

Cooperation Between Library and Teaching and Learning – What’s the Use?

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Summary - At Lund University Faculty of Technology a growing number of teachers develop active student learning methods. These methods can have some advantages in obtaining certain objectives with higher education. To take responsibility for the own learning process and also to learn how to independently handle information and use it in an adequate way are important skills to achieve during an university education and this is trained when students are active in their learning process. One specific problem raised in this development process towards using active learning is to create suitable possibilities for the students to use and independently search for literature and other materials needed in their studies. Since 2003 there is cooperation between the pedagogical development program, Genombrottet, and the student library of the faculty to create conditions to support development of active student learning methods and information literacy. Both these competencies are best learned in integration with the core subjects. Just as important is the fact that the development of these competencies will support the students’ learning of the core subjects. To concrete link these activities together in the teaching and learning courses an Internet tool called “My Course Library” is used.

Key words - Active learning, information literacy, information science, cooperation, Internet tool

I. INFORMATION LITERACY AND ACTIVE LEARNING AS CAPABILITIES

One of the primary aims of higher education is to provide the students with an adequate education for their future working life. The students’ goals with their education are to develop the ability to manage their role at the labour market and the ability to scientific and critical thinking, but also to develop as human beings (Trowler, 1998). According to recent research on higher education it seems to be equally important during an education to acquire competencies to manage changes and develop openness to new circumstances and perspectives as it is to develop new knowledge in different subjects (Bowden 2004). Also the rapid development of new knowledge in the

science of technology raises the demands on engineers to have the competence to find and evaluate new information and to transform it to new knowledge which can be applied on new situations. This also leads to that the students must develop a competence to take responsibility for their own learning. One way to do this is to use active student learning methods where the teachers’ focus is to develop the students’ learning process so that they will be able to conduct tasks in a flexible context (Bowden, Marton 1998).

At Lund University Faculty of Technology a growing number of teachers develop active student learning methods. These methods can have some advantages in obtaining certain objectives with higher education. To take responsibility for the own learning process and also to learn how to independently handle information and use it in an adequate way are important skills to achieve during an university education and this is trained when students are active in their learning process. One specific problem raised in this development process towards using active learning is to create suitable possibilities for the students to use and independently search for literature and other materials needed in their studies.

Still this is an important objective for higher education and in the society today, characterized of a constant flow of information, an essential capability for every individual. In information science the capability to manage information is called information literacy. One definition of information literacy is: “Information literacy is the adoption of appropriate information behaviour to identify, through whatever channel or medium, information well fitted to information needs, leading to wise and ethical use of information in society.” (Johnston, Webber, Boon 2005). In Sweden the importance of this objective for higher education is stressed in The Swedish Higher Education Act, S. 9. The regulations for higher education requires that the students develop this capability during the undergraduate education: S. 9 “Undergraduate education shall, in addition to knowledge and skills, provide the students with a capability of independent and critical judgment, an ability independently to solve problems and an ability to follow the development of knowledge, all within the field covered by the education. The education should also develop the students’ ability to exchange information at a scientific level”.

To make it possible for the students to acquire information literacy, understood as training to search, evaluate and use

information, the development of this capability is facilitated if it is integrated with the core subjects, incorporated in the entire curriculum. By training to search and evaluate information in many varied contexts the students will develop this capability and be able to use it in new, previously unknown situations. Active student learning methods where the students are required to gather and use information to solve tasks support the development of information literacy.

II. INFORMATION LITERACY TO SUPPORT LEARNING

Since 2003 there is cooperation between the pedagogical development program and the student library of the faculty to create conditions to support development of active student learning methods and information literacy. Both these competencies are best learned in integration with the core subjects. Just as important is the fact that the development of these competencies will support the students' learning of the core subjects (Bowden 2004).

According to the findings so far by a not yet completed research project in the UK including academic teachers' conception of information literacy it seems that teachers having a focus on the students learning process in their teaching also have a deeper conception of both information literacy and of the pedagogy which could be used for supporting the students to acquire information literacy (Johnston, Webber, Boon 2005).

By taking advantage of the cooperation between the student library and the pedagogical developing program a process to find methods to develop active student learning and ways to use the library in a more conscious way has started. One example is that the teacher training courses try to be model courses to show possible ways how to use those components in learning situations. Many of the courses traditionally use active learning as method and in the most of them there is a project work. Since the cooperation begun a librarian participates in the courses together with the educational consultant. To concrete link these activities together in the courses a certain tool is used called "My Course Library".

III. THE TOOL "MY COURSE LIBRARY"

The tool used for information management in the courses is the internet based tool "My Course Library" developed at Lund University. This internet based tool provides links to current databases used in the subjects. It is also possible to put lists of current literature in this tool and other material the participants can use in their work. The course participants are required to on their own start the process to find relevant information in the sources presented in "My Course Library" and with support from the librarian and the course leader value the information and analyse its application on the problem in the project. An effective, mostly self conducted, learning process occur. Another objective with using this tool

is to make the teacher familiar with the information sources of teaching and learning.

This internet tool is easy to use and one of the ideas with using it in the course is that the teachers will discover how they can use it in their own courses to train the students in information literacy but also make the students familiar with the information sources linked to the different subjects in their education. Many teachers use "My Course Library" to improve the present course homepage. If there is no homepage teachers discover how easy it is to get a "My Course Library" to use. The teacher the decide to either form the "My Course Library" in collaboration with the librarians or to do it independently.

A general version of "My Course Library" for teaching and learning is on the homepage of the pedagogical development program to facilitate for the teachers to use the sources in their every day life.

IV. FINDINGS AND RESULTS

This cooperation between the library and the pedagogical development program, Genombrottet, in the teacher training courses and the use of "My Course Library" in different ways at LTH has already lead to results. Obviously it is a very effective way to inspire and find ways for the teachers to start to elaborate with using "My Course Library", which also leads to activate the students more in their learning processes in the courses at LTH. Several projects have been started to develop active student learning methods in different institutions or to improve courses already designed with active student learning methods by using "My Course Library".

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