

## The evaluation of the library software course instruction through Tehran governmental universities and a comparison between DOS and Windows based Pars Azarakhsh library software

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### Abstract

This paper studies the condition of Library software instructing in governmental universities of Tehran. To conduct the study, a descriptive survey was used and a self-designed questionnaire was prepared for the study. To measure the validity, the questionnaire was referred to some informants to evaluate the items. In the next stage, the questionnaires were distributed through LIS students of Tarbiat Moalem and Shahid Beheshti universities and finally 68 valid questionnaires returned. The findings showed that there is a significant relation between the theoretical instruction of library software and the practical training. It was revealed that the kind of library software affects to the LIS students' satisfaction. The study concluded that, despite the lack of financial resources, LIS departments should acquire some up to date library software for practical training, because the theoretical instruction is insufficient.

**Keywords:** LIS students, library software, Pars Azarakhsh, Nosa, Tehran universities

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### **Introduction**

In the information era, library software plays an important role in managing and organizing information. In library and information science, there are widespread use of such software, enhanced the speed of process and accessibility of information. Besides, library software helps to quickening technical processes in library as well as retrieval and storage of information. Today, librarians are imposed to learn the practice of such software because these functional software could help librarians and information experts to organize their resources more easily. Furthermore, these software could perform the classification, cataloging, labeling and are servicing at desk receptions and journal departments.

Library software is actually a kind of computer program that is prepared by one of the variety of programming languages. Until the last 1980s, the library software was generated by using languages such as PASCAL, COBOL, QUICK, BASIC, and PERL. Which were operated in DOS. Some new versions of such software run in Windows and some newer versions in web environment challenge with a vast amount of digital information.

General characteristics of library software include (Mohammadi Fard, 2005):

1. High speed in information retrieval,
2. Enough memory for various kinds of databases,
3. Trusted security,
4. Information support,
5. Supporting networks,
6. Simple user interface

Library software should have following capabilities:

1. Management,
2. Network function,

3. Multi user/operator,
4. Simple and advanced search,
5. Circulation,
6. Input, output and edit the data,
7. Organizing,
8. Cataloging,
9. Making reports,

Some other specifications are as follows:

1. Web support,
2. Producing label and card
3. Abstract and Index
4. Upgradable

Functionally, library software systems are mostly two kinds:

- a. Integrated system, in which all library units and departments use single software. This system also has known as linked system.
- b. Stand-alone system, that every units and department have independent software.

### **History and background**

As using computer was popular in different educational organizations, libraries employed library software in 1960s. Although the circulation desk was the first unit, which used computer, high speed and accuracy of computer encouraged other departments to make use of such technologies. Consequently, other library departments and units utilized specialized software for, acquisition, cataloging, periodicals and indexing. Mark's (Fatahi, 2001) idea success in the late 1960s in designing a scheme for bibliographical records storage showed that according to the storage and retrieval standards we could enhance the capabilities of library software in information storage and accessibility. He also proposed that we could apply such standards in

other departments. In 1980s, many innovative attempts performed in many countries such as the United States to develop library software. At that time, UNESCO developed CDS/ISIS, which was powerful library software.

In 1988, CDS/ISIS was used for English collection of Emam Reza Hospital library in Meshed and after that, central libraries of Shahid Chamran University in Ahvaz, Ahvaz University of Medicine, and Ferdowsi University of Mashhad were Iranian pioneers in utilizing UNESCO's library software.

Some times later, various packages of library software compatible with Persian released in Iran including Borna, Ketabdar, Nama, and Kopis.

After the innovative attempts of Irandoc in generating Persian compatible software for its collection, two non-governmental companies traced Irandoc attempts and began to create national library software for Iranian libraries. These two companies were Pars Azarakhsh and Nosa Company. CDS/ISIS library software was the initial base for two Iranian library software, namely Pars Azarakhsh and Nosa library software.

Pars Azarakhsh Company made its first library software according to the UNESCO's library software. CDS/ISIS had some problems and especially had a low compatibility with Persian. Therefore, Pars Azarakhsh Company decided to develop new library software based on CDS/ISIS, which could support Persian as well English. Besides, Pars Azarakhsh showed a reasonable attempt to modify the UNESCO's library software (Pars Azarakhsh official site).

Initially, Pars Azarakhsh developed its first library software operated in DOS. Therefore, it dubbed to DOS supported Pars Azarakhsh Library software. Afterwards, revealing some problems with DOS version of Pars Azarakhsh software, the company

determined to produce the Windows based version of Pars Azarakhsh library software. Some changes were made and new version of Pars Azarakhsh library software was implemented in many Libraries in Iran. After that, web based Pars Azarakhsh library software was released through Iran's market and in spite of its high price, some organizations welcomed its existence and purchased a copy for their libraries. In current years, computerized retrieval has been distinguished through libraries and information centers because of four main factors including the importance of time, change in quantitative and qualitative information, change in the importance of information resources, and finally change to information contents (Gazani, 2000).

### **Literature review**

Since there is only single document about this subject, this paper seems to be an innovative study. While the kind of research is not originally unique, but for the unique presentation of library software in Iran universities and specific problems related to Iranian educational system, the paper is a pioneer one. The only single document on current subject has performed by Davarpanah (Davarpanah, 2003). In that paper, he has studied the contemporary university libraries systems in Iran. In a part of his study, he has surveyed the information technology applications, administrating, and staffing the libraries. He has stated that some systematic problems in university libraries in Iran has caused to revealing various difficulties dealing with library software such as Pars Azarakhsh and Nosa. Pars Azarakhsh in university libraries has the most attendance. It means that this software is frequently used by university libraries in different versions (Pars Azarakhsh, 2007). Afterwards, Nosa and Kavosh and other software has less used by library universities and have been used

frequently through public and school libraries (Nosa pamphlet). Therefore, the students who are being trained in such libraries have the most contact with Pars Azarakhsh library software. LIS students may face to other library software during passing internship course out of university campus in public or school libraries.

### **The statement of problem**

Although the excessive growth of computer based knowledge and generating new software products in all areas, library software development in Iran had a slow move to acquire library needs. Besides, here we are faced with the ignorance of many organizations including universities, from the new technology products. Old versions of library software used in many universities such as Tarbiat Moalem University, has reduced the quality and quantity of services to audiences. In Iran almost every universities that have held the library and information science course of study, lack to own a set of library software. Since the library software is two-credit university course for students of LIS, it seems that every LIS department should possess all popular library software. This possession would make LIS students more informed of library software.

Traditionally, library software course is consists of one theoretical credit and a hands-on training credit. It means that in theoretical part, they would learn all possible kinds of library software but in practical section, they would only work with a kind of possible library software. Because of the fact that the students pass their hands-on training just in a single library, they lose the opportunity of working with other types of library software. As the central libraries of universities always have only single version of a kind of library software, it would be nearly impossible for students of a university to be practically familiar with variety of library software used in Iran.

Moreover, there are some few library software popularly utilized by Iranian university libraries, therefore it may be helpful to purchase all possible kinds of library software for academic purpose. This attempt will enable instructors teach the library software contents effectively. Consequently, the LIS students will be better educated for their future job, no matter which library or organization they would enter because they know nearly all possible library software in their country.

Another problem is about engaging to all aspects of the library software. Ignoring some lacks in Iranian library software such as insufficient utilities for acquisition and ordering materials in Pars Azarakhsh Nosa library software, the students are coerced to pass their practical training credit related o library software course in such a library, which does not implement all aspects of the software. It means that, according to the library policy and facilities as well as materials, libraries make use of library software. Some aspects are used only by large libraries and smaller ones may not utilize them. Therefore, the teacher may instruct the software comprehensively, but the students fail to recognize them for the practical training the software needs to be learnt. Besides, many university libraries are traditionally manipulated by some inexperienced staff, who do not know much of a library software and may not be qualified to train the students effectively.

More to the point, sometimes university organizations evade of purchasing new version of library software for their affiliated libraries. The example is Tarbiat Moalem University that likes to maintain its old version of Pars Azarakhsh library software based on DOS OS.

**The aim and objectives**

The aim of study was to examine a two-credit library software course, which is instructed for LIS students in under graduation level. The objectives are follows:

1. To measure the students knowledge of library software
2. To measure the satisfaction of students due to the library software instruction
3. A comparison of two versions of Pars Azarakhsh- i.e. Pars Azarakhsh DOS based version and Pars Azarakhsh Windows based version.
4. The evaluation of the LIS students' knowledge of library software.

**Population**

For acquiring the data, the population was selected among governmental universities of Tehran. There are five governmental universities in Tehran which run LIS course in BA level. The course of library software is instructed during the last educational year of under graduation, either in first semester or in second semester. Since the study was performed at the end of the first semester of 2006-2007, only two governmental universities including Tarbiat Moalem University and Shahid Beheshti University were presenting the library software course. Therefore the population was two classes of LIS students, one in Tarbiat Moalem University and other in Shahid Beheshti University. In Tarbiat Moalem University LIS class, 32 students currently passed library software course at the end of first semester. In Shahid Beheshti University, 34 students currently passed the library software course. Therefore, the population consisted of all possible samples in both two universities including 66 LIS senior students. All possible samples were selected to gain data.

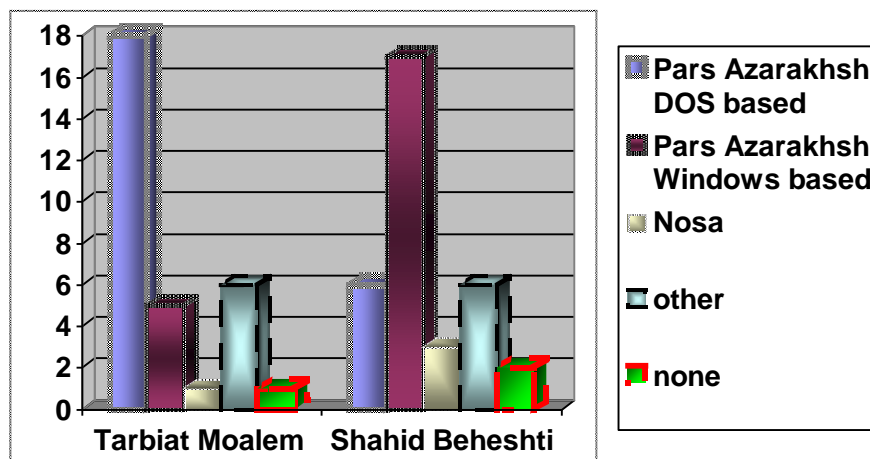


### Methodology

This study was performed through a descriptive survey. For data gathering a self-designed questionnaire was developed. To measure the validity, the questionnaire was submitted to some informants. Consequently, the returned edited questionnaire was duplicated and distributed through all the population. The co-author personally attended to both classes and distributed the questionnaires to all students. The co-author gathered the questionnaires. For more students' performance, the study was performed just few days after the final exam of library software course. Collected data were analyzed in SPSS version 13.

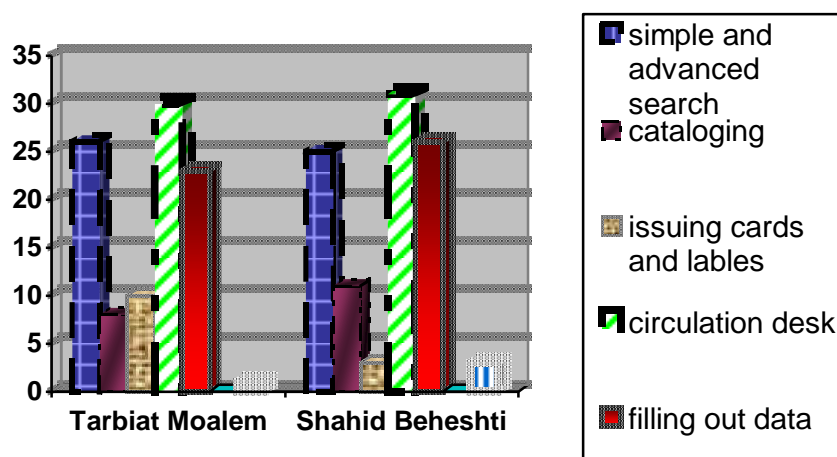
### Findings

When the workload is high and accuracy is very important, we should not rely on non-computerized systems. Manual systems may fail in performing subtle and repeatable processes. In such conditions, computerized systems are helpful. For that aim, library software have been invented and are used now by libraries. Therefore, having the knowledge of such software seems necessary for librarians. During the under graduation period, LIS students have two-credit course of library software and usually take it in 7<sup>th</sup> or in their last semester of BA level. Despite the insufficient period, the LIS students must acquire a good knowledge of software during the instructing of that limited library software course. Without that knowledge they may not be able to work as educated librarians. To measuring their performance and familiarity with kinds of library software, current study explored their knowledge of library software in table 1:



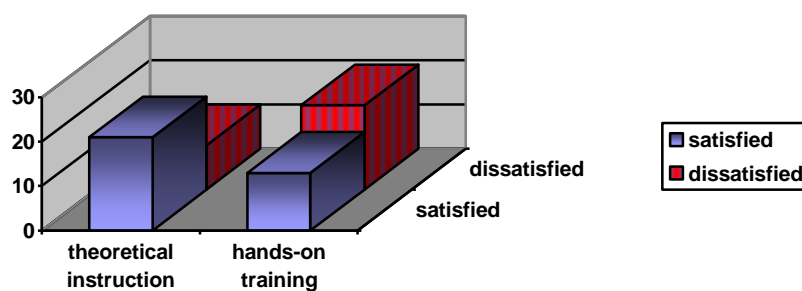
**Chart 1. The LIS students' familiarity with kinds of library software in two universities**

Table 1 illustrates that LIS students' knowledge of library software is high due to the kind of central library software. It means that if they have passed the practical part of library software course in a library which its library software was DOS based (like as Tarbiat Moalem central library), they would state a high familiarity with DOS based library software and vice versa. Table 1 also reveals that the theoretical instruction of other library software would lead to a reasonable to poor knowledge of software.

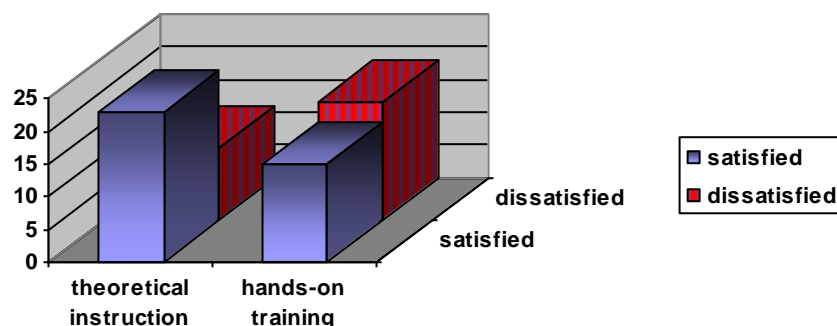


**Chart 2. Knowledge of LIS students for different utilities of Pars Azarakhsh library software**

Chart 2 shows that about 31 students from Shahid Beheshti University and 30 students from Tarbiat Moalem University were familiar with circulation desk option. The majority of students were familiar with options such as simple and advanced search and filing out data. All students failed to report acquaintance with making report option.



**Chart 3. The satisfaction chart for LIS students of Tarbiat Moalem University after passing the library software course**



**Chart 4. The satisfaction chart for LIS students of Shahid Beheshti University after passing the library software course**

In charts 3 and 4, the satisfaction of LIS students has shown according to their perspectives. This evaluation shows that about 65.62% of Tarbiat Moalem University students' are satisfied with their theoretical course, while only 40.62% of them are satisfied with practical section of library software course. This rate through Shahid Beheshti university LIS students changes a little. Chart 4 shows that about 67.64% of Shahid Beheshti students were satisfied for theoretical part of the course, while 52.94% expressed their satisfaction on hands-on training.

### Discussion

According to the returned questionnaires, the analyses were made and suggestions were collected from the end of questionnaires. It was revealed that the kind of teaching- i.e. theoretical or practical- would lead to different performance of students. While the practical training would lead to a good knowledge of library software, the theoretical fails to satisfy the students as well as hands-on training.

It seems that practical training is necessary to the instruction of such a course. The students always could not link themselves to new technology unless work with it practically. They showed a low familiarity with other kinds of library software with exception of Pars Azarakhsh.

About the sections of Pars Azarakhsh library software, the students showed that they were only practiced in some common options such as circulation desk, simple and advanced search, and filling out the data. They showed a poor performance deal with making reports and software management. It means that they have not been trained for special tasks of library software and their skills backs only to general options. Today, the library software such as Pars Azarakhsh, have acquired a valuable knowledge of library management and have specific options for LIS professionals. The LIS students must be familiar with expertise options of such software. Unless they obtain the capability of utilizing such software, they would not be able of work as a graduated librarian.

A meaningful difference of the rate of satisfaction between the Tarbiat Moalem university students and the Shahid Beheshti's seems to be related to kind of software they had. The Shahid Beheshti's

students have worked with Windows based Pars Azarakhsh software while the Tarbiat Moalem University students have been trained by older version of Pars Azarakhsh library software (DOS based version). It seems that the new version is more use-friendly and has better capabilities according to the students' points of view.

### **Conclusion**

In information era, librarians have to enhance their knowledge themselves by acquiring up to date information. This aim will be gained through hard and practical work of new technologies. Library software, as library modern technologies that facilitate the librarians' profession as well as improving the library services for audiences, are playing important roles in today 's library technical services. Therefore, it is essentially important to train librarians with the growing pace of new technologies. Since, the theoretical instruction is insufficient and practical training is required for such courses, LIS departments must think of new procedures to overcome existing problems including lack of facilities for practical training and possible kinds of library software in LIS departments for practical education. Neither all LIS students will work in university libraries, nor all university libraries use of a same version of library software.

Therefore, it seems that LIS department should develop a new policy which could meet the needs of today's libraries and librarians. They could prepare the needed tools in their technical services labs. When a library or a LIS department likes to buy a new package of library software, the technical support of purchased software including the upgrading software must be involved in contract.

Pars Azarakhsh library software has developed many options for libraries to help enhance librarians functions as well as library services. It was revealed that the LIS students fail to acquire suitable knowledge of all aspects of such software. Besides, here we have newer version of Pars Azarakhsh Library software, which is web-based and can do much more of its older versions in some services such as interlibrary loan, online information retrieval, sharing data bases etc.

During the finding analyses, it was discovered that the LIS students like Windows based software more than DOS based one. Being more user-friendly and the kindly environment have led to a better linkage between audiences and library services. According to this fact, the students who passed their training course with Windows based library software have showed more satisfaction in comparison to those who have used DOS based one.

### **Suggestions**

1. Developing new policy for LIS department to obtain suitable facilities in presenting library software course. The theoretical instruction has not an efficient outcome.
2. Purchasing library software due to the specific conditions including the possibility of upgrading the purchased software.
3. Increasing the credits of library software course,

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