

Assessing the Digital Library Services in Iran's Virtual Higher-Education

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Abstract

In virtual higher education systems, one of the most important priorities for achieving the goals of education and research refers to the development of digital libraries and its dynamism to provide better and more information services. Ease and speed of access to educational resources in virtual education depends on the quality of digital libraries. Accordingly, the study of virtual higher education in the digital library services is considered as main objective of the research. In this research the documents and survey method is used. The population in this study included all students, teachers and experts in virtual higher education institutions. Sample size included 60 teachers and scholars, who were selected based on Cochran formula among 400 students and random sampling method was used to reach the target student population. The data were collected by using a questionnaire, which its reliability is 0.70. Results of t- test showed that the quality of library services is desirable ($t = 10.845$, $P < 0.01$) because the index average of the quality of library services (39.36) is greater than the assumed mean (30) and this difference is significant. According to the experts' viewpoints, ($t = 2.644$, $P < 0.05$), this situation is favorable because the index mean (33.53) is greater than the assumed mean (30) and this difference is significant. But, according to the students' viewpoints ($t = 1.029$, $P > 0.05$), the quality of library services at moderate downward, because the index mean (29.63) is less than the assumed mean (30). Respectively, this difference was not significant. Overall, the results of the test ($t = 1.488$, $P > 0.05$) reflect the quality of library services at moderate to high because the mean of the index (30.5101) is more out of a given (30) and this difference is not also significant.

Keywords: virtual education, digital library, library services-learning

Introduction

In higher education systems, one of the most important priorities in order to meet the training and researching targets of universities is to develop library and its dynamism for providing better and more information services. Providing information systems for library in today's very changing educational environment, regarding to variety of expectations and increasing the visitors of such libraries in order to get access to the latest scientific and technological findings has manifested the demand to use new informational and communicational technologies in university libraries more than ever (Mohammad Ismaeil & Rahimi Nejad, 2008: 86).

If the library services want to be effective along with supporting distance education programs, sum of infrastructures are needed that are called the infrastructures of distance education library services (Dalili et al, 2008) that are introduced under the tile of digital libraries.

Digital libraries are organizations that are providing resources including expert staffs for selecting, structuralizing, establishing accessibility to intellectual resources, interpretation, maintaining consistency and continuity of collected digital works, so that these resources are easily accessible for determined communities or sum of societies (Digital library federation, 1999).

Digital libraries are necessary for emergence and development of virtual education. In education, if it is decided to do through e-learning, therefore professors and students and the

designers of educational systems shall access to educational resources easily and quickly. Therefore, there should be a library for individuals to use. When a library is accessible to learners for educational resources in a hypertext way, they can meet their own learning and searching requirements (Mohammad Ismaeil & Rahimi Nejad, 2008: 92). Therefore, the quality and quantity of digital libraries is significantly considerable in developing virtual education. In accordance with it, the study of virtual higher education status in terms of digital library is considered as the main goal of the research. The following questions are asked in order to meet this goal:

- What is the role and position of digital library in national virtual educational system?
- How is the qualitative status of digital library in national virtual educational system?

Libraries in Virtual Education

By changing the electronic teaching mechanisms, libraries shall use new structures for instance, they should focus on visitors instead of organizing the work of librarians and before any change in the systems they shall provide an opportunity for training staffs and for their growth and development. It should not be expected that librarians can obtain new skill without any training and adapting with the changes without any comment. Libraries can be the emergence of change if they have the key of such changes which is “participation of experienced staff”. E-learning management systems have provided new opportunities for libraries to design, develop and provide new services in accordance with new training system. It is necessary to present such services more professional and efficient specifically in the scopes that the resources are irreplaceable and any machine cannot be replaced to play the role of navigator. Learning management system has useful applications that manage the electronic elements of the period. This system has quickly gone to use information technology for training instead of sporadic using of it and now it provides wide range of services through interline periods (Mokhtari Asaki, 2002).

Information technology has paved the way for digital libraries. Such libraries that sometimes are called online libraries, without wall, virtual, electronic and on desktop are providing permanent access to digital information (complete text) by using information technology methods.

Digital libraries are considered as the necessities of virtual education system. This kind of library is based on digital data that is gradually getting the place of printing records which provides 24.7 accesses for all through network. Digital libraries unlike printed books are multimedia and retrieval and data can be collected in the ocean of information by searching within the network and data can be used by meta-media hypertext applications and expert systems (Gopal, 2003). The terms digital library and virtual library are used for pointing out a wide range of information that individuals are getting access to them through internet, cable television, or some of other kinds of electronic distance communication. There is an official definition of digital library that is sum of information management and providing related services that the information are saved in digital formats and in access on network (Livonen, 2005). Generally, digital library refers to sum of digital things (like digital text, images, and videos) and techniques and related services that help to collect, organize, retrieve and keep those digital things for the community of users (Borgman, 2000). ACM digital library is a sample of digital library that are organized for magazines, journals and conference actions for individuals in order to have distance access. By the advance of information technology and different budget plans of governmental budgets, digital library has become a quick developing research and action region. However, in other words, since different societies (for instance, professors of computer, library and information and firms) are participating in production of many digital library theories, models and projects, the scope of digital library includes many of different views of what digital libraries and related researching issues should be. We believe that an electronic educational system can help to simplify the first and third difficulties. Specifically, good

designing of electronic education system should: a) collect scattered but related course materials and organize them in such ways that the interaction of students becomes effective and significant with visual materials, b) manage and provide course materials through a dynamic and flexible method due to that students are having different fields and learning tendencies, for instance, in order to complete the learning duty, students may request and use course materials in different forms or different angles of access, c) permit different ways of access to course materials from any place and in any time or by reviewing or by researching d) provide society atmosphere for students in order to communicate with each other and to help each other. Generally, the purpose of electronic education system is to provide the capacity to improve the quality of students' experience and increase the effectiveness of the experience (Daqing et al, 2008). Easy and quick access to electronic resources is important part of electronic education. Librarians of university libraries are professional and they are responsible for access, select and provide the possibility of access to information/external knowledge for all the university community. Latest external knowledge is increasingly accessible in form of electronic: electronic magazines, e-books, e-textbooks, database, and universities' libraries which are working for:

- Proving access to electronic resources
- Providing good IT facilities for students including computers on the network, workstations, lab training, and wireless networking for students' laptop
- Acting as a partner in university education particularly with taking responsibility of teaching information literacy (Liunen, 2005).

Resources in classes are established on a range of digital content and also a new combination. Both alternatives and new recommendations for content in classes are managed through email and are sent to libraries by training staff. Therefore, updating the content is not immediate. In addition to it, all contents are retrieved and labeled before access to them within virtual class to significantly decrease the probability of content update through a slow method. The content which also is accessible from digital library in virtual university usually through MARC 21 or for electronic resources it is described through Dublin Core Standard. But as it is already mentioned, produced conceptual description by library is not used in virtual class where such content is not semantically organized yet but it is organized through training program. It is a clear example of metadata redundancy as equal information (but from two different point of view of library or e-learning). It should be clarified twice in different formats. From the point of view of e-learning, there is also the need for adding new kinds of contents in span of virtual class resources which is more based on text now:

- Training materials: which are established for UOC training method (Open University of Catalonia) develop fundamental contents for all course issues.
- Digital Base articles or database
- Unique electronic information resources
- Access to the latest newsletter specialized in the subject
- Requested Bibliography: List of study with general bibliography for the subject with the option to request or borrow from the class.
- Exams and answers to previous semesters' exercises
- Frequently asked questions ((FAQ: With the help of the right tools, the topic can be changed to suitable FAQ in virtual class.

Now, all of these resources are labeled by using minimum collection of metadata in order to maintain library only by using MARC 21 or Dublin Core. In few number of topics, these resources are also labeled by using a subset of LOM standard for training purposes (for example, permitting

students to create their own retrieval actions by choosing appropriate practices from a big resource). Such labeling is not applied by MARC21.

A) Standards of digital libraries

There are two items about digital libraries which are significant: a) the standards of digital library and the challenges that the digital libraries are facing with. In continue we will explain each one of them:

Ultimately, both Dublin Core and MARC21 standards are use normally for labeling contents in digital libraries. On the one hand, Dublin Core is a set of metadata elements. It includes all the creative expressions of Dublin Core metadata (it means modifying code, design and expression and controlled terms) that are considered for facilitating resources discovery. Dublin Core has developed since 1995 through a set of invitational focused workshops that collects experts from the world of library, network and researching communities of digital library and kinds of technical content. Dublin Core is a content-descriptive metadata model for improving electronic resources that are used by descriptive communities of official resources, like museums, libraries, governmental agencies, and commercial organizations. Dublin Core is based upon XML language. There is the possibility of using several combinational forms for DC evidence including descriptive framework of resources (RDF and DTD and extensible Markup Language model. One the other hand, the catalogue of Machine reader (MARC) has been used since 1968 for programming, saving and exchanging data for bibliography. MARC has been created in congress library for exchanging the machine of readable bibliography resources among libraries.

MARC21 is the result of MRAC change with a major difference that is increased for listing electronic resources. In fact, both standards are consistent so that converting metadata from one format to another is possible by using appropriate surveying (Pascal 1et al, 2006).

B) The challenges of digital libraries

Digital library is the interface among different and distributed information resources in one hand and on the other hand, it is the change of vast range of user communities. Digital library provides informational services that refer to the space of online information network in which the users can discover, determine and gain access to the information. Today's digital library systems are accessible to create information or knowledge through different tools and formats. Books, magazine, paper based archives, videos, movies and sound recording are observable in the environment of digital library services and online list, abstract and indexing documents, electronic magazines, e-books, access opportunities are currently beyond the boundaries of personal desktop computers or laptops. Digital libraries can now be in access through cellphones and pads, and libraries can integrate the services through providing informational services by mobile SMS and MMS services. Configuration is the access to the world of information under ownership or it is the only part of management that is an inseparable part of creating service environment of digital library. The services of digital library about opening access and using information are not simple. It may have below features:

- Supporting wide range of administrative performances, occupation, and required library tasks by library for management, inspection, control and reliability of fair using from its collection either in digital formats or non-digital, either it is in the site or out of the site.
- The most powerful information resources are classified into the open access, book-store with high density, and being in access through interlibrary trusteeship and it includes data services and digital archiving resources.

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- Cooperation with client, lending, and other database and merging appropriate method for user registration, authentication and the cost of transaction processing.
- Evolution in space of network learning, providing access and library tasks and training materials for lifetime and from distance.
- An electronic informational environment that supports library in different aspects and different usages.
- It is designed for library client and its professional staff with a glance to requirements and the features of those who use it with content and informational systems (Haji Avang et al, 2005).

Studying of texts, references and previous researches in Iran and abroad about digital libraries, also studying successful digital projects indicated that we should consider 14 major elements in designing digital library as follows:

- The full text resources
- Special users
- Permanent access to resources
- Resource format
- Searching and Retrieval
- Making collection
- Specialist Human Resources
- Development of infrastructure and equipment
- Organizing
- Interoperability with other libraries
- Services
- Print resources along with digital resources
- Standards and standardization
- Respect for intellectual property (Nadi Ravandi & Haji Zainul Abedin, 2009)

C) Organizational challenges

Organizational challenges in developing virtual university refer to the conditions that are in connection with the required framework for the activity of virtual university. Such challenge refers to establishing library, training management and consulting students and also collecting teachers and other competent staff and creating a new framework for developing new trainings.

In order to develop virtual university, the library should be re-studied again to indicate that it is reliable for virtual university students that they will easily gain access to the library. The actions done in this field refer to some year ago that the very first step was establishing databases based on web with expanded features for searching and reserving available physical books in the collection of library. Next step is to create virtual library with electronic features that provide the possibility of searching, reserving and delivery. Traditional universities management also has faced challenges by creating virtual university. Management should find new ways of cooperation among teachers and students. Although, virtual frameworks are needed for management for establishing virtual elements, it is very important to remember that students' requirements and the possibility of contact with management should be established with change in combination of students' population. In this regard, adaptation with virtual university can be at least based upon two different strategies including increasing working hours of management department and high level of electronic helps by the person and non-simultaneous ask and answer (Nyang, 2001).

Literature review

Several theories and models are provided about studying qualitative evaluation. In this research, regarding to the purpose of control theory and Helm model and the model of dynamic development of information are used.

Garrison and Baynton (1992) have focused on teaching process and learning in distance training and have provided a model for explaining the concept of “control” in exchange training. Control is considered as an opportunity and the capability of impacting on training exchange and in order to develop a more comprehensive independent view, it is considered as one of main elements of distance learning. Garrison and Baynton (1987) approved that the concept of lack of dependency, lonely and adequately do not indicate the complexity of current variables’ interaction in communication process which happens in learning. They have suggested moving beyond the concept of lack of dependency to the concept of control which includes more completed aspects of interaction in distance learning, specifically interaction among teachers, learners, and other references in field of distance learning. They have provided a model in which the control of learning process results from the combination of three fundamental dimensions including lack of dependency pervasive (having the opportunity of choosing) mastery or the skill of learner (capabilities, skills and motivations) and supporting (both human and non-human resources).

They believe that lack of dependency in connection with competency should be studied and supported. It means dynamic balance among these three indicators empowers student to develop and maintain control on learning process. Therefore, activities and assessment methods are nonsense in case that the learners do not have the competency or necessity support for using independency, giving pervasive independency in choosing learning purposes.

Being equipped with digital libraries is one of the competencies and supports that virtual education system should consider that provides the possibility of distance access to references and intended contents. Therefore, in qualitative assessment of virtual education system, the study of qualitative status of libraries as one of fundamental infrastructures is highly necessary. Many models have been introduced to test the quality of virtual education system that we will explain two models of Helm and technology dynamic development in assessment of education system.

Helm model

In this model, six effective dimensions on the quality of electronic training with 46 criteria are considered. In this model, the quality of e-learning is evaluated on 84 students of Brunel University, UK by using a questionnaire with 74 questions. In this study, qualitative and quantitative methods are used for model testing. Information about the opinions of students on e-learning environment and their level of satisfaction was collected. 10 experts in field of informational systems and training technology were invited to study the dimensions of evaluation in three levels of necessity, useful but unnecessary and unnecessary. This research recommends integrating theory of e-learning systems' evaluation, the study of researches and articles in connection with e-learning socially and technically.

Social dimension of these researches with approach of considering the behaviors of learner such as motivation, belief, confidence, eager to computer, fear, anxiety, ecstasy, excitement and technical dimension, quality of system and internet quality were evaluated. In this study, system quality is discussed over two indicators. First indicator includes the quality of learning management system software that investigates issues like stability, safety, interaction, usage simplicity and good organizing and the second indicator considers the issue of hardware. In this part, issues like the status of library, microphones, loudspeakers and cellphone, electronic plates, discussion plates, and

video conference are considered (Shee & Wang, 2008, quoted by Ozkan, sevgi, Koseler & Refika, 2009).

The dynamic development of technology in the education system evaluation

Assessment of education system is based on indexes that can be extracted from developing model of UNDP. The model of developing information technology consists of the interaction of 5 main elements including a) developing human resources, b) developing policies, c) developing entities, d) developing content and usage, and e) developing infrastructure and equipment.

In this model, it is pointed out that developing infrastructures refers to the infrastructure of the technology of educational communications and access to informational networks in learning (Montazer, 2004: 6). In assessment of education system, infrastructures should be studied in terms of internet status, digital libraries status and the amount of learners' access and etc. Based on discussed indices in assessment of qualitative status of virtual training, we should study the digital library index as one of the dimensions in developing infrastructure and equipment.

Dalili et al (2008) conducted a study entitled "Infrastructure of distance learning library services in Payam Noor university in connection with its training structure in ten regions of Payam Noor university in year 2006". The results indicated dissatisfied status of libraries in responding to informational needs of users in field of resources and digital services, inability of Payam Noor University in responding to the needs of teachers and students, inappropriate library facilities of Payam Noor University for supporting distance learning.

The results of the study of Najaf Gholizadeh (2009) entitled "assessing collection, staff, and the space of central library of Tarbiat Modarres University" indicated that the provided quality of library services was significantly lower than the least expectations of the members of scientific board but it has no significant difference with least expectations of students. Omidifar and Mousavizadeh (2009) conducted a study entitled "testing the library services quality of Psychology College and educational sciences of Allame Tabatabaei University" and their research findings indicated that according to the visitors the indicator of information control, then the index of service impact, and at the end the indicator of library as a place have the most importance. In information control indicator, the performance of library was very weak and even it did not fulfill minimum expectations of users. In indicator of library as a place, not only it is not at maximum level of users' expectations, but also it is far from their minimum expectations' level. In service impact indicator, what distributes library was in accordance with least expectations of users. In fact, library in this indicator have fulfilled the minimum expectations of users.

Mohammad Beygi and Hasanzadeh (2009) in a research entitled "Evaluating the public libraries services' quality depending on the entity of general libraries of country in Qazvin city by using the Libe Qual tool" have identified and introduced below effective factors on the quality of library services by using factor analysis:

Tendency and staff interests in providing services and availability of resources and their accessibility; appropriateness of library environment or availability of an appropriate space for studying, access to electronic information by using modern equipment; access to non-printing resources and publications; possibility of easy access to information. Next findings of above research indicated that current status of services was higher than clients' expectations in all dimensions and indicators of library services.

Nasiri (2005) in his research entitled "infrastructural factors in establishing virtual education system" has explained seven indicators of running virtual education system (cited in Jafari, 2002): a. Technology infrastructure, b) Human infrastructure, c) Pedagogical infrastructure, d) cultural, social and value infrastructure, e) Economic infrastructure, f) management and leadership infrastructure, g)

administrative and support system infrastructure. Chang (1373) in his study entitled “strategy of distance learning development” in Zimbabwe, considered the existence of appropriate learning tools and also supporting systems as the most important factors that lead training programs to success that include set of learners, simplicity of access to the members of science board through phone, the posting services system and efficient library systems. He believed that without such support system learners will become isolated and the probability of continuing their long-term educational programs will be vanished. Zheng Ye (Lan) Yang (2005) in his research titled “distance learning librarians in U.S.ARL libraries and library services provided for distance users” has studied 103 libraries from 123 libraries of ARL. The results indicated that 38 libraries of ARL libraries do not provide any kind of service for their distance members, since they are at the first steps of their activity. 3 libraries announced that they could not participate in the research and 62 libraries of ARL provide services for their distance members. Among 62 libraries, 13 of them have a full time librarian exclusively for distance learning services. 22 libraries and also their librarians spend a part of their working day for providing services for distance learners and 27 libraries do not provide distance services for their users.

Methodology

In this research, two methods of documentary and survey were used. Therefore, references and documents were checked for studying the theories and gaining information. Population of this research was all the students and professors and experts in virtual higher education centers. The number of students were 29390 (Research and Higher Education Planning Institute, 2012). According to teachers, managers and experts, the volume of sample was obtained 60 people by theoretical saturation. Regarding students’ viewpoints, the sample size for students was obtained 400 people by using general formula of Cochran and simple random sampling method was used in order to gaining access to intended students’ population.

Visual validity method was used to measure the validity of research questionnaire. To do so, the questionnaire was given to some experts in field of sociology and the modification of contents and the balance of variables with questions were checked. In next step, after determining the validity of terms, the scales and questions were adjusted and pre-tested was done in form of a questionnaire. About the reliability, the most important index of inner consistency is the test of Cronbach’s Alpha coefficient that was obtained 0.70 for this questionnaire which indicated that inner correlation among variables for testing the concepts was intended and therefore, research is reliable enough.

Research Findings

Descriptive findings

Most of studied experts were (77%) men and 23% women. The domain of age changes of respondents was among 31 to 50 that their age mean was 39. Regarding the level of education, most of them had master degree (50% of respondents), and the least related to PH.D (7%). But most of studied teachers (70%) were women. The domain of age changes of teachers was among 26 to 44 and the average age of them was 38. About 83% of teachers had Master degree and 17% of them had PH.D. More than half of the teachers (53%) had at least one year experience of management in education system. More than half of teachers (57%) were instructors, 27% assistant professors and 16% were professors. The range of changes in working experience of teachers at university was between 1 to 12 years, the mean is 4 years. About the students, most of them (72%) were women and 28% of them were men. The range of age changes of the students was among 18 to 45, and the mean was 27 years old. 31% of them were students of Tehran Universities. 19% of them were from Qazvin University, 15.5% from Mashhad University, 12.8% from Shiraz University, 12.2% from

Isfahan University and 9.2 from Alborz University. 49% of students had bachelor degree, 13% associate degree, 35% master degree and 3% of them had PhD.

Assessing experts in terms of library services index

Based on the findings of below table 17% of respondents have assessed library services bad, 37% average and 47% well. The results obtained from statistical indices also indicated that the assessment of respondents from library services were good enough.

Table 1. Assessing experts in terms of library services index

Percentage	Frequency	Description
16.7	5	Bad
36.7	11	Average
46.6	14	Good
100	30	Sum
10 Minimum 50 Maximum	Mean=33.53 Standard Deviation= 7.31	Statistical Index

Evaluation of teachers in terms of Library Services index

At first the results of respondents' assessment for library services are indicated and then its constructive items are studied. Based on the findings of below table it can be said that 10% of professors have assessed library services bad, 13% average and 77% have assessed it well. The results of statistical indexes also declared that the assessment of professors in terms of library services is good enough.

Table 2. Frequency distribution evaluation of respondents in terms of library service

Percentage	Frequency	Description
10	3	Bad
13.3	4	Average
76.7	23	Good
100	30	Sum
10 = Minimum 50 = Maximum	39.36 =Mean 4.73 =Standard deviation	Statistical index

Evaluation of students in terms of Library Services index

According to the findings of below table, 37% of respondents have assessed library services bad, 31% average and 32% have assessed it well. The results of statistical indices indicated that the assessment of respondents in terms of library services was average to low.

Table 3. Frequency distribution of respondents' evaluation in terms of library services

Percentage	Frequency	Description
36.5	146	Bad
31.2	125	Average
32.2	129	Good
100	400	Sum
10 = Minimum 50 = Maximum	=29.63Mean =7.18Standard Deviation	Statistical Index

Analytical findings

RQ: How is qualitative status of virtual higher education in terms of library services?

Independent sample T-test was used to respond to this question. Results were presented in Table 4.

Table 4. One-sample t-test to check the quality of virtual higher education in terms of library services

Level of significance (sig)	Degree of freedom (df)	T	Assumed mean	Standard deviation	Mean (50-10)	Respondents	Variable
0.001	29	10.845	30	4.73	39.36	Teachers	Library service
0.013	29	2.644	30	7.31	33.53	Experts	
0.304	399	1.029	30	7.18	29.63	Students	
0.138	459	1.488	30	7.49	30.51b	sum	

Professors: With respect to the results of test ($P < 0.01$, $t = 10.845$) it can be said that the qualitative status of virtual higher education in terms of library services were appropriate from the perspective of professors, since mean of qualitative status index of virtual higher education in terms of library services (39.36) was more than assumed mean (30) for qualitative status of virtual higher education in terms of library services and this mean difference was significant.

Experts: According to the results of test ($P < 0.05$, $t = 2.644$) and regarding to the point of view of experts, the qualitative status of virtual higher education in terms of library services was appropriate, since mean of qualitative status index of virtual higher education in terms of library services (33.53) is more than assumed mean (30) for qualitative status of virtual higher education in terms of library services and this difference of mean was significant.

Students: Based on the results of test ($P < 0.05$, $t = 1.029$), it can be declared that the qualitative status of virtual higher education in terms of library services from the perspective of students was average to low, since mean of qualitative status index of virtual higher education in terms of library services (29.63) was less than assumed mean (30) of qualitative status of virtual higher education in terms of library services and this mean difference was not significant.

Total: the results of the test ($P > 0.05$, $t = 1.488$) indicated that totally the qualitative status of virtual higher education in terms of library services was average to high, since the mean of qualitative status index of virtual higher education in terms of library services (30.5101) was more than assumed mean (30) for qualitative status of virtual higher education in terms of library services and such difference was also insignificant.

Conclusion and recommendation

Information technology has paved the way for digital libraries. Such libraries that sometimes are called online libraries, wall-less, virtual, electronic and desktop, and continual access to digital information (full text) will be provided by using methods of IT.

Digital libraries are considered as the necessities of virtual educational system. These libraries provide informational services. It means the space of online information network in which users can discover, determine, obtain and use information. As it is referred in the model of dynamic development of information technology, library service is one of fundamental indices in studying virtual education quality that in this connection the findings of research indicated that the view of professors and experts toward qualitative status of virtual higher education in terms of library services was average to low and totally the qualitative status of virtual higher education in terms of library services was in average to high.

Results of the research are consistent with the findings of Mohammad Beygi and Hasanzadeh (2009) such that they have concluded that current status of library services are higher than minimum client expectation of services and in all factors they are lower than the maximum service expected by clients but are in conflict with the results of Dalili, Diati and Azad (2008) Najaf Gholizadeh and Hasanzadeh (2009), Najafzadeh and Hasanzadeh (2009) and Omidifar and Mousavizadeh (2009) that have assessed the quality of library services weak. The results of these researches indicated that the infrastructure of distance learning library services in Payam Noor University are weak and the status of libraries responding to users informational needs is not appropriate, about resources and digital services, Payam Noor University cannot respond professors and student's needs and the library facilities of Payam Noor University are not appropriate for supporting distance learning. It is necessary to mention that recent results are almost same as students in this study expressed library services were average to low. Totally, based on the findings of this research it can be stated that in virtual education system of Iran, factors like: accessibility of the resources of all text and permanent access to them at home and workplace, providing resources in different forms of texts, image, map, movie, video and audio, possible to search and retrieve (through shortening, phrasal, controlled words and so on), standards usage and standard software for increasing search ability, using metadata for identification, documentation, organizing evidences in digital environments, possibility of using other digital libraries for fulfilling required resources for community of users, providing reference resources and availability of electronic magazines that students are requiring for studying and researching cause that the quality of library services in virtual learning of Iran to be appropriate. Regarding to the results of research, below recommendations are provided to promote the quality of digital libraries within virtual education system:

- Libraries should prepare and organize required resources by learners by using technological changes and providing solutions for quicker and easier access to such resources.
- Regarding to the important role of infrastructural factors in providing distance learning library services, reinforcement of such infrastructures should be considered by university authorities.
- Providing technological fields for supporting distance learning in terms of university libraries seems to be necessary.
- It is recommended that libraries use digital resources instead of printing resources and continually try for synchronizing library facilities according to increasing growth of training inputs of university.

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