Knowing the needs. A system for evaluating the university library.

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Abstract: In the light of the digital library development and of the online communication development, the university education develops in its turn new educational instruments put at the students' disposal in order to improve their professional skills and their individual studies.

The University libraries, which have traditionally been focused on supporting the scholars' needs in research, have begun to play a more active role in this changing educational system, as a result of the Bologna process.

Incorporating the new technologies in the didactic process, accessing the electronic informational resources, using the web space for communication, all these imply qualitative research so as to determine and to optimize the students' learning methods, and we see a movement in the library world of libraries actively pursuing this.

However, to be able to play an active role in the students' acquiring of scholarly skills, libraries need to implement systems for uncovering the gaps in students' knowledge. We find that theories and practices from the fields of Market research and Marketing analysis provide a helpful perspective.

In this paper we will present a system for an university library to gain knowedge about their student's needs. This consists of several parts, and we will use examples of surveys, questionnaires and structured interviews.

Also, we will present an analysis of data that have been acquired as part of our collaboration in European projects between the university libraries of Brasov, Romania and Bergen, Norway

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Keywords: marketing, university library, electronic resources, library assessment

1. Introduction

As a result of the Bologna process and the changes in technology, one can see a digital library development. This is in tune with a development of the university education towards new educational instruments put at the students' disposal in order to improve their professional skills and their individual studies. University libraries, which have traditionally been focused on supporting the scholars' needs in research, have begun to see the need for playing a more active role in this changing educational system.

There have been many different solutions to the challenges of incorporating the new technologies in the didactic process, accessing the electronic informational resources and using the web space for communication. All these imply qualitative research so as to determine and to optimize the students' learning methods. Libraries in the world are actively pursuing this.

The theories and practices from the field of Market research and Marketing analysis may provide a helpful perspective in providing systems for uncovering the gaps in the student's knowledge. This "uncovering" is vital for the University libraries, for them to play an active role in helping students acquire scholarly skills.

2. What is necessary for a library to know?

The first step in a system for gaining knowledge is deciding what one wants to know. Is it the student's actual information behaviour when it comes to finding information for solving an assignment? Is it the choice between printed or electronic sources for students? Or what the university staff prioritizes? Is it the results from the library's teaching of information literacy? These are just examples of different questions a library may want to ask itself. This will be vital; as determining where the focus of the system of gaining knowledge is have a major influence of how to successfully design the methods.

A special part of relevant information is to be found in different kinds of statistics. This may be the

library's own statistics, of visitors, books borrowed, downloads of electronic resources; or it may perhaps be the university statistics of age and geographical composition of students.

3. How to find out?

For each of the "questions" that wants answering under Part One, there will be one or several preferred methods of extracting that information. For the student's actual information behaviour one can use different kinds of observation methods, or use a survey for controlled questions. For the choice between printed or electronic resources one may look at the statistics for down loads vs the ordinary loans, or use interviews with different groups of users. For the results of the library teaching, one may have separate questions in the exams, or ask the examinators for their views.

4. Experiences from Bergen and Brasov

Since 2005 the University of Brasov and the University of Bergen Library have cooperated within the European Union Framework. As one of several projects, there has been planned and implemented a small survey of the student's use of electronic vs. printed material for their information gathering. The survey was developed in Brasov, after in-depth interviews and a pilot, and then translated into Norwegian and used. The results from both libraries can then be compared.

As a background for the survey it is hypothesized that:

1. Students who have more computer experience will be more likely to use the library's electronic resources and have higher self-efficacy.
2. Students who use the library's electronic resources from home have higher self-efficacy.
3. Students who frequent the library more often are more likely to use the library's electronic resources.
4. Students who use the library's electronic resources will be able to discriminate them from information from the Internet.
5. Students who express interest in learning about the library's electronic resources will have higher self-efficacy.

The survey examines some factors that correlate with students' usage of the library's electronic resources. While examining the relationship of age and gender to usage, we also focused on the concept of self-efficacy, a person's belief in their ability to attain desired outcomes

5. Methods

A pilot survey was conducted in the spring semester of 2008. That survey had a number of open-ended questions that were used to determine the close questions we asked in the fall survey. Although helpful in some areas (for example, to determine what students came to the library for), some of the open-ended questions had a very low answering rate and therefore were not helpful in focusing our final survey's questions (in particular, students did not answer open-ended questions relating to which electronic resources they used.)

Our fall 2008 survey contained two distinctive parts: a self-efficacy standard measuring instrument and a library component.

The self-efficacy survey made use of a Likert scale. Seventeen statements were presented to the students, and they could agree or disagree with them on a five point scale, from 1=Strongly Disagree to 5=Strongly Agree. Thus. a total numerical value can be calculated from all the responses.

The library section consisted of 31 questions. Questions one through six were concerned with gathering demographic data. Questions seven to 12 focused on whether or not the student used the Internet and what for. Questions 13 to 26 dealt with how the students used the library and its electronic resources. Questions 26 to 31 focused on the how students gather necessary information for their research. Most questions were closed-ended, although some were open-ended.

Survey responses were coded and input into the SPSS statistical package for analysis and the hypotheses presented above were tested using analysis of variance (ANOVA). The ANOVA is used to uncover the effects of independent variables on an interval dependent variable. This procedure employs the statistic (F) to test the statistical significance of the differences among the obtained means of two or more random samples from a given population. The statistic (F) is a ratio, which, if sufficiently larger than 1, indicates that the observed differences among the obtained means are statistically significant. It is important to note here, however, that the samples were not random, which reduces the generalization of our results.

Students' demographics
Demographics often yield important clues as to what factors contribute to undergraduates' use of electronic resources. There is a correlation between background characteristics such as gender, race, and initial critical thinking scores and library use during the freshmen and sophomore years, although these played less of an important role in the junior year.

Age
Age is one variable that correlates with comfort with computers and use of electronic resources.

Gender
Gender is another relevant factor in examining use of electronic databases. In a study of high school students, it was found that their attitudes towards computers and their computer use tended to vary by gender. This difference, however tended to diminish with computer experience.

Frequency of computer use
Computer anxiety is another contributing reason that discourages users from taking advantage of library resources and services

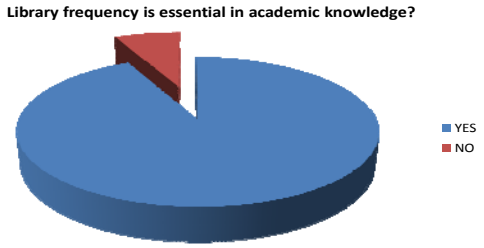
Library use
Students' library use is another variable influencing the use of electronic resources. It is reasonable to assume that the more an undergraduate uses the library, the more familiar the student will be with its resources, including its electronic resources.

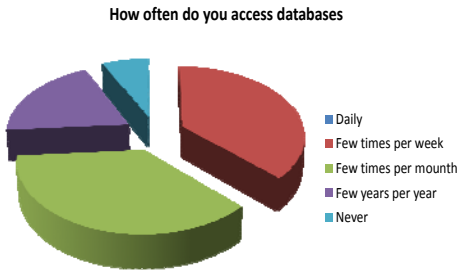
Self-efficacy
The degree of self-efficacy is another variable that appears to influence use of the library's electronic resources.

6. Results and Discussion

Computer and Internet use
Computers are definitively present in students' lives in that 94% reported having access to a personal computer at home, with 93% saying they own one. For this population of incoming students there is no digital divide. Perhaps because so many students have access to a computer at home, they do not seem fully aware of the computing resources available to them: only 34% said they had access to computers at school, although there are student computer laboratories on campus.
Our incoming students are also very familiar with the Internet: 73% say they access the Internet daily, and an additional 25% at least once a week. In other words, over 97% of students access the Internet weekly or more often. When surfing, 44% look for educational information, 42% for entertainment information, 30% for news, 25% check for sports information, 9% for health information, and 70% report using e-mail often.

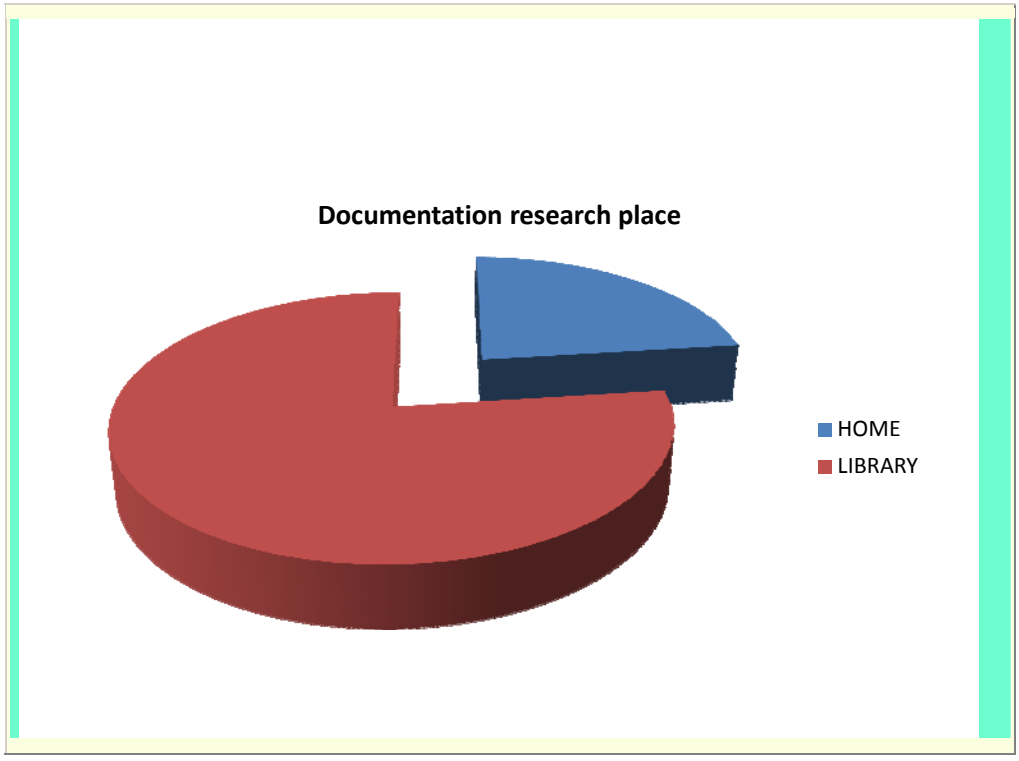
Library use.
Data revealed that 67% visit the library weekly, and only 1% has never been to the library. Asked what they did at the library, 80% reported studying, 38% to do research, 33% to sleep, 30% to socialize, 24% to use the library's electronic resources, 22% to check books out and 21% to e-mail or chat .





Even though some of these areas overlap (research and use of electronic resources, for example), it is clear that these students are mostly using the library as a place, not to make use of the library's resources or services.

It is interesting to note that although only 24% responded that they use the library's electronic resources when at the library, 81% responded that they have used those resources, and 30% said they use them at least weekly.



LibQual

The survey described above is a smaller specialized survey. A library may also use a larger, more general survey to cover (or rather uncover) the “customers” view of library services in more general terms. One

such survey is LibQual. When the University of Bergen Library in the spring 2009 joined other Norwegian University libraries to use this survey, it was found that all groups of "customers" were happy with the service rendered by the library staff, and unhappy with the electronic resources, finding them too difficult to find and use. The scholarly staff was less pleased with the selection of books and journals in the library, while the students wanted more quiet zones to be able to work. These are just a few examples of the preliminary findings, and a survey like this will give a lot of information about the needs of the users of the library

7. Conclusion:

In this paper we have given some examples of different kinds of information-gathering tools that a library may use in order to uncover needs among the users. The tools shown include examples of interviews, focus groups, specialized surveys and general surveys. In accordance with marketing research theories, these different kinds of tools can be systematized and put together in a system for providing a better knowledge. Further, this evaluation-system will make it possible for a library to improve its performance in accordance with the needs of the users.

Finally, research could also explore, in more depth, what makes students decide to use the Internet as opposed to the library's electronic resources, and what kinds of incentives would encourage students to use more of the library

It's ascertained that the Internet and the library are the most important informational resources.
The students rather make use of electronic informational resources.
The library services are considered by the patrons to be well organized, but the students prefer booklets containing instructions regarding the use of resources.

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