

Planning designing and building a prototype of a library as a successor of the additional library / Moshe Shemesh

Abstract:

The purpose of this paper is to establish concepts regarding the question "what is a digital library?", by examining the digital library should include. This paper does this through a comparison to the parallel function specifications of the traditional library, by following the existing need of each function and through an extensive survey of the existing digital libraries on the internet network. One chapter is devoted to a review of digital libraries which deal with student projects.

The theoretical model passed a practical test by building an internet site of the prototype of a digital library based on the concept of "information harvesting. This digital library contains information sources for three courses which were held in the Department of Information Science in Bar Ilan University. This site was written in HTML and JavaScript and includes, among other things the following:

1. Bibliographies of courses.
2. Syllabi of the courses.
3. Exercises.
4. Presentation & reference materials.
5. Class summaries.
6. List of electronic sources reference (URLS).
7. Learning material of the Internet.
8. Scanned learning material.
9. Multimedia file for material.
10. A forum for students who participate in these courses.
11. A counseling service of the lecturer/instructor, using LEQ.
12. Student papers, saved on the department's computer network.
13. Bibliographical details of the students papers:
Heading, author, bibliography, synopsis, key terms, site address, source reference, data & type publication.

Assumptions of the research

Assumption 1

This model will be efficient system for locating, harvesting and organizing information, from the internet for users in an academic environment | various configurations, in the framework of a uniform user interface (integration of catalog department, sorting, acquiring and counseling) as a substitute and supplement to the traditional library services.

Assumption 2

This model may increase the learning threshold in the courses it is tested on. Students may reach achievements based on implementation of ideas raise in the papers of students, who took the courses in previous years, which using current technology. The system will encourage the students to develop

research thinking independently starting from his stage of choosing the information, through the defining of the research question and collection, organization, sorting and reposting of the data.

Assumption 3

The system will encourage the lecturers to become guides, rather than teachers, who help the students to define research questions and find information sources. With the help of the system the lecturer can instruct the student how to organize knowledge, beginning with sorting and judging the knowledge and ending with the evaluating of the accumulated knowledge.

Assumption 4

The recommended model will change the social atmosphere in the organization, by creating a fruitful cooperation between the students and lecturers and among the students themselves.

Assumption 5

The model, being manual, may cause technical difficulties caused by the use of various configurations in the students' papers, which are transferred to HTML as Power point presentations Excel worksheets.

In order to test these assumptions a quantitative research was performed. A questionnaire was distributed among 73 M.A. students in the Department of Information Science in Bar Ilan University. The questionnaire was composed of two parts: A pre-questionnaire – to be completed after the use of the digital library. Analysis of the finding of the questionnaire allowed the preparation of the quantitative research. The Research finding confirmed most of the assumptions of the research. It was proved that the prototype is indeed efficient in locating, harvesting and organizing information. However there is still room for improvement by increasing the quality of some of the sources.

The assumption that the model may increase the learning threshold also was confirmed. It was proven according to the students' reactions that the prototype may contribute to the motivation to learn and to cooperation among the students and between the students and the lecturers, thus creating the possibility of new concept of research and encouraging a large number of students to continue to higher academic studies.

The assumption that system will encourage lecturers to evolve from teacher to instructors, who guide the students in defining the research questions and in locating information, was confirmed as well. Many students noted that the model will obligate lecturers to become active instructors who will encourage the students' research independence, thus creating a tighter and more fruitful cooperation between the students and the lecturers.

The assumption that the suggested model will change the social atmosphere in the organization was confirmed. Changes in the learning and the teachers function create changes in the general social atmosphere as well. The situation of personal learning without noticeable cooperation between the students will change to a situation of cooperation mutual aid between the students. With the need of chasing after material eliminated, the students will be able to focus on academic research team work for its own sake.

The final purpose of this research is to allow, after overcoming all the technical and bureaucratic obstacles, mainly the problem of copyrights, creation of a future digital library of thesis's and dissertations, which will be based on the concept of "information harvesting" which will make it unique from other internet libraries around the world.

Thus academic research in Israel may truly advance as in other countries where such libraries, supported by government and private sectors, are developed in great speed.

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