COLLABORATION AND EXAMINATION IN INFORMATION

LITERACY AS AN ASPECT OF QUALITY IN THE

PROFESSIONAL ROLE OF STUDENT NURSES

Pia Bagge, Lena Wieup

Collaboration and examination in information literacy as an aspect of quality in the professional role of student nurses

Introduction
We started our cooperation ten years ago. The expression "Rom was not built in a single day" comes to mind when describing our project.

Our goal is to give the student a tool for lifelong learning and we think that the best way to do this is to integrate the library in teaching, so that the library become an obvious part of education and research and that the faculty look at the library as a pedagogic resource in the students learning process.

In the beginning we had great difficulties, both technically and with students´ attitudes. My predecessor managed all information retrieval for the students. At that time there were just single user CDs access to the databases we needed, and there were more than 200 students who need to become information literate. For the students the library was a service organisation and not, as we want them to think of us, as an educational institution.

Improvement of scientific standard in nursing studies through information literacy

The Swedish nurse education is now days a University Education, regulated by university law (1992:1434). The Swedish National Agency for Higher Education is a central agency responsible for matters relating to institutions of higher education. The National Agency exercises supervision of higher education institutions, which means ensuring that they comply with laws and regulations that apply to the area of higher education.

In establishing an evidence-based nursing practice and achieving a health care service of high quality, the implementation of research results is an issue of great concern for the nursing profession. There is however a growing body of knowledge of nursing research, which has the potential to improve the quality of Health Care and contribute to evidence-based care. The law requires Swedish registered nurses to keep themselves up to date within their profession. Although there are demands from the authorities and the patients for evidence-based nursing and continuous improvement of quality in the Health Care sector, there is still lack of utilisation of research findings among broad groups of nurses. There can be barriers to research utilization, for example to the way in which research is presented as well as how the students get the introduction to find the research result. The nursing practice is still sometimes based on non evidence based tradition, routine and experience.

Swedish nurses are required to work in accordance with scientific knowledge and reliable experiences, that demand that they shall keep themselves continuously informed about developments in their profession. Nurses are also responsible for improving the quality of practice and for carrying out a research-based practice. This may be of great importance for professional care of patients. The expansion of nursing knowledge has been noticeable in the last few decades and the number of nurses with high academic qualifications in Sweden is continually increasing. It is vital for future expansion of nursing knowledge to find strategies that will ensure that research results reach the practitioners, for possible implementation and critical evaluation.

Two ways to breach this gap are to give professional credits and to improve the research training for nursing students. Nurses who incorporate high quality research evidence into their clinical decisions and clinical recommendations are being professionally accountable to their clients. They are also reinforcing the identity of nursing as a profession. Evidence suggest that nurses who have been exposed to basic research training in their initial nursing education perceive fewer barriers to research utilization, composed with nurses without such training. It is shown that research education promotes knowledge of and positive attitudes to research.

However it can be a challenging pedagogical endeavour to disseminate and communicate results to the world for the potential users. The overall purpose of a research project is to assemble knowledge on a topic. Nursing students need both to learn how to review and to synthesize evidenced-based information and how to disseminate the results to a specific target group.

Collaboration
Teamwork between the teacher and the librarian is very important when you have to live up to what the official documents says and it is also convenient to have official documents that give weight to your arguments.

Christensen (2004) points out two things that are important to the dynamics and qualities in the collaboration between librarian and teachers.

1. Organisational dimensions and issues.
It is easier to collaborate if your manager expects team planning and if you are allowed to have a flexible schedule. It is really an obstacle if your manager does not understand the necessity of giving you enough time to spend on common planning. As a librarian you can ask the teacher how much time they get to prepare for an one hour lesson and then demand the same time for your own courses. Concerning teamwork between librarian and teacher Haycock (1998) says "Collaborative planning by these two partners ensures a better understanding by students of how to plan research and use print and database resources."

2. Social status dimensions.
Improved and continuously and sustainable cooperation between librarians and nursing teachers are necessary for a successful cooperation. There should not be asymmetrical disconnections between the librarian and the teacher. In our case we can say there are no differences in the social status. When working together we are at the same level, but with responsibility for different tasks and with different perspectives.

In service training
Both librarians and teachers need to develop their talents when it comes to professional competencies. As an example of in service training I can mention that at our University we are giving credit courses in university pedagogy and both teacher and librarians are welcome to these courses. Another example is that a few years ago I did a survey among our teachers concerning "what is information literacy" and nearly all of the teachers thought that it was something that just the library managed. After that I gave some lecturers about information literacy and today we see it as a common responsibility to prepare the student for their lifelong learning.

But in service training can also be informal contacts between librarians and teachers when we have the chance to discuss pedagogic methods as well as teaching, learning and knowledge issues. Informal contacts can really be a good opportunity to experience if there are differences between teaching and library cultures and what it is that enhancing learning by the students. Just for the reason that this kind of chats and discussions will happen, it is important that the librarian as well as the teacher have reflected upon their own view concerning teaching and learning.

Informal contacts are also very important, in that they often give continuity and the feeling that you really are a part of the teaching team. For instance, I really appreciate that I as a librarian am a obvious member of the institutions supervisory group, actively working in different course planning projects and that I am a part of the institutions Network Learning group. The informal contacts can help you find your role and responsibilities as a teaching librarian.

With the student in centre
We do not see the students as empty bags to be filled. We believe in active learning. To make them succeed with this we have to give them a good teaching environment and try to give them the right motivation at the right time, give them plain goals and appropriate challenges. Our advice is, do not lay to much stress on technical processes and normative model when you plan your user education (Bruce, 1997; Kuhlthau 1993; Limberg, 1998).

We believe in a phenomenographical approach to learning. Phenomenography is a research method for studying human understanding of specific phenomena. The method has been developed at Gothenburg University by Ference Marton. According to phenomenography, to learn is to change the way you understand or think about something and learning is the effort to understand meaning in phenomena. This is what we also use to call the deep approach to learning (Ramsden, 2003). Deep understanding of teaching and learning and their relationship to each other is an essential bas for effective action as a teacher (Biggs, 1988, 1999) and will lead to a high quality outcome among the students.

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Phenomenography also states that knowledge is always tied to its content and there is no teaching without content. Therefore Limberg (2001) warns against librarians too much emphasizing the searching process and the teachers the subject contents.

There is no significant difference between information seeking and use according to Limberg. Information use is an intellectual process and how you use the information is the result of learning. The concept includes as follow:

- To read
- To reflect upon gathered information
- To compare different sources
- To analyze
- To examine and assess
- To make syntheses
- To create meaning from information

Pedagogic and Didactic
Didactic is the art of teaching. With teaching we also mean supervision and counselling. To get a didactic for information literacy that is sufficiently effective we need to combine library and information science with pedagogy.

There are many different schools among pedagogy. Behaviourism with Skinner as a famous advocate is one of them. Behaviourism stands for external change of behaviour with the help of rewarding systems. This will lead my thoughts to ex-cathedra teaching and surface approach to learning. Another school is Cognitivism with influences from cognitive psychology. The result of a cognitive viewpoint in user studies is that focus is on internal mental activities.Constructivism state that cultural and social differences influence peoples ways forming an understanding and interpreting the world around and that the individual creates his own understanding. Well-known spokesmen for Constructivism are Vygotsky and Piaget. In this content I also want to mention Säljö with his sociocultural perspective on learning and his statement of how we relate new things to those already known (Säljö, 2000).

Teacher – librarian
Our experience says that cooperation enriches teaching. You get new angles of incidences and you can get suggestions about different materials you have not used or known about before. This often leads to higher quality in your work. Collaboration between teachers and librarian is a significant factor in improved student achievement (Haycock, 2004).

I will say that teamwork is necessary around pedagogic content and the tasks the students are to work with and solve. It is also important that the two occupational groups, librarians and teachers, get enough insight into students work, so that they are able to see the whole learning process. The process consists of framing a problem, framing a question for information searches, working with documents and finally the presentation and analysis of results.
I know personally and results from research shows (Bergman, 1999; Thomas, 1999; Todd, 1999) that the quality of students´ information searches and use to a high level is dependent on the shaping of the tasks with reference to delimitation and framing of the problems and of how meaningful the students found the tasks to be. The students have to learn to reflect upon what they know and be critical towards their sources. They must learn to interpret, analyze and compile disparate material from different sources.

Study programme
How do we plan our teaching and supervision so that our students become independent, analytical, critical and flexible searchers?
Information literate is not something you become after one day of education. Instead you need to repeat the process of seeking and using information several times. Therefore we have frequent educational opportunities for attaining information literacy during the students´ three year programme. We use a progressive method and we have made a study plan especially for information literacy. This plan gives an overview as to when in the study programme time devoted to teaching in information literacy is inlaid and what the contents of the tasks belonging to information literacy are about. The study plan also shows what tasks in information literacy belong to which course in the study plan. The teachers are very pleased

with the plan because it enhances their understanding about what the student know when it comes to seeking and using information at every stage.

Examination task
How do we then plan our teaching and supervision so that our students become independent, analytical, critical and flexible searchers?

As early as 1995 in the final report of an investigation called "The student´s library" published by BIBSAM (The Royal Library´s Department of National Coordination and Development) they concluded that in the integrated library, information seeking is a natural part of the subject teaching and the library is a natural partner in planning, conducting and examining.

As an example of an examination task we want to describe the one we are giving the students during their second year, we call it course 4. We have divided the course into two parts.The first part, called the exercise task, consists of a short lecture by the librarian and one hour of information seeking under supervision. The librarian talks about how to write references and make a reference list and shows the students a document about this, done by the librarian and placed on our homepage. The students are given examples of five different bibliographic and fulltext databases they can use to search for reviewed articles and scientific articles. The articles must be about nursing but they are allowed to choose any illness and patient group they want. For the exercise task we prefer to have small groups of 12-15 students and they are allowed to work two or three together to solve the task.They have to make a reference list consisting of at least three articles. If they want we give them feedback on this exercise when they have finished their task.

The second part consists of three hours long lecture by the librarian with the attendance of approximately 50 students. After the lecture we divide them into smaller groups and give them one hour to search for information together with a teacher and a librarian as supervisors. The library gives access to a search-work shop twice a week with a librarian as supervisor. The students can attend this workshop during their work. It is important that the students get continuous support and individual supervision because each opportunity for information seeking is dependent on its content. Haycock says that student support more effectively guarantee student success and academic achievement. He also says that libraries can make positive differences in student self-esteem, confidence, independence and sense of responsibility in regard to their own learning.

Examination of the students is done in small groups and both librarian and teacher act as examiners.

The lecture
The purpose of the lecture is to inspire the students and giving them ideas about what information seeking, information use and information literacy is.

The lecture contains following parts:

- Information literacy.

Definitions and different ways to understand the concept. ALA´s definition and the way Doyle and Bruce explain information literacy.

- Information seeking and information use.

Theory and practice and the information searching process. The information behaviour according to Wilson, Ellis, Kuhlthau. and Heinström. Giving them practical advice of where to find information.

- How to formulate a question to the literature.

- Learning.

Deep and surface approach to learning

- About scientific articles

Explanations of some of criteria of a scientific article.

- How to write references and a reference list.

Giving them some examples and direct them to a document, written by the librarian, on our homepage.

The examination task.

The students are allowed to work in groups of two to three persons. We ask them to read a case study concerning a nursing problem. When they have read about the nursing situation, they have to formulate a question which pertains to the information they as nurses need to obtain in order to advice their client.

The students have to:

- Make literature searches on the basis of the words and concepts emerging from their questions
- Document their searches in a search diagram
- Review their results critically
- Write a short report
- Motivate and reflect upon chosen information sources, search strategies and choices of articles
- Relate their search behaviour to a theory
- Reflect over problems and possibilities they have experienced during their work
- Reflect over benefits they gain as information literate nurses
- Write a reference list
- Repeat the search strategy used by different group
- Present and discuss their experiences during the examination seminar

Assessment of the examination task

We try to create a relaxed atmosphere but since it is an examination we also make demands upon the students. The teacher and I use a schedule with different parameters for failure, a minimum passing grade and passing with honours.

We assess the following:

- The use of resources
- The search strategy
- Their motivations and reflections in documentation
- The reference list

- The presentation at the seminar

According to the students this examination task contributes to making them more interested in information seeking and information use, they become more engaged by the tasks and they understand the benefits they gain as information literate nurses able to give their clients carefully prepared nursing advices.

In my opinion, as a librarian, the greatest advantages and benefits in being an examiner are that you get almost instant feedback from the students. My efforts as a teacher become more meaningful, my work seems more interesting and I can actually create an understanding of what the students have comprehended.

Evaluation

Now an then I do my own evaluation often I ask three simple questions What was good, what could be done better give me some reflections about our work today.In our school, the efforts of the librarian are always evaluated during course evaluations by the institutions
The way we evaluate shows what we expect the student to know. The evaluation should work well together with the goals of information literacy education.
At Kristianstad University Sweden we can after this ten years see that the quality has improved and the students are more aware of how they can use their knowledge. The quality of the students´ research literature contains a higher scientific standard, compared with before.

Future

The pedagogic role of librarian is not an end in itself but a way to enhance the quality of the students´ education in becoming an information literate person.
Looking into the future The Faculty of Health Sciences at Kristianstad University and The University Library can see a possible way to continue. We have applied for funding from the National Agency for Higher Education and are planning cooperation with another university department.

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