



The Role of Library in a School of Architecture, A Study of the Built Environment Library* of SBU**

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ABSTRACT: The swing of the pendulum between centralization and decentralization of the higher education (HE) system has generally been towards the former in the Iranian context in the past decade. This has prompted some academics, particularly those who find their disciplines left out to react by highlighting intrinsic differences in teaching and studying methods across the HE spectrum. Built Environment disciplines are no exceptions in this regard as their interdisciplinary nature has always made it difficult to classify them as science, art or engineering, and hence to expect research and study methods associated with either. The present research initially started not to highlight the differences between Built Environment and other libraries, but to scrutinize the ways in which this particular library is used. Further examinations cast light on managerial and cultural issues behind what authors believe to be the underuse of the library. However, the research also highlighted possible discipline-specific reasons for such underuse. Authors are convinced, however, that not only what is considered as norms in library usage standards should be applied to this library cautiously, but also that there is a need to rethink the role of a library in research and teaching excellence in this particular context.

Keywords: Library, Architecture, Built Environment Libraries, Librarian Studies, Library Usage Patterns, Academic Libraries.

INTRODUCTION

Due to their possession of specialist and detailed information resources, university libraries play a key role in the teaching quality of any higher education institution, which is why students -whether advised by faculty members or independently- constantly need to use anything kept in the library, be them books, periodicals, dissertations or other sources such as online and electronic resources. Questions have constantly been raised, however, as to how the information revolution on one hand and discipline-specific matters on the other affect and change the ways in which these libraries are to be used. Noteworthy among the research conducted on the latter is one by Uloma Doris Onuoha and Adedamola Adesola

Awoniyi (2011), in which their analyses bring them to conclusion that students in education, humanities and arts are more inclined than those in science, technology, social sciences and business disciplines to use library for writing papers and examination preparation, whilst others equally use it for other purposes such as preparing class notes, doing assignments and updating their knowledge. In the earlier days of the information revolution, however, Kathryn M. Wayne (1996) focused on the former arguing that rather than making the architecture library anachronistic and irrelevant, the information revolution has just intensified the need for specialist training for the users of university architectural libraries. This is echoed

* The present paper revisits and expands on a research originally conducted between 2009 and 2011 as part of the the Faculty of Architecture and Urban Planning's Library Strategic (10 years) Plan by Alai, A.

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by other researches conducted in university libraries in developing countries, for instance one by Nina Shrestha (2008) on Nepalese university libraries, in which she acknowledges the advantages of information technologies and warns about the risks of students no longer being prepared to use more rigorous research methods on one hand, and calls for a more intensive training for search methods on the other; and another conducted in Turkey by Gürcü Koç Erdamar and Hüsne Demirel (2009) which emphasizes on the centrality of physical books for users, as well as the pressing need for their training. Acknowledging this, Sheila M. Klos (1996) highlights a need for tailor-made research models when it comes to design and architecture students. From a range of research conducted more recently on specialist libraries, one by Saadat Ahmadzaadeh (2005) entitled "A Study on the Situation of Tehran University Fine Arts library and its Compliance with Iranian University Standards" studies a similar case to the one studied here and is, therefore, of particular relevance. In this study the author notes that, with the exception of staffing, other standards are below 50 percent of internationally recognized standards. The research focuses on how the library functions and how to optimize it, but with no reference to the nature and levels of members' usage. Whilst recognizing the relevance of the latter research, the present research tries to focus on the ways the library is used.

RESEARCH OBJECTIVES AND METHOD

It is assumed that with the growth of postgraduate courses in Iranian universities including Shahid Beheshti University (SBU) there is also a growing need for respective study activities and their associated facilities. This can probably best be measured by the levels and types of library usage, and SBU Built Environment library¹ is a case in this point².

The main questions the original research aimed to answer were:

- a. How frequently and regularly do students use their library?
- b. Are there any differences between students studying at various degrees or on various courses?
- c. What purposes are behind students' use of the library?
- d. How to encourage users to use these facilities more extensively and in a wider range of ways?

The original data used in the research were collected during a 30 month period between 2007 and 2009, including places and courses of students' study, entry

and leaving times and the purpose of their visit. The data was collected through two slightly different sets of questionnaires to student and faculty member visitors about their reasons to visit the library, how frequently they visited, and whether they are satisfied with the services they receive or not (see appendix 2). This was re-examined, though, through discussing the findings with a number of users in a series of interviews, as well as being checked against fresher sets of data from a more recent period collected in 2014.

The data collection stages of the original research included:

- a. A survey of existing library design standards;
- b. A survey of some architecture school and other specialist libraries which were found relevant, consisting of nine domestic and two non-domestic cases³;
- c. A full survey of SBU Architecture School library premises and the statistics of its users (appendix 2);
- d. A two-stage survey of users' (faculty members' as well as students') opinions about the library needs. This was conducted through 80 questionnaires (see below and appendix 3) with participants having no obligation to write their names.

ABOUT QUESTIONNAIRES

Of 80 questionnaires disseminated, 68 were filled by students (representing 9.5 percent of student users) and the other 12 were filled by academic staff (21 percent of academic users). The results showed that most students visit the library on a weekly basis, whilst this was lower than that of the academic staff: between once or twice a term to once a month. The latter group tends to use books more whilst the former tends to use dissertations.

In order to spot the library's achievements or otherwise, users' reasons for not visiting the library were summed up; where their use of other libraries was most frequently mentioned, followed by their use of their own books, and least of all their lack of need. The last reason was only mentioned by three people, indicating that the need to library is generally recognized. There was also a difference between academic staff who prefer to use their own books on one hand, and students who also visit other libraries on top of their own books.

THE WIDER CONTEXT

On a more general level, the above was planned in recognition of some earlier 21st century literature formulating the contemporary library role and



requirements in the light of developments in users' needs and information technologies, notably those formulated by IFLA (Latimer & Niegaardf, 2007) and Michael Dewe (2006). The former lists the ten key qualities the present-day library should enjoy including functionality, adaptability, accessibility, variedness, interactivity, conduciveness, environmentally suitability, safety and security, efficiency, and suitability for information technology; whilst the latter highlights the role the contemporary library can play in the shift from the more conventional concept of "education" to the less passive, less formal "learning".

LIMITATIONS

The fact that the Faculty of Architecture and Urban Planning at SBU offers an extensive range of courses and degrees, makes its library a suitable case to study. However, the same mixture of courses is hardly repeated elsewhere in the country. Nor are there similar numbers and mixtures of students. For example, non-state universities tend to have much larger numbers of students spread over scattered sites. In order for such research to be nationally conclusive, therefore, similar studies needed to be done in a number of other Built Environment schools.

Furthermore, accelerating changes are occurring in SBU Built Environment library⁴, leaving this research in need for constant updating: something done once during the course of the present research. The research also found that there are little standards available in some specialist areas. There is, therefore, the question of whether such standards are to be sought or whether these areas would better be tailor-made on a case-by-case basis.

GENERAL INFORMATION ABOUT THE LIBRARY

SBU faculty of Architecture and Urban Planning and its library opened in 1960. The library is currently run by the School's Research Deputy Department, and is based on an open access system, allowing members to borrow resources other than reference books, periodicals and dissertations, alongside an increasing proportion of digitized, openly accessible material growingly added to the library archives. Search and borrowing systems are computerized, complete with online out-of-library access. All students and faculty members can become members of the Library, and students of other universities are allowed a limited access. Table 1 shows the 2009 membership, which in total amounted to 772.

Table 1. Library Membership Statistics during the Original Study Period

	Members		Numbers
1	Students	BA/BSc	279
		MA/MSC	392
		Ph.D.	43
2	Members		58

Located in a 530 m² area, the library is in a new extension wing of the building, and, unlike some other spaces in the building, it is a designated area for its current function. This means that the library meets some standard design criteria such as those of daylighting (Golcar & Rahimi, 2010). In spite, a research conducted in 2010 (Fallahi) showed that the space, its equipment and escape routes are vulnerable against contingencies, and need further protective provisions for incidents such as fire or earthquake.

The library has a seating capacity of 66 (including 4 designated computer search places) expandable to 100. A research on library usage (Tajir, 2006) has shown that Iranian humanities and art students spend the longest time in libraries compared to others. Elsewhere, a per capita of one seat for each four in libraries for art students is

recommended (The Iranian Standards and Industrial Research, 2006). In other words, even if expanded to its full capacity, this library would still be short of the 170 seats needed. The library's maximum capacity is currently between 23,000 and 35,000, expandable to 70,000 items, subject to rearrangements⁵. Current library items amount to 26,000 in five categories as shown in Table 2. Some library standards (Thompson, 1989; The Office of Technical Codes and Standards, 2004) recommend a per capita of at least 3 books for each library user. This, however, might need adjustments when it comes to university libraries. Some locally conducted researches (Haji Ebrahim Zargar, 2005), for example, set criteria according to which for the present SBU Built Environment library, notwithstanding general and foundation resources normally located in central



libraries, the total number of items is expected to be 52,000⁶. The current 26,000 number, therefore, shows that the library resources supply level is 50 percent below this standard. In 2009 library services rate has been about

76 percent. In other words, 76 percent of members have borrowed library items⁷. Furthermore, of the total 11,454 borrowable items 4839 (42 percent) have been on loan.

Table 2. Library Resources Statistics in 2009

	Items	Total Number
1	Reference (Persian)	2527
	Borrowable (Persian)	6915
2	Reference (Non-Persian)	2232
	Borrowable (Non-Persian)	4539
3	Master's dissertations	2024
	Ph.D. Theses	40
4	Periodicals (Persian)	1807
	Periodicals (Non-Persian)	6130
5	Electronic	University Network
	Total	26214

LIBRARY VISITORS

Users' statistics is given in Table 3. The data were collected during the first period mentioned above asking visitors questions about their disciplines, levels and visit aims. As shown, during the 30 months of the original monitoring a total number of 7897 people (3160 a year on average) have visited the library, of whom 82 percent have been members and 18 percent non-members. Thus, notwithstanding weekends and public holidays, there has been an average of 15 visitors⁸, of whom only 12 (1.5 percent of the total membership) have been members. This is far from the ideal 25 percent rate for members' visits per day based on a seating space for each 4: 6

percent to be precise.

Library visits can alternatively be measured by the ratio of total annual visits to total membership. This ratio has been 3.4 for 2009. During the research no previous studies were found to cite an ideal number of student visits for a university library. In the absence of that, the only useable alternative was to use the figure from a comparable university in which the figure was deemed satisfactory. This was observed in a study by Gürcü Koç Erdamar et al⁹, recording one visit per week. If we take this as the target and considering the university's standard number of term-time weeks as 34, the present visits amount to only 1.10 of this target.

Table 3. Number of Visitors

Visitors	Numbers	Annual Average	Percentage
Members	6480	2592	82%
Visitors from other Faculties and Universities	1407	563	18%
Unknown	10	4	-
Total	7897	3159	100%

Table 4 shows the distribution of users in various levels. It indicates that Master's students represent most frequent visitors (59 percent). The School's own students

as a whole represent 62 percent of visitors. Interestingly, when it comes to other visitors, Bachelor's students outnumber those at Master's level.



Table 4. Distribution of Users in Various Levels during the Original Study Period

Nature of Use	Books		Dissertations		Periodicals		General Study		Other		Total	
	No.	Ratio	No.	Ratio	No.	Ratio	No.	Ratio	No.	Ratio	No.	Ratio
Bachelor's	2208	68%	288	9%	272	8.5%	231	7%	240	7.5%	3239	100
Master's	2775	55.5%	910	18%	373	7.5%	315	6.5%	624	12.5%	4997	100
Ph.D.	72	44%	38	23%	15	9%	11	7%	30	17%	166	100
Total	5055	60%	1236	15%	660	8%	557	7%	894	10%	8402	100

Users have expressed their relative satisfaction with the library's quantity of physical books in the survey whilst they remain dissatisfied with its online content. This indicates a shortage in existing facilities and their associated technologies to enable users getting access to online material more easily and to a wider range of sources.

FURTHER EXAMINATIONS

On reexamining the data collected during the

original study period, authors used a fresh, comparative set of data collected during 2014. Table 5 shows the number of items each member borrowed in this period from the Built Environment library as compared with SBU Literature, Electrical and Computer Engineering, Science, and Geology libraries. It shows consistencies with the comparison made earlier in this paper between the Built Environment library and generally recognized standards. In other words, even within the same university library usage levels are significantly lower for the Built Environment library.

Table 5. Number of Items Borrowed By Each Member During 2014

Library	Built Environment	Literature	Electrical and Computer Engineering	Science	Geology
Item per Student	3.30	6.60	5.20	4.50	4.30
Item per Faculty Member	1.60	8.18	4.10	5.04	4.05

SUMMING UP

Having summed up the results of questionnaires, it emerged that in terms of quantities, users were most dissatisfied with available databases, suggesting the need for serious improvements on new technologies and non-physical formats. Books and periodicals quantities were generally assessed as satisfactory, and dissertations section came at top. The order was slightly different, however, when it came to qualities of available resources and databases and dissertations were found dissatisfactory. The quality of books and periodicals were found satisfactory, though.

In terms of services on offer in the library, users were most satisfied with the ease of quick access to resources, followed by the suitability of the environment -both physical and psychological- and administration services. Least satisfactory were access levels to resources outside the library and shortcomings of updating users with recent study material of whatever type. The latter was somehow at odds with the little importance users attributed to being up-to-date elsewhere in the questionnaire, but it has

played a key role in their overall dissatisfaction with the library.

Statistically, the results of this study show that levels of library visits by students stand at 10 percent of the ideal levels at best, although the pattern is not similar throughout groups with majority of visiting students from Master's courses (4 visits per year) and Ph.D. students being the least frequent visitors (under 1). Ranked by disciplines (Table 6), students of Landscape Architecture were the most frequent visitors (6 visits per year) closely followed by Iranian Architecture Studies (just under 6). Next came Architecture (4) and Urban Design (3.5), and Restoration and Project Management students came at the bottom (1-1.5)¹⁰. Whilst some of these differences can be explained by the nature of the curriculum in the faculty, authors believe that a thorough analysis will require a distinct research. The monitoring also recorded very infrequent visits by faculty members. Furthermore, it showed that the majority of members visit the library to use books whilst other visitors tend to use dissertations more. The same division exists between member users in



Bachelor’s degree and graduate students, as the former group tend to use books and the latter dissertations.

Table 6. Visitor Numbers by Discipline during the Original Study Period

Users		Total Users		Population	Annual Use Average
		Number	Share		
Students	Architecture	1374	53%	371	3.7
	Landscape and Environment Architecture	362	14%	59	6.1
	Urban Design	239	9%	68	3.5
	Urban and Regional Planning	177	7%	61	2.9
	Iranian Architecture Studies	223	8.5%	38	5.8
	Project and Construction Management	82	3%	56	1.5
	Post-Disaster Reconstruction	82	3%	33	2.5
	Restoration and Regeneration	22	1%	58	0.4
	Miscellaneous	19	0.5%	-	-
	Sub-total	2580	99%	714	3.6
Faculty Members		24	1%	58	0.4
Total		2604	100	772	3.4

FURTHER INVESTIGATIONS

As shown above, the survey indicated that library usage is unexpectedly low—much lower than expected. In the next stage, in order to develop explanations about these usage levels interviews were arranged with faculty members, students and graduates, to discuss the findings and seek their opinions. The questions were structured but asked from a more limited number of interviewees than the original research. They included six faculty members to represent various departments, four randomly chosen students and two recent graduate visitors. They cited four main reasons for this:

a. The specific nature of Built Environment courses:

Some interviewees did not find anything unexpected in the outcome of the research and believed that Bachelor’s students who form the majority of students are less in need for theoretical studies, and to focus on their design work they will do better directly studying design works, and that this is easily accessible online. Graduate -particularly Ph.D. students on the other hand tend to personally acquire their study material, including academic papers which, again, are accessible through specialist websites.

b. The nature of library services:

The other view expressed was that the library is in short supply of specialist material suitable for specialist studies

particularly for Ph.D. students. Moreover, searching the library was frequently found disappointing and not yielding proper results because of, among other things, the library’s limited opening hours or the difficulties of taking copies from reference material—a problem partly addressed later by scanner facilities and users being able to use mobile phone cameras to make copies of some pages. This, it was believed, has forced students away from their own library towards other libraries and research centers in search for their study material. This claim is supported by the 50 percent shortage in library resources compared with usual standards of specialist libraries.

c. Attitudes of faculty members and teaching and research departments:

This view sees a lack of encouragement by faculty members and departments of students to study library resources, exacerbated by their tendency to give students their own standard texts as an easier, more accessible alternative. This view is supported by the little use of the library by faculty members themselves.

d. Student habits and needs:

The last view blames students for not investing enough time and effort, and sees this at the heart of the problem. Students are seen in this view as reluctant to study and too reliant on their personal knowledge, what they learn in teaching sessions, surfing the Internet, or using information taken from friends and classmates. This



view is supported by the annual 42 percent borrowing rate by only 76 percent of library members.

To sum up, what follows from the ideas of the above groups, a lean, lightly used library would be good enough for the faculty according to the first group. According to the second group, on the other hand, the library problem is partly one of management and vision: management of opening times and study material availability and searchability, but also a strategic plan to boost the library's resources particularly with the materials better suited for advanced research. The views of the two latter groups, however, involve a change of study culture in a wider context whilst recognizing inevitable ongoing changes in that culture as a result of modern media.

CONCLUDING REMARKS

Whilst all of the above views need to be put on test through further research, it would not be too simplistic to claim that each of them probably have elements of truth; witness the differences in usage between different groups. Assuming that, it should also be added that apart from the need to improve library services -a necessity of a more universal nature- the others are not universal. Issues about student and academic staff attitudes are closely associated with the cultural context, and those arising from the nature of Built Environment courses are rather discipline-specific. The former requires a cautious use of general standards and norms, whilst the latter is a case in the point against centralization, in this case, of standards, and a reminder of the fact that Built Environment disciplines are not just different in the way they are taught, but also in the way students research and study. To conclude, the library might appear anachronistic in the light of new technologies, but when it comes to, among others, Built Environment libraries, they can retain their role as a driving force in many respects. In order to do so, decentralization of norms needs to be taken seriously. These libraries need to embrace what can be done through online sources—probably not necessarily inside the library's physical environment, and focus on offering more in-depth knowledge, perhaps through leaner, more efficient spatial organizations, as well as offering studying environments unattainable elsewhere. The present research hopes to be the first step towards this direction, hopefully to be followed by more detailed studies.

ENDNOTES

1. This is not the official title of this library, but the

title is adopted here to better reflect the inclusiveness of resources kept here.

2. It should be noted, however, that apart from the Built Environment library, students can also use the main library as well as the School's Documents and Research Centre where a selection of previous student research is available. Access to electronic resources is also possible through the School's computer clusters. The library, nevertheless, has kept its central role as a hub to get access to everything including electronic resources.

3. They included libraries of Iran's Science and Technologic University, University of Art, Tabriz University of Islamic Art, Gilan University Architecture Faculty, Tabriz University, Shahrood Industrial University, Central Tehran Free University, Science and Research Free University, as well as UK's University of Westminster and UCL. Please refer to Appendix 1 for the questionnaire.

4. For example the library has now stopped keeping any hard copies of new dissertations.

5. This is based on a relocation of 20,000 items in closed access area (60 sqm) using moveable shelving, 50,000 items in open access area (300 sqm), and 170 sqm sitting area for 100 students.

6. This is calculated using the following formula (Ahmadzadeh 2005):

Total number of resources = basic resources + 100F + 12E + 335U + 3000M + 20000D, where F is the number of faculty members, E: full-time students, U: BA/ BSC students, M: MA/ MSc students and D: Ph.D. students.

7. This figure in percent is calculated by the formula $A \times 100 / B$, where A is the number of borrowers in the target society (584 in this case) and B is their total number (772 here).

8. This includes 104 days for weekends, 30 for New Year and summer holidays, and 15 for other public holidays. The number will rise to 20 if out-of-term-time summer holidays are also taken into account.

9. This assumption is based on a comparison with the number observed in a research conducted by Gürcü Koç Erdamar et al. on a library in the neighboring Turkey with expected similarities with our case study.

10. It should be noted that the School offers all degrees in Architecture only. There are Masters' and Ph.D. courses for Urban Planning and Urban Design, with only Masters' courses available for the rest.

APPENDIX 1

Questions included in questionnaires filled by library authorities in other libraries:



1. Who can become a library member?
2. Are your services available to non-members? Under what conditions?
3. Is there a borrowing system in place, or resources are only available in the library?
4. Is the library system open or closed?
5. How is the library managed (in terms of membership cards, borrowing system and time, return delays, maximum borrowed items, whether or not an automated borrowing system is in place)?
6. What numbering system is in use (Dewey ...)?
7. Is there a fully computerized search system in place?
8. What keywords can be used for search (title, author, subjects, publisher, publication date ...)?
9. Would the library take any action if searched items were unavailable?
10. In connection with the purchase of new items:
 - How are updates received about new items?
 - How is the budget supplied, and what is the annual allowance if any?
 - Can members give advice about new purchases?
 - Are new titles purchased in book exhibitions, from bookstores, or ...?
 - What happens if a publisher does not have an official representative in the country?
 - What procedures are in place from the purchase of an item to placing it on the library shelf?
11. What security arrangements are in place in the library?
12. What copying and scanning facilities are in place?
13. Are resources available in electronic formats? How can they be accessed and copied?

14. Is there a section for periodicals? If so how is it managed?
15. How is the reference section managed and used?
16. What are opening times?
17. How many members of staff are working in the library? What is each person's responsibility?
18. Is the library used for other activities such as holding teaching sessions etc.?
19. Is there other available material such as CDs, videos etc.?
20. What types of services are used in the library (HVAC, lighting, fire extinguishers, pantries, emergency lighting...)?
21. Is study materials available through internet and/ or intranet systems? How?
22. How many items are kept in the library (including borrowable and reference books, periodicals, CDs ...)?
23. What is the library's floor area, numbers of desks, seats, computers and other facilities available to users?
24. How old is the library?
25. What sector in the faculty runs the library? Or is it run independently?

APPENDIX 2

Questionnaires filled by users:

2.1. Academic Staff:

1. How frequently do you visit this library?
Once a week, once a month, up to twice a term, up to twice a year, rarely
2. Please state your reasons for visiting the library.

Type of Use	Teaching Needs	Research Needs	Personal Needs	Other (Please State)
Books				
Periodicals				
Dissertations				
Data bases				
Other				

3. Please state your reasons for not visiting this library.

	Teaching Needs	Research Needs	Personal Needs	Other (Please State)
Using other libraries				
Using personal resources				
Lack of need				
Other				

4. How do you find the quality and quantity of following resources?



Type	Quantity					Type and Content					Additional Notes
	Too many	Enough	Insufficient	Unacceptable	No Comments	Excellent	Suitable	Unsuitable	Unacceptable	No Comments	
Persian books											
Non-Persian books											
Persian periodicals											
Non-Persian periodicals											
Dissertations/ theses											
Domestic databases											
International databases											
Other											

5. Bearing in mind your use of this library, how important do you find any of the following services?

Type of Service		Very Important	Important	Little Important	Unnecessary	No Comments	Further Notes
Quick access to library resources							
Quick access to other sources							
Purchases	Of new items						
	Of items you need						
Updates about new resources	From the library						
	Nationally						
Suitability of the study area	Physically						
	Psychologically						
Administration	Services						
	Maintenance						
Other							

6. How do you find present library services?

Type of service		Very Important	Important	Little Important	Unnecessary	No Comments	Further Notes
Quick access to library resources							
Quick access to other sources							
Purchases	Of new items						
	Of items you need						



Updates about new resources	From the library						
	Nationally						
Suitability of the study area	Physically						
	Psychologically						
Administration	Services						
	Maintenance						
Other							

7. Personal data:

Number of years worked as a faculty member

Rank

Qualifications

Department

Gender

2.2 Students:

Similar questions to those in 2.1 except for personal data, which were as follows:

University of study

Year

Degree

Department

Gender

APPENDIX 3

The data was collected at the library entrance during a 30-month period by a member of staff. On average 3160 people have used the library annually, of who 82

percent have been members. Taking out weekends, public holidays, this equals to an average 15 users a day. Taking the summer break into account, however, raises this to 20.

Users	Number	Annual Average	Percentage
Members	6480	2592	82
Visitors from other universities and faculties	1407	563	18
Unknown	10	4	-
Sum	7897	3159	100



REFERENCES

- Ahmadzaadeh, S. (2005). Estimating the Status of the Library of the Faculty of Fine Arts. Tehran University, in Comparison with the Standards in Iranian Universities, *Bagh-e-Nazar*, 2(3), 3-20.
- Alai, A. (2011). *The Faculty of Architecture and Urban Planning's Library Strategic (10 years) Plan*, SBU Research Deputy Department.
- Dewe, M. (2006). *Planning Public Library Buildings: Concepts and Issues for the Librarian*, Ashgate.
- Fallahi, A.R. (2010). *The Incident Command System of the Faculty of Architecture and Urban Planning*. SBU Research Deputy Department.
- Golcar, A., & Rahimi, E. (2010). *Library Design. Library Architecture and Interior Design Principles from Classic to Modern*, Honar-e Memari-e Gharn.
- Haji Ebrahim Zargar, A. (2005). *University Libraries, in Spatial Reorganization of Universities: Criteria, Codes, and per Capita Physical Allocations, Education and Research Technical Office*. SBU Faculty of Architecture and Urban Planning.
- Klos, S.M. (1996). Information Literacy for the Next Generation. *Journal of Architectural Education*, 49(3), 204–206.
- Latimer, K., & Niegaardf, H. (2007). *On Behalf of IFLA. IFLA Library Building Guidelines: Developments and Reflections*, K.G Saur.
- Onuoha, U., & Adedamola, A. (2011). *Comparative Analysis of Students' Information Seeking Behavior in Adventist Universities: A Survey of Babcock and Solusi Universities*. Library Philosophy and Practice.
- Shrestha, N. (2008). *A Study on Students' Use of Library Resources and Self Efficacy*. Master's Thesis, Tribhuvan University.
- Tajir Consulting Engineers. (1996). *Codes and Guidance for Planning and Design of Cultural Spaces: libraries. Museums and Performance Spaces, Technical and Implementation Deputy, Engineering Department, Ministry of Housing and Urbanism*.
- The Iranian Standards and Industrial Research (ISIR), Document 8894: Information and Documentation — Library Performance Measures 2006, Available at www.isiri.org, 2009.9.15.
- The Office of Technical Codes and Standards (OTCS), Iranian Management and Planning Organization, Planning and Design Standards for Public Libraries, Document 270, 2004.
- Thompson, G. (1989). *Planning and Design of Library Buildings*, Butterworth.
- Wayne, K. (1996). Form Follows Information? *Journal of Architectural Education*, 49(4), 269–271.

