

# Evaluating the Quality of Educational Services in the Architectural Design Course (2) in the Islamic Azad University of Tabriz from the Perspective of Students based on the SERVQUAL Model\*

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Received 11 May 2019; Revised 11 September 2021; Accepted 13 September 2021; Available Online 21 June 2022

## ABSTRACT

Investigation of the students' perspectives as the main receivers of the higher education services plays a vital role in the quantitative and qualitative promotion of the services provided in this area. The main objective of the current study is the explanation of the quality of educational services for the course of architectural design (2) at the Islamic Azad University of Tabriz from the students' perspective, based on the SERVQUAL Model. In terms of the courses provided for the bachelor course of Architectural Engineering, the architectural design courses are the most important part of the education and the main body of teachings in this major due to the connection they make between the theoretical and practical approaches. Therefore, a qualitative evaluation of the educational services related to these courses is necessary. The research method is a survey and the statistical population is undergraduate students in the field of architectural engineering at the Azad University of Tabriz who were taking the course of architectural design (2) in the first semester of the 2017-2018 academic year. The data collection instrument was the SERVQUAL questionnaire which measures the educational services in five dimensions tangibles, reliability, responsiveness, assurance, and empathy. To determine the quality gap, the difference between the scores of the level of perception and the level expected by students from educational services is measured. Based on the studies, the research components, criteria, and indicators are explained based on the service quality dimensions of the SERVQUAL Model. The findings indicated that from the students' perspective, in terms of the five dimensions of the SERVQUAL Model, the quality of educational services provided in the course architectural design (2) is lower than expected. The highest and lowest gap belonged to responsiveness and assurance, respectively. It indicates the necessity of higher attention paid to the quality of communication and interaction with the students by the professors and education staff and the importance of prioritization and appropriate managerial measures to eliminate or reduce this quality gap in other dimensions.

**Keywords:** Educational Service Quality, Architectural Design Course, Architecture Education, SERVQUAL Model.

\* The current study was extracted from the doctoral thesis entitled "Analysis of the state of cultural contextualism in the designing methods of architectural space based on the use of digital technology" by the first author, supervised by the second author and consulted by the third author, in the Architecture department of Islamic azad University, Sanandaj Branch written in 2021.

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## 1. INTRODUCTION

Higher education, as one of the infrastructures of the educational system, is responsible for the education of the individuals and the provision of specialized services in various areas of science and technology in the society (Bitaraf, Kameli & Saleh Sedghpoor, 2021, p. 613). Architecture education at the higher education level has a special process based on its nature. The bachelor's course in architectural engineering has been defined for public attitude and efficiency and acquiring the knowledge and ability required to produce architectural works and critique and investigate these works in a wide area, including the building technique, principles of maintenance and restoration of buildings, and existing theories in the field of creating man-made spaces. The courses offered for this major are based on such an attitude in the service of design courses so that the architecture expert while playing a role in future professional or research fields, acquires general knowledge and skills that can be used in various fields of this major (Higher Education Council of Iran, 2013, p. 2). The importance of architectural design in the architecture education process is so high that many experts consider it the most important subject. Considering five architectural design courses alongside the final design course for the bachelor's degree and the architectural design lessons taught in the postgraduate courses in Iran well indicate the importance of this subject (Mehdizadeh Seraj & Farsi Mohammddipoor, 2012, p. 62). Therefore, it can be said that architectural education is ultimately meant with architectural design education (Mirjani & Nadimi, 2018, p. 6).

The teaching in the architecture schools and faculties is important because they are places whose users can enter the society and labor market after graduating as educated architects and artists. If the education of these people is well invested, they can play an important role in the excellence of architectural art and also in promoting the culture of the society by presenting architectural works with identity, which leads the society towards growth and excellence (Sedaghati & Hojjat, 2019, p. 6). Architecture education, as one of the multidisciplinary and multidimensional structures of the general discussion of "education," has different dimensions in the developmental discussions, which, in addition to the quantitative development in the academic form, require consideration for the qualitative development (Naghdbishi, Najafpoor, & Naghdbishi, 2018, p. 48). Considering the importance of the qualitative educational promotion and improvement in the area of architecture, the architectural design courses are the most important part of the education and the main body of teachings in this major due to the connection they make between the theoretical and practical approaches. On the other hand, expanding the higher education and its increasing costs

alongside the increase and diversity of applicants in this major increase the necessity of continuous sensitivity and attention to the education quality of these courses. Therefore, assessing the educational quality in this field is very important to identify the weak points and shortcomings. It can allow for the management of correct changes in the educational quality and be effective in directing the objectives and identifying the priorities in educational planning to eliminate the weak points and shortcomings and its qualitative promotion, since otherwise, the process of education will be unfavorable, and its productivity will be reduced from the desired level. Several studies have been conducted in terms of the education of architectural design courses (Caravan, Talischi & Hagh Talab, 2020; Zandi Moheb, Dejdari, & Talischi, 2020; Shariat Rad, 2019; Mousavi et al., 2019; Sardashti, Mozaffar, & Shafaei, 2019; Mirjani & Nadimi, 2018; Mozaffar, Ghasemi, & Kianersi, 2017; Saghafi, Mozaffar, & Mousavi, 2015; Karbasi, 2011; Alalhesabi & Nowruzian Maleki, 2009; Daneshgar Moghadam, 2009; Taneri & Dogan, 2021; Van Dooren et al., 2018). However, these studies focused on investigating and assessing the effective educational processes and methods for the students in the design studios. They lacked an approach that could investigate the physical and non-physical factors that affect the architectural design courses' educational quality in the educational space and the educational processes in the studio with a holistic and comprehensive view.

Regarding the importance of quality in architectural design courses, the current study aimed to explain the quality of the services provided in terms of the architectural design courses at the Islamic Azad University of Tabriz by using the SERVQUAL Model from the students' perspective. Among the architectural design courses, the architectural design (2) is the second design exercise in a comprehensive form. Regarding the focus of this course on the topic of housing, the most important concern of the architects is the design area. In this course, the student uses visualization and reasoning to develop his previous learning in different courses along with individual ideas and creativity and works in a comprehensive experience based on an always practical and challenging topic, namely housing. Therefore, this course is more important than other design courses in the educational process of students in terms of application in the professional world and job creation, as well as the need to pay attention to semantic, cultural, and social concepts and factors in the design process. On the other hand, the authors' experience in teaching this course over the years and encountering various quantitative and qualitative dimensions of this issue caused the architectural design course (2) to be selected as a case study. Research questions include the following:

1. What are the components for assessing the

educational services provided for the architectural design course?

2. What is the extent of the quality of educational services for the architectural design course (2) at the Islamic Azad University of Tabriz?

3. What is the relationship between students' perceptions and expectations of the quality of educational services in the architectural design course (2) at the Islamic Azad University of Tabriz?

## 2. METHODOLOGY

The current study is applied and was conducted using a survey method. The statistical population included the undergraduate students of Architectural Engineering in the Islamic Azad University of Tabriz in the first semester of the 2017-2018 academic year who took the architectural design course (2). The sampling method was a simple random sampling method, and regarding the population size, the sample size was obtained to be 63 students by using Cochran's formula. A researcher-made questionnaire derived from the SERVQUAL Model and the related domestic and foreign studies was used for data collection (Maraghi, Hayati, & Hayati, 2019; Sarafraz et al., 2019; Nowrouzi Nia et al., 2019; Jafari Nejad et al., 2016; Zarei, Alijanzadeh, & Musazadeh, 2015; Yasbalaghi Sharahi, Hawas Beigi, & Mousavipour, 2015; Enayati, Zamani, & Nasirpour Drouei, 2013; Nojavan, Heidari, & Mohammaditabar, 2020; Chui

& Bin Ahmad, 2016; De Araújo et al., 2016; Bhuian, 2016; Lupo, 2013). This questionnaire included 61 pairs of questions in the five dimensions to assess the quality of services. These dimensions are tangibles, reliability, responsiveness, assurance, and empathy. The responses were scored from 1 to 5 based on the Likert scale. Half of the questions assessed the perception level (the current situation), and the other half assessed the expectations level (desired state). The validity of the questionnaire was approved by three experts in the field using the content validity method. The reliability of the questionnaire was investigated using Cronbach's alpha, and the overall reliability was obtained as  $\alpha=0.91$ . To determine the quality gap, the students' scores of the current situation (their perception of the provided services) were compared with their scores of the desired situation (their expectations of the quality of services) and the difference between the scores of the perception level and the expected level is determined. If the obtained score is positive, the provided educational services are above the expectation level of students, and if it is negative, these services do not satisfy the students' expectations, and there is a negative gap. If the obtained score is equal to zero, there is no quality gap, and the educational services are at the level expected by the students. The data has been analyzed by the SPSS.

**Table 1. Research Components, Criteria, and Indicators based on the Five Dimensions of the SERVQUAL Model**

Dimension	Component	Criterion	Indicator	Sources Supporting the Research Structure
Tangibles	Standardization of the Studio's Environment	Dimensions	-Proportionality between the dimensions of the studio and the number of students and activities	(Maraghi, Hayati, & Hayati, 2019; Sarafraz et al., 2019; Nowrouzi Nia et al., 2019; Jafari Nejad et al., 2016; Afify et al., 2021; Jose, Arlene, & Lydia, 2020; Nicholas & Oak, 2020; Davidsen, Ryberg, & Bernhard, 2020; Nojavan, Heidari, & Mohammaditabar, 2020; Daemei & Safari, 2018; Chui & Bin Ahmad, 2016; De Araújo et al., 2016; Bhuian, 2016; Lupo, 2013)
		Light	- Standard quality of how to receive natural light in the studio - Standard quality of artificial lighting in the studio	
		Temperature	Standard quality of internal temperature of the studio	
		Furniture	- Furniture is ergonomically standard - Proportionality between furniture and the number of students	
	Space Supply	Studios space	- Existence of enough studios in terms of dimensions and number	
		Exhibition space	- Existence of spaces for holding exhibitions of students' works	
		Personal and group activities space	- Existence of spaces for students to do projects freely (individually or in groups) outside the studio hours	
		A space to communicate with the professors	- Existence of spaces for the possibility of correction and answering students' questions outside of class time (for example, in professors' dedicated rooms)	

Di- men- sion	Component	Criterion	Indicator	Sources Supporting the Research Structure
Tangibles	Aesthetical Quality of Studio Space	Proportion	- The proportion of materials and colors used in the space with each other	(Ibid)
		Diversity	- A variety of materials and colors are used in space	
	Equipment and Facilities	Educational aids	- Existence of educational aids (video projector, etc) in the studio space	
		Individual facilities	- Existence of individual facilities for students (dresser, work tools, etc.)	
Reliability	Existing Scientific Sources	Comprehensive and sufficient sources	- Comprehensive Persian sources related to the course of architectural design and especially housing design - Comprehensive English sources related to the course of architectural design and especially housing design	
		Up-to-date available sources	- Up-to-date Persian sources - Up-to-date English sources	
		Possibility of the use of sources	- Easy and unrestricted access to studies available at the university	
	Professors' Knowledge	Specialized knowledge of professors	- Mastery of professors on the content of the course and the field of housing design - Up-to-date knowledge of professors	
		Introducing suitable sources for study by professors	- Introducing new and up-to-date sources - Introducing comprehensive sources concerning the topics	
		The ability of professors to provide appropriate course content and guide students in advancing the design		- Expressing the objectives and topics related to the architectural design course (2) by the professor to orient the students' mentality and make it coherent about the purpose of the design
				- Comprehensive view of projects and student attention to all dimensions and factors affecting the design by professors
				- Utilizing new and up-to-date methods in presenting topics
				- Using methods appropriate to the subject in presenting the topics
				- Correction and effective guidance of students to advance the design
	- Effective use of teaching aids (slides, videos, etc.) based on the purpose and subject of the lesson			
	- Trying to raise new topics in the field of housing design			
Practical Training	Providing the possibility of group field visits for students concerning the subject of design	- Visiting the design site to analyze neighborhood considerations, views, and landscapes, etc. - Visiting spatial examples of housing design		
Regular Education	Observance of holding regular class sessions during the semester by professors	- Timely presence of professors and the completeness of the number of sessions held during the semester - Effective use of class time to present topics and correction of designs		
Evaluation	Evaluation of student projects by professors	- Paying attention to the regular process of submission and correction of designs in the final evaluation - Class and final evaluation based on specific criteria		
Performing Activities related to the Subject of Architectural Design	Workshops and conferences	- Holding workshops and conferences related to the field of housing architecture and related topics		

(Maraghi, Hayati, & Hayati, 2019; Sarafraz et al., 2019; Nowrouzi Nia et al., 2019; Jafari Nejad et al., 2016; Zarei, Alijanzadeh, & Musazadeh, 2015; Yasbalaghi Sharahi, Hawas Beigi, & Mousavipour, 2015; Afify et al., 2021; Nicholas & Oak, 2020; Davidsen, Ryberg, & Bernhard, 2020; Nojavan, Heidari, & Mohammadtabar, 2020; Chui & Bin Ahmad, 2016; De Araujo et al., 2016; Bhuian, 2016)

Dimension	Component	Criterion	Indicator	Sources Supporting the Research Structure
Responsiveness	Interaction with Professors	Access to the professors and communication with them	- Ease of access to professors when needed outside of class time on campus - Allocating enough time by professors to answer students' questions	(Maraghi, Hayati, & Hayati, 2019; Sarafraz et al., 2019; Nowrouzi Nia et al., 2019; Jafari Nejad et al., 2016; Zarei, Alijanzadeh, & Musazadeh, 2015; Yasbalaghi Sharahi, Hawas Beigi, & Mousavipour, 2015; Enayati, Zamani, & Nasirpour Dorouei, 2013; Afify et al., 2021; Nojavan, Heidari, & Mohammaditabar, 2020; Chui & Bin Ahmad, 2016; De Araújo et al., 2016; Bhuian, 2016)
		Logical reaction	- Reasonable and logical reaction from professors to students' suggestions, criticisms, and views	
	Interaction with the Education Staff	Responsiveness of education staff	- Ease of access to education staff - Effective response to students' issues and problems	
		Logical reaction	- A reasonable response from the education staff to the suggestions, criticisms, and views of students	
Assurance	The Desirable Quality Educational Process	Preparing students for future activities (jobs)	- Considering the knowledge and skills required in future professional activities in the studio training program - Familiarizing students with the needs and opportunities related to the field in future professional activity	(Maraghi, Hayati, & Hayati, 2019; Sarafraz et al., 2019; Nowrouzi Nia et al., 2019; Jafari Nejad et al., 2016; Zarei, Alijanzadeh, & Musazadeh, 2015; Yasbalaghi Sharahi, Hawas Beigi, & Mousavipour, 2015; Afify et al., 2021; Nojavan, Heidari, & Mohammaditabar, 2020; Chui & Bin Ahmad, 2016; De Araújo et al., 2016; Bhuian, 2016)
	The Proportion of Student Effort and Activity with the Result of the Evaluation	Obtaining the desired score in the evaluation of the student's efforts	- Considering the regular and continuous efforts and activities of the student during the semester in the final evaluation - Better scores for more student effort	
Empathy	Motivation	Encouraging and supporting	- Paying attention to and reacting to the progress of the student's work during the class and encouraging and supporting him, the professor	(Maraghi, Hayati, & Hayati, 2019; Sarafraz et al., 2019; Nowrouzi Nia et al., 2019; Jafari Nejad et al., 2016; Zarei, Alijanzadeh, & Musazadeh, 2015; Yasbalaghi Sharahi, Hawas Beigi, & Mousavipour, 2015; Enayati, Zamani, & Nasirpour Dorouei, 2013; Nojavan, Heidari, & Mohammaditabar, 2020; Chui & Bin Ahmad, 2016; De Araújo et al., 2016; Bhuian, 2016)
		Encouraging the scientific quality improvement	- Creating interest in students for research and scientific activities	
	Respect	Reverence	- Respectful behavior of the professor with the student  - Respectful behavior of the education staff with the student	

Based on the related literature and considering the five dimensions of tangibles, reliability, responsiveness, assurance, and empathy in the SERVQUAL Model, the research components, criteria, and indicators relevant to the educational services provided in the architectural design course (2) to the students were explained (Table 1). It should be noted that this structure was approved by the experts. Figure (1) shows several designs and models of

students in the statistical population in the architectural design course (2) that have been designed and presented during the semester.

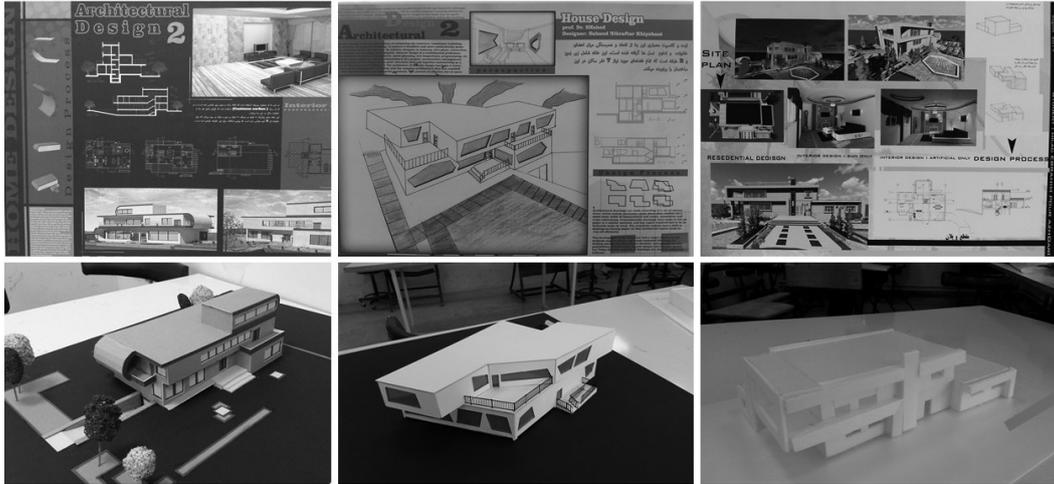


Fig. 1. Several students' Projects for the Architectural Design Course (2)

### 3. FINDINGS AND DISCUSSION

The statistical population included the undergraduate students of Architectural Engineering in the Islamic Azad University of Tabriz in the first semester of the 2017-2018 academic year who took the architectural design course (2). Regarding the statistical population of the study, the sample size was obtained as 63

students. Regarding the demographic characteristics, 47.6% of the participants were female, and 52.4% were male. Regarding the age distribution, the participants' minimum age was 20, and the maximum age was 26 years old, among whom 71.2% were in the 20-23 years old range, and 28.8% were in the 23-26 years old range. The demographic characteristics of the statistical population are shown in Table (2).

Table 2. Demographic Characteristics

	Variable	Percentage
Gender	Female	47.6
	Male	52.4
Age	20-23	71.2
	23-26	28.8

One-sample t-test was used to determine the students' perception of the quality of the educational services. The scores ranged from 1 to 5; thus, a score equal to 3 was considered the average change rate. If a variable's mean value is above 3, it is indicative of a better situation. According to statistical findings, the mean value of students' perception of educational services for the tangibles was equal to 2.40, for reliability, it was equal to 2.88; for responsiveness, it was equal to 2.29; for assurance, it was equal to 2.98, and for empathy, it was equal to 2.84. Finally, the overall mean value of students' perception of educational services quality was equal to 2.66, and the significance level of the test was 0.001. Since the overall mean value is significantly lower than the mean value, it is concluded that students' perception of educational services quality is significantly lower than average. Also, the value of students' perception of the tangibles and responsiveness variables was significantly lower than the mean value ( $m < 3$ ,

$p < 0.05$ ). However, the value of students' perception of reliability, assurance, and empathy variables was in the average range ( $p > 0.05$ ).

One-sample t-test was used to determine the students' expected quality of the educational services. The scores ranged from 1 to 5; thus, a score equal to 3 was considered the average change rate. If a variable's mean value is above 3, it will indicate a better situation. According to statistical findings, the mean value of students' expected quality of educational services for the tangibles was equal to 3.68, for reliability, it was equal to 3.85; for responsiveness, it was equal to 3.85; for assurance, it was equal to 3.87, and for empathy, it was equal to 3.97. Finally, the overall mean value of students' perception of educational services quality was equal to 3.81, and the significance level of the test was 0.001. Since the overall mean value is significantly higher than the mean value, it is concluded that the students' expected quality of educational services is above average.

Also, the value of students' expected quality of the tangibles, reliability, responsiveness, assurance, and empathy variables was significantly higher than the mean value ( $m > 3$ ,  $p < 0.05$ ).

The two-sample t-test was used to compare the perceived and expected qualities of educational services. Based on Table (3), it is observed that in all educational services variables, the expectations

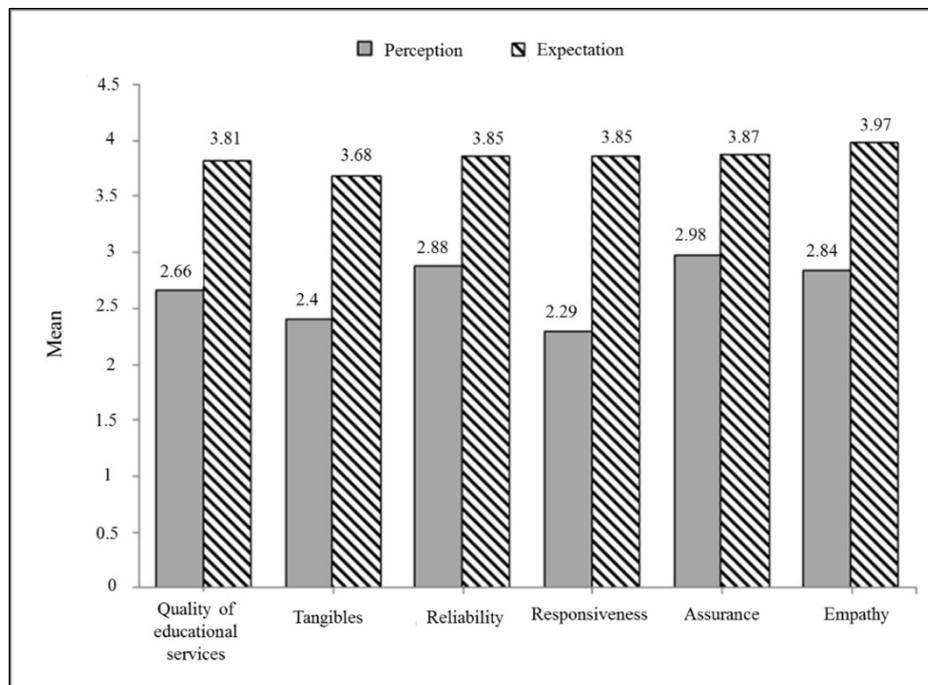
of the students were significantly higher than their perceptions of educational services quality ( $p < 0.05$ ). Also, the students' overall mean perception was 2.66, and their overall mean expectation of educational services quality was 3.81. the significance level was also 0.001. Therefore, it can be concluded that the expectations of the students were significantly higher than their perceptions of educational services quality, and there is a negative gap between these two values.

**Table 3. Results of Two-Sample t-Test for the Comparison of Students' Perceived and Expected Qualities of Educational Services**

Variable	Fre- quency	Perception		Expectation		The Gap between the Perception and Expec- tation	t-Value	Degree of Free- dom	Signif- icance Level
		Standard Devia- tion	Mean	Standard deviation	Mean				
Tangibles	63	2.40	0.53	3.68	1.01	-1.29	-7.97	62	0.001
Reliability	63	2.88	0.70	3.85	0.92	-0.97	-5.95	62	0.001
Responsiveness	63	2.29	0.82	3.85	1.10	-1.55	-8.93	62	0.001
Assurance	63	2.98	0.76	3.87	1.06	-0.89	-4.89	62	0.001
Empathy	63	2.84	0.86	3.97	1.08	-1.12	-6.03	62	0.001
Average	63	2.66	0.57	3.81	0.94	-1.15	-7.34	62	0.001

Figure 2 compares the students' mean expected and perceived quality of educational services in the

architectural design course (2) for each dimension of the SERVQUAL Model.



**Fig. 2. Comparison of Students' perceptions and Expectations of the Quality of Educational Services in the Architectural Design Course (2)**

The findings show that the students' expected quality is higher than their perceived quality in all five dimensions of the quality. Therefore, the gap in educational services quality for all dimensions is negative, in a way that it is equal to -1.29 for tangibles, -0.97 for reliability, -1.55 for responsiveness, -0.89 for assurance, and -1.12 for empathy. The negative gap indicates that the quality of educational services provided is lower than expected from the students' perspective.

The biggest gap belongs to the responsiveness dimension. This negative gap indicates that the students do not have easy access to professors outside of class time in the university environment to ask their questions or to correct projects if needed, and the quality of allocating time to answer students' questions and pay attention to comments, suggestions, and criticisms is not as expected by the students. Another part of the negative gap in the responsiveness dimension is the lack of easy access to the education staff when students need it and being responsive to students' problems, issues, and perspectives. On the other hand, the research findings show the smallest gap in the assurance dimension. A negative gap in the assurance dimension indicates that the educational process of students from the perspective of adaptation to future professional activity and familiarity with job needs is not as expected. Also, in evaluating student projects, professors do not pay enough attention to issues such as student performance and continuous effort during the semester. After the responsiveness dimension, the biggest gap is seen in the tangible dimension. The existence of a negative gap in this dimension indicates that there are weaknesses in terms of having enough space in studios, exhibition spaces, free spaces for students for personal or group work, and spaces in which they can correct their design or ask questions outside of class time from the professors. Also, from an aesthetic point of view, the fit and variety of materials and colors in the environment and furniture are not desirable in studios. The next influential component in student dissatisfaction is the lack of facilities and equipment such as teaching aids and personal facilities for students. After the tangible dimension, the biggest gap is related to the empathy dimension. This indicates that the quality of support and individual attention to students by professors and teaching staff is not as expected by the students. Part of this issue is related to the weakness in professors' encouraging and supporting the students and motivating them to work and improve quality, and part is related to the quality of behavior with respect for students. Finally, the negative gap in reliability is indicative of the weakness in terms of several categories. A part of students' dissatisfaction is related to the scientific sources of the library about the housing design, and the quality is not desirable in terms of comprehensiveness, being up-to-date, and accessibility. Another part is related to the professors

in the field of housing design and their mastery of the subject and the desirable guidance of the students to advance the design. In other words, there are weaknesses in orienting the students' mentality and making it coherent, making them pay attention to all the factors affecting the design, using up-to-date methods, proposing new topics about housing design, and using teaching aids. The next effective component in students' dissatisfaction is how to evaluate students' projects. Also, the facilities for practical training, such as visiting the design site or sample housing spaces, are not at the level expected by the students. In terms of holding regular and effective classes during the semester and holding activities such as workshops or conferences related to housing design, enough attention has not been paid.

The negative gap in five dimensions of quality of educational services in the current study is in line with the results of Nojavan, Heidari, and Mohammadi's (2020) research in eight institutes of higher education in Iran, Norouzinia et al. in Alborz University of Medical Sciences, Yousapronpaiboon In Thailand, Dursun, Oskaybaş, & Gökmen (2013) in Turkey; Aghamirzaei Mahalli et al., in Mazandaran Science and Technology University (2017), Foroughi Abri, Yarmohammadi, and Estoki in Islamic Azad University of Khurasgan, (2011), Akhalghi, Amini, and Akhlaghi in Ahvaz Girls' Technical and Vocational College (2012), Chui & Bin Ahmad (2016) in Malaysian Private Higher Education Institute, Maraghi, Hayati and Hayati (1398) in Abadan School of Medical Sciences, Sarafraz et al. (2019) in Zanjan University of Medical Sciences, Alami, Ansarifar and Akbari (1398) in Tehran State Universities, and Bhuian (2016) in the Western University of the Persian Gulf region. The results of the research show the biggest negative gap in the dimension of responsiveness, which is in line with the results of Akhlaghi, Aminian, and Akhlaghi's research (2012) in Ahvaz Girls' Technical and Vocational College, Chui and Bin Ahmad (2016) in Malaysian Institute of Private Higher Education, Dursun, Oskaybaş, & Gökmen (2013) in Turkey, Foroughi Abri, Yarmohammadian and Estoki (2011) in Islamic Azad University Khurasgan, and Khadem Rezaian and Mousavi Bazaz (2016) in Mashhad Medical School. The biggest gap in the responsiveness dimension indicates the importance of the quality of communication and interaction with the professors from the students' viewpoint. In line with this result, Mahmoudi's results also indicated that from the perspective of both professors and the students, the successful professors establish good communication with the students and allow for their useful activities with the flexibility (Mahmoudi, 2002). Also, Naghdbishi, Najafpour, and Naghdbishi emphasize the creation of necessary incentives for more presence of the professors and interaction with the students to promote the quality of their learning and scientific level (Naghdbishi, Najafpour, and Naghdpour, 2018).

In line with the subject of emphasis on the effectiveness and importance of the interaction between the professors and the students for promotion of the educational quality of architectural design courses in the current study, Mousavi et al. introduce an educational model based on intra-group participation of professor and student, which is characterized by the sincere relationship between them and tolerance of disagreements by the professor, which has made the students more open to criticism. Also, in this model, the professor's treatment of group members should be accompanied by friendship and intimacy, and in interaction with groups, he should have a sense of humor, be flexible depending on the situation, and encourage the group to interact be active. Student opinions are very important for the professor, and the need to accompany students should be met (Mousavi et al., 2019). The results of Saghafi, Mozaffar, and Mousavi's research also show that direct participation of professors and students improves the quality of education and student satisfaction with the learning process (Saghafi, Mozaffar, & Mousavi, 2015).

The findings show the smallest gap in the assurance dimension. This result is in line with the results of Dursun, Oskaybaş, & Gökmen (2013) in Turkey, Aghamirzaei Mahalli et al. in Mazandaran Science and Technology University (2017), and Bagherzadeh Khajeh and Bagherzadeh in Higher Education Centers of Tabriz (2009). It is not in line with other studies mentioned in the above paragraphs. The smaller gap in this dimension, compared to other dimensions, is indicative of higher attention paid to it, and perhaps it can be considered one of the strengths of educational services in this university. However, the negative gap in this dimension indicates that the student's expectations in this regard are not met yet.

Reflecting on the research findings and observing the negative gap in all dimensions indicates that the dimensions of the quality of educational services are related, and the existence of weakness or dissatisfaction in one dimension can affect the level of satisfaction in other dimensions. For example, the lack of spaces for communication with the professor and correction of projects such as professors' dedicated rooms outside the classroom time (physical dimension) has a negative impact on professor-student interaction. It thus reduces the level of satisfaction in the responsiveness dimension from students' point of view. Also, the weakness of professors' knowledge in presenting topics and guiding students in advancing the design or possibility of practical training (reliability dimension) has an adverse effect on the quality of the educational process and preparing students for future jobs (assurance dimension) and reduces the level of satisfaction with this dimension. The failure of quality of responsiveness and reaction of professors and education staff to students' problems and views (responsiveness dimension) to be at the level as expected by the students has a negative

effect on creating a sense of respect and esteem for them (empathy dimension) and lead to a decrease in satisfaction with this dimension. Therefore, the dimensions of the quality of educational services are affected by each other, and the existence of a negative gap between the perceived and the expected levels in one dimension causes dissatisfaction in some other dimensions.

Conclusion:

The current study aimed to assess the quality of educational services in an architectural design course (2) at the Islamic Azad University of Tabriz from the students' perspective based on the SERVQUAL Model. Based on the previous studies, the research criteria and indicators were explained according to the five quality dimensions of the SERVQUAL model. In terms of tangible dimension, the standard components of studio space, space supply, quality of aesthetics of studio space and facilities and equipment; In terms of reliability, existing scientific resources, professors' knowledge, practical training, regular training, evaluation, and performing activities related to the subject of design; In terms of responsiveness, the components of interaction with professors and teaching staff; In terms of assurance, the components of the educational process with the desired quality and proportionality of the student's efforts with the evaluation result, and in terms of empathy, the components of motivation and respect were explained. Findings showed that from the students' perspective, the quality of educational services provided in the course of architectural design (2) was lower than their expectations in all dimensions. The biggest gap in the students' perceptions and expectations was observed in the responsiveness dimension, and the smallest gap was observed in the assurance dimension. The biggest gap in the responsiveness dimension emphasizes the necessity of higher attention paid by the professors and education staff to the quality of communication and interaction with the students. A brief training can improve a part of this gap. In this regard, some of the weaknesses can be improved by holding workshops for the education staff to teach how to interact and communicate with students, as well as workshops to increase the knowledge and technical skills of the staff. The availability of professors and the allocation of specific times to answer students' questions and project corrections, as well as the allocation of spaces for this purpose, such as the professors' room, will increase part of the students' level of satisfaction. Also, considering organized systems to effectively reflect students' suggestions and criticisms regarding educational and service issues will help reduce the quality gap between the status quo and the expected level. In the context of quality gaps in other dimensions, some components can be easily improved by appropriate management measures and modifying or changing patterns of educational services. Other dimensions can be improved by prioritizing and

correcting measures in the dimensions that have the biggest quality gap because the dimensions of quality are related to each other, and the existence of weakness and gaps in one dimension has a negative effect on other dimensions. In this way, the responsiveness dimension is considered the highest priority, the assurance dimension is considered the lowest priority, and efforts are made to eliminate or reduce the quality gap by allocating appropriate resources and management measures.

Comparing the current study results with other studies in this area and observation of similarities in findings. It is concluded that the educational services gap exists in most Iranian educational centers. However, regarding the university's structure in terms of the active manpower, the number of students, and the existing physical space and educational facilities, there are some differences between some dimensions. Therefore, generalizing the results obtained in a university to other educational centers should be done carefully. As the first step, conducting such research in each educational center is better. In this case, a pattern consistent with the characteristics of the educational environment and desired function for promoting educational services in architectural design courses can be obtained. By doing so, the weak points in terms of quality are eliminated. The strong points are strengthened, and services can be provided even above the students' expectations.

Based on the current study, the following suggestions are provided for further studies in this field to reflect more on this issue and explore the internal aspects of the subject:

- Comparative studies on the quality of educational services of architectural design courses in the faculties of Iran and the other countries of the world;
- Comparing the views of professors and students on the quality of educational services of architectural design courses;
- Conducting research using qualitative methods such as interviews with professors and experts;

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#### HOW TO CITE THIS ARTICLE

Shahed, M., Sattari Sarbangholi, H., & Tahmasebi, T. (2022). Evaluating the Quality of Educational Services in the Architectural Design Course (2) in the Islamic Azad University of Tabriz from the Perspective of Students based on the SERVQUAL Model. *Armanshahr Architecture & Urban Development Journal*. 15(38), 73-85.

DOI: 10.22034/AAUD.2022.154311.1716

URL: [http://www.armanshahrjournal.com/article\\_152314.html](http://www.armanshahrjournal.com/article_152314.html)



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