a pilot project called "Integrering af biblioteket i læringsmiljøerne i udviklingen af de studerendes informationskompetence" (the integration of the library in the learning environments in the development of the students information competence/literacy) funded by Denmark's Electronic Research Library. The aim was to make distance students more information literate through teaching and counselling in a mixed learning environment of face to face teaching, virtual reference service and virtual counselling through an ict-system. The library made a contract with the distance study programme Master of ICT and Learning which is offered by the five institutions of higher learning; Aalborg University, Aarhus University, Copenhagen Business School, The Danish University of Education and Roskilde University Center. The library established a project group of four information specialist and a development

consultant. They were in contact with a coordinator at the study and one of the teachers/supervisors.

The project group developed a learning plan for supporting the students IL competences through a semester in spring 2006. The students were at their 2nd semester and were offered a face to face teaching/introduction to some of the library services and taught about the information search process based on Carol Kuhlthau (Kuhlthau, 2004) to point out that information search is a process with different information needs. The face to face teaching was afterwards supported by a virtual ask-a-question service at the students LMS (VirtualU). Finally a small group of students together with their supervisor were offered virtual counselling to support the students in their information search process in their explorative phase and later in their goal orientated phase. A Maratech system was used as the video based communication channel.

The face to face teaching was performed by two information specialists from AUL, the virtual librarian was divided between the four information specialists and the virtual counselling was performed by two information specialists, the project supervisor and the project group.

The projects are still ongoing and right now we are collecting data through interviews and questionnaires to assess the projects' elements such as teaching, counselling and collaboration. We know that the students who have been in contact with the library and experienced the teaching are very satisfied with the help and support provided by the library. However our evaluation has not provided ample data to give us opportunity to state what the learning outcome is regarding their development of information literacy as a part of empowerment.

For BUL and AUL a common strategy has been to provide both faculty and library with strategies for how empowerment could be achieved in a more formalised and comprehensive way. Empowering the student through digital and information literacy education has become a gradually more explicit goal. In trying to define it and discussing how to achieve it, faculty and library have become more aware of what responsibilities each of them have in helping students learn how to learn. In this context, academic and library staffs have acknowledged the value of the librarian's facilitating role of *counsellor* (Kuhlthau 2004) in the student's process of constructing meaning. In this way, faculty counts with the library as a new partner in their task to empower the student through the development of independent learning skills.

Collaboration between faculty and library has been a key factor for embedded teaching in a blended environment which is adequately tailored to the students' specific learning needs. The faculty and library's joint work in this project has laid the ground for further wider institutional collaboration in the task of embedding information literacy education in the curriculum.

What role does the library play in empowerment and in collaboration?

This section aims at a meta-reflection on our experiences and ideas, so that we can pinpoint the library's role in educational empowerment⁵. In short the role of the library is not only to be a part of the empowerment of the students, but also to be a collaborative partner alongside with other partners at the educational institutions. The libraries need to be much better at understanding the students and faculty. At the same time, faculty needs to be more committed and have a better understanding of the possibilities within the library to empower the students.

⁵ The thoughts, reflections, comments and ideas in this section are based on experiences and ideas from our university perspective. We are aware of other and smaller organizations often have a closer relationship between the empowering partners surrounding the student.

The new situation – true collaboration

The new situation is that libraries begin to regard themselves as a part of the learning environment and librarians begin to look upon themselves as partners in the student's learning process. Both library and faculty are aware of the fact that physical access to information alone does not make students information literate. Academic libraries have come to realise that they have a double goal to achieve: to make electronic resources available for students and to assist them in their learning process (Torrás & Vaagan, 2006).

The library's focus on user education creates a focus on pedagogy. For example at the recent conference *Libraries in the Digital Age*⁶ professor Carol Kuhlthau and associate professor Ross Todd (2006) ran a workshop about "guided inquiry". "Guided Inquiry is carefully planned, closely supervised targeted intervention of an instructional team of librarians and teachers to guide students through curriculum based inquiry units that build deep knowledge and deep understanding of a curriculum topic, and gradually lead towards independent learning. Guided Inquiry is grounded in a constructivist approach to learning, based on the Information Search Process developed by Kuhlthau (1993; 2004), for developing students' competence with learning from a variety of sources while enhancing their understanding of the content areas of the curriculum"⁷. They saw this method of process counselling based on the user's needs as a main competence for all librarians working in a learning environment.

At faculty level, this is not a new concept. The names might be different but the essence is to guide or counsel the student through her construction of knowledge, often in connection with a project work. In Denmark this practice is common in problem-based learning environments from secondary school to university. At Aalborg University and Roskilde University Centre in Denmark it has been practiced since the beginning of the 1970's.

Since contextualised learning focuses on the students' situation and her learning situation, it is important that all parts of the learning process are facilitated. This also contributes to the increased need for collaboration between faculty and library.

Following the thoughts of constructional, process-oriented and contextualized learning the timing of user education becomes of importance. This makes it important to have user education in information literacy connected to the right counterparts in faculty's educational programme. Topics that are closely related to information literacy can for example be academic integrity, plagiarism, academic writing and research proposals.

Theoretically, we could say that faculty and library share the ultimate goal of empowering students and are equally concerned with developing teaching materials and pedagogical methodology which helps students develop the skills and competencies necessary for lifelong learning. In real life, however, sharing this ultimate goal does not result in true collaboration automatically. Our experience has taught us that even though library and faculty ultimately focus on student empowerment, they are not necessarily equal partners in this task. It is often the library who sees the need for collaboration and thus initiates contact with faculty. Obtaining the desired response from faculty can be a time and energy consuming job. This picture will probably strike a chord with many readers. Achieving true collaboration between faculty and library is a challenging task, but an essential one for student empowerment to happen.

⁶ <http://www.ffos.hr/lida/>

⁷ <http://www.cissl.scils.rutgers.edu/guidedInquiry/guidedInquiry.htm>

Still, we sometimes ask ourselves at the library why faculties do not include the library, the librarians, the information specialist, information counsellors or whatever we call ourselves, in their plans for the students' learning or competence development?

Some challenges – lack of knowledge, competences and a discourse

Maybe the faculty has an "old" understanding of the library's role as a storage of information. Maybe we as libraries are not competent enough to be a partner in the students' learning process because we don't know enough about the faculty's pedagogical concepts, learning processes and academic methodology. Maybe we are not speaking the same language or having a common discourse. The mutual understanding or lack of same between library and faculty is touched e.g. in Birgitta Hanssons and Olle Rimstens report "Someone else's job" (Hansson and Rimsten, 2005) on the implementation of information literacy in Swedish higher education, and also in Niels Ole Pors' report "Studerende, Google og biblioteker: Om studerendes brug af biblioteker og informationsressourcer." on students use of libraries and information resources (Pors, 2005).

We believe it is a mix. Our own experiences collaborating with faculties show us that they – in rough terms – have an incomplete understanding of what the library is capable of in terms of helping the students. When the faculty shows initiative they often suggest an hour of instruction at the library where the students are supposed "to learn" the most important databases, how to search and how the library in other ways can help their students. Libraries talk about information literacy, search strategies, Boolean operators, information seeking behaviour, keywords and information resources. The faculty talks about academic competences, methodology, problem definitions, research, the use of sources and argumentation. The students talk about writing a project report, the need for relevant material, their problem definition and how to move forward in their process and about frustrations in their writing process and information seek.

The libraries need to move toward faculty's academic discourse and explain the library's role in the faculty's own terminology. Instead of information search process, we can talk about the academic writing process. Instead of information literacy we could talk about how the library and the information specialists can support the problem-based learning process.

Our own experiences also show that we are not always competent enough to guide or counsel the students in their learning process because we do not know enough about how they study. Finally our own experiences show us that the library, the faculty and the student are not speaking the same language. This means we have problems entering a dialogue about the combination of the learning, the writing and the information search process.

What role does the library play in empowerment?

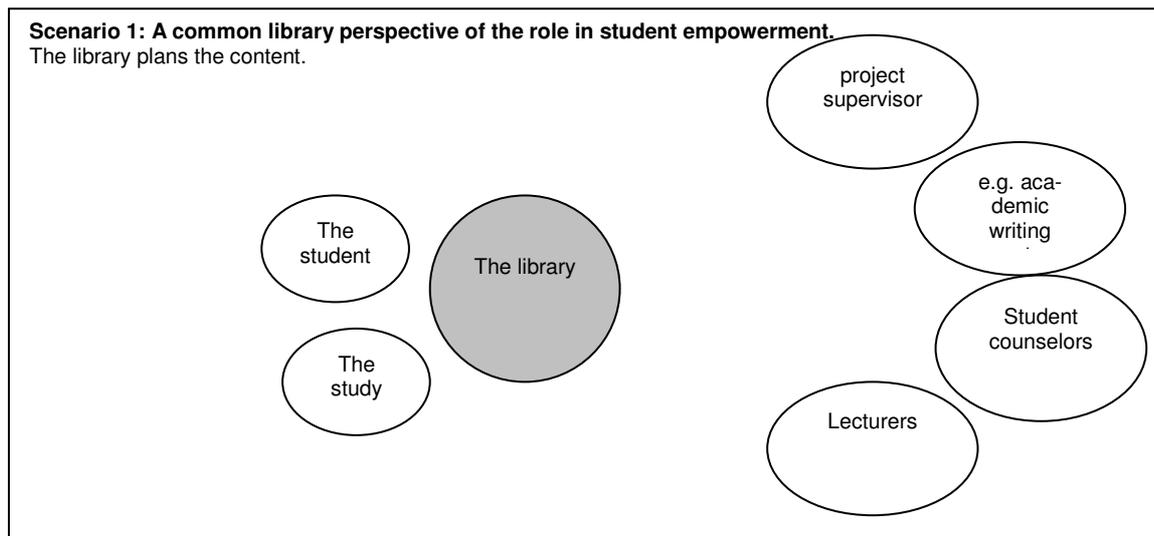
It is clear that we have a lot of formal contact with faculty planning *when* to run the courses, but planning the content, the learning goals or learning style is something that is rarely formalised and done in collaboration. In other words, we make an administrative arrangement with the single study programs, but not a true collaboration in our understanding. The cases described in this paper are exceptions, where the library has tried to go into a dialogue with the studies about learning content, learning goals and learning style.

With the concept of student empowerment, the library needs to consider its role and its contribution to empowerment. The library world talks a lot about how to implement information literacy in the studies and how to develop the students' information literacy as a starting point for a dialogue with faculty. We experience

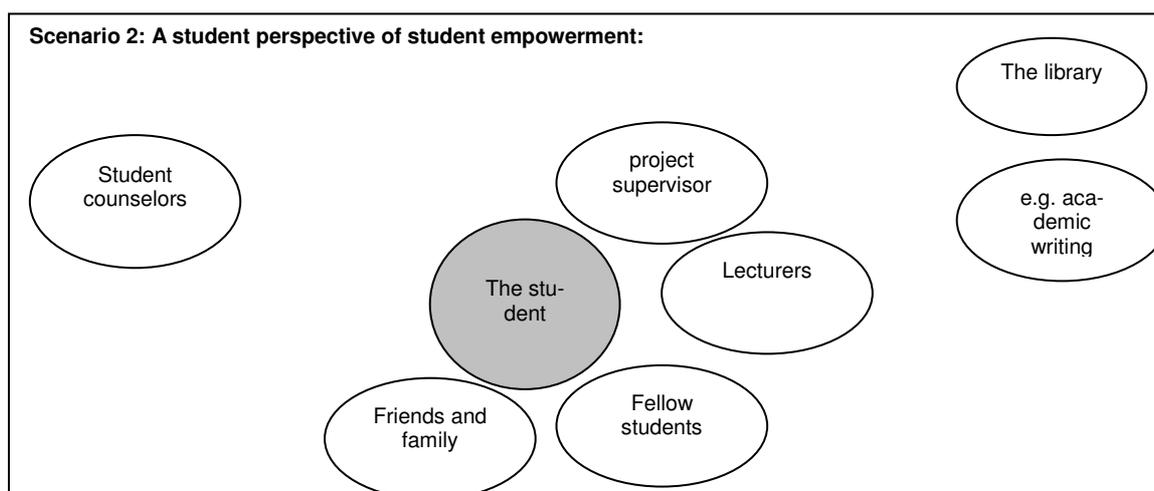
this to be a problem. Information literacy is simply not a known concept in the faculty world. Student empowerment could instead be a shared concept for a dialogue between faculty and library on how we can empower the students and what the content should be.

Below we have tried to illustrate different places for the library in the empowerment scenario showing close and distant relations between the partners.

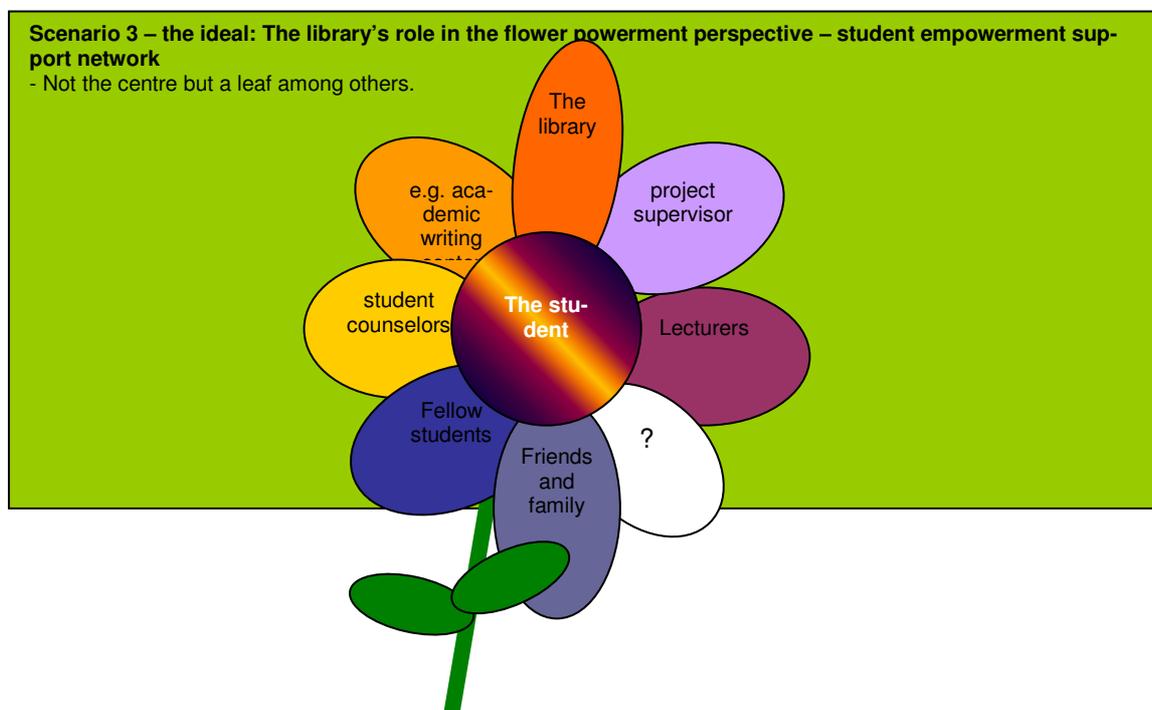
Scenario 1: This illustrates a common library perspective where the library puts itself in the middle asking the question of "what is important for the student to know?". From their centre the library communicates with the student and the study arranging time and place. The content is decided from the library's perspective.



Scenario 2: This illustrates a student perspective of where she seeks help and inspiration for her studies. We often experience that the library is not placed in the closest sphere of helpers. The student uses her project supervisor, lecturers, fellow students and friends and family. The use of the library is dependent on advice from the closest helpers.



Scenario 3: This illustrates a holistic picture of how we would like to facilitate student empowerment. That we all place the student in the middle and ask ourselves the question of what the student's needs are in connection with the learning process. That we are all partners in varying extent playing different roles based on acknowledgement of the fact that we are all important in educating competent candidates.



It is obvious that the library's contribution to the student empowerment is focused on IL, but it must be based on a mutual understanding of student empowerment among the formal leaves or the student empowerment network. The form could look like this in first phases of writing a project:

- Project supervisor – e.g. methodological guidance about project start.
- Lecturers – e.g. professional knowledge.
- The library – e.g. based on a dialogue with the supervisor, information seeking counselling about pre-focus exploration.
- Academic writing centre – e.g. how to work with creative idea development and to get started writing.
- Study counsellors – e.g. how a frustrated student can use the supervisors and information specialists to move forward in his project work.

When the library is a partner in an empowerment team it requires that the library initiates development projects in collaboration with the other partners. The outcome should be cases of best practice of what a library can do to go beyond the provision of information. The cases of "Søk og Skriv" (Search and Write) and "Integrering af biblioteket i læringsmiljøerne i udviklingen af de studerendes informationskompetence" (the integration of the library in the learning environments in the development of the students information competence/literacy) are examples where the library has tried to combine the information search process with the writing process and the overall learning process in collaboration with faculty.

The societal and technological development and increased focus on librarians' role as an information provider and educator makes it important to consider the librarians

needs for competencies. Library staff must feel competent to perform the task at hand, which is being able to help empower the student. They need to know how their communication with the student can contribute to empowerment. The librarian's role can be described as a double one: as a mediator in a pedagogical process and a facilitator in assisting in use of information resources (Kuhlthau 2004). This includes a pedagogical shift from a focus on what the library can offer to a focus on the user's need. It includes an understanding of the students writing process and the faculty's methodological work so the information specialist can enter a dialogue within a shared discourse with the students and with faculty.

According to Levy (2002), librarians feel the need for training in technological issues (related to educational tools) like use of communication by e-mail, chat, discussion groups, handing in of written exercises and administration (for example through learning management systems) and pedagogical topics like communication between teacher-student, or student-student or flexible education. Levy's observations are in line with the views expressed by library staff.

Formal training might not be enough. Knowledge might give the staff a positive and motivational belief that user education can be carried out. The attitudes and values related to education and learning will influence the communication with students. The development of teaching material, also web-based, makes it necessary to take a stand on pedagogical issues. Learning is viewed upon as a constructive and social process. Staff must also be committed to follow the pedagogical guidelines from the library and faculty. Traditionally the focus on library user education has been instructive, with a focus on the right ways to use search tools and find information (source-oriented and behaviouristic). The focus is today on the process and environment where learning takes place (process-oriented and communication-oriented) (Sundin, 2005). This entails pedagogical understanding among librarians and willingness to plan and perform their courses according to a process-oriented pedagogy. Ultimately, empowerment is not about what the student will be able to remember after a course, but about what they know how to find- on their own or through others they have identified as sources.

Future perspectives

We have found our common ground. Higher education should be committed to the making of innovatively competent knowledge workers, who are attractive to employers, amongst other things, because of their academic skills, their methodical competencies and information skills.

As we stated earlier empowerment is about developing the learners own learning. Hence the library's role in empowerment is to support the students learning process. This is where the dialogue and the collaboration with faculty should start.

Through our collaboration with faculty we have learned a lot and several issues of discussion are already visible.

First, the important collaboration with faculty must be established and sustained. It is difficult to establish a true collaboration with faculty, although we are not sure of what the cause is. Maybe it is a lack of understanding of what the library wants to do or can do due to a missing shared discourse. Maybe it is a lack of interest from faculty or lack of time. It is very difficult to collaborate if both parties are not committed trying to reach the goal and fulfil the intermediate goals.

Second, collaboration with faculty creates new roles for the information specialist and members of faculty. It is a new role for the information specialist to give process-orientated counselling to the students in their information search process and do it together with their supervisor. It points to a need for more training and knowledge about process-orientated counselling and a need for clarifying the roles and responsibilities for the information specialist and the project supervisor in their

collaboration about counselling the students. The learning content, goals and style can be negotiated through university policies, but also through faculty policies and within the individual's pedagogical views of counsellors and library staff.

Third, the technological side in regards to the virtual learning environment is also an issue.

In blended learning the students' learning management system becomes their learning environment. Web-based learning objects makes it possible for the student to more actively manage the learning process, and take responsibility for her own learning process. This process is often enhanced through interaction with peers and academic staff, but in virtual learning environments there is a possibility that tacit knowledge about academic discourse is lost. Contextualized and process-oriented learning implies that the library must meet the users in the virtual learning environment. The role of the librarian must also meet the demands of the virtual information desk in the virtual learning environment. Our virtual learning environment will allow and support the student in taking control of her learning process and facilitate meta-reflection on the students' actual steering course throughout the study.

How will library staff have to act to create a new situation where the library services penetrate the learning environment and provide contextualised counselling in a student empowerment support network? How will we fulfil the goal in the flowerpowerment model in collaboration with relevant partners throughout our institutions and between us as well? Understanding and effort of all parts involved in the empowerment of the student is needed. The answer lies in the above and the first step is to create communication with our institutions – at all levels; top-down, bottom-up, management, staff and students.

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