

THE IMPACTS OF SOCIAL, SOCIAL AND SCHOOLING ELEMENTS ON THE INSTRUCTION PREPARING CLIMATE IN ENGINEERING TRAINING; THE CONTEXTUAL INVESTIGATION OF THE BRANCH OF DESIGN, KTU

Kamran Shahid
University of Peshawar

Abstract:

Architecture is one of the world's oldest disciplines, related to a great many other disciplines such as mathematic, economics, art history, sociology, civil engineering and mechanical engineering. Its connection with a great many different disciplines has given increased social responsibility to the discipline of architecture. In this context, architecture, which is defined as designing buildings to fit dimensions in a physical environment, its art of construction and its science, should be performed by people who are self-confident, sociable, generally cultured, who can generate practical solutions, and are forward looking. People with the above characteristics can only grow in a good quality education-training environment. This environment depends on many different dynamics. The most important of these are social, cultural and educational dynamics. This study aims to understand how the quality of the education-training environment of architecture students can be improved. For this purpose, a survey was carried out with students who graduated from the Department of Architecture in 2006 and 2008, together with students who graduated before these dates. This survey asks questions regarding the social, cultural and education dynamics that affect the education-training environment of students, and tries to answer what contributions are made by these dynamics to the quality of this environment.

Keywords:

Social, cultural and education dynamic; Education-training environment; Survey; Architectural Student

1. Introduction

Architecture is a dynamic, innovative and continuously varied profession. It is accepted that the greatest alterations also occur in present day. In the present day that are debated modernism and post-trends and technology also lives gold age, available architectural education programmes should be inquired convenience our age (Lokce, 2002). One of the most important features of architectural education is that it requires the ability of its practitioners to be creative. Since the primary mission of architects is to create three dimensional space and form to accommodate related human activities, the educational and training process should focus on two missions. These are the balance between formal and socio-behavioral aspects, and the balance between students' faculties in terms of searching, thinking, and other mental activities. Consequently, the design of an architectural education programmed has to attain a balance between design education in architecture and the role of the architect in society, where the justification of the profession will be in providing a better environment for contemporary societies (Salama, 2005).

The first formal education for architecture started with the Beaux-Arts in the 19th Century and this has continued until the present day. Thus, we can say that transformation in the architectural education programmed is a common process. It is known that the most important changes in architectural education were the attempts started in Bauhaus by Walter Gropius, and a model creating effect to activation of merely design in place of spread an pronunciation, a system, a dogma is developed in Harvard (Gropius, 1962; Balamir, 1992). While architectural education generally focuses on basic design and three-dimensional perception in the first semester, it also focuses on the process of building construction in subsequent semesters. The process of building construction is taught through the use of both studio and critical methods. Here, it is waited and supported to generate original solutions within defined area and program from students. Group study is valid only for common models and drawings. Apart from this, students study alone (Bashier, 2015; Bergstrom, 2014; Savic & Kasef, 2013; Anthony, 2013; Groat, 1996). Architects should improve toward their free choices from their education to their professional activities and stand in rich environments that will can be selected their education style and architectural approach (Esin, 2008). To achieve this, departments offering architectural education require to develop a good quality education-training environment. The quality of such an environment can be defined through its social, cultural and education dynamics.

The social and cultural dynamics are:

- environmental conditions
- living in the city
- relationship with your friends
- your behaviours
- cultural activities

Education dynamics are:

- lessons and curriculum
- types of educational programmes
- lecturers
- computer skills
- level of foreign languages

This study looks at how to increase the quality of the education-training environment using the dynamics defined above. To do this, a survey was carried out with recent and older graduate students that asked questions about their experiences of the social, cultural and education dynamics under consideration.

2. Method

This study includes a survey that looked at how to support and improve the quality of the education-training environment within the Department of Architecture, Faculty of Architecture, at Karadeniz Technical University. Students who graduated in 2006 and 2008, together with earlier graduates, participated in this survey. The number of participants in the survey was 72. 24 of the participants are graduate students from 2006; 24 participants are graduate students from

2008, and 24 participants are architects who graduated before these dates. By means of an interview, both newly graduated students and older graduated students were asked 25 open-ended and 14 multiplechoice questions. The questions focused on the social, cultural and education dynamics that affect the quality of the education-training environment. Answers to these questions were evaluated as a percentage according to the participant group, and variations and changes among the groups were interpreted. 2.1. Interpreting the answers given by students who graduated in 2006 and 2008 regarding social and cultural dynamics 8 questions are asked regarding social and cultural dynamics. The answers given by students who graduated in 2006 and 2008 are different. While most of the 2006 students stayed with their family, most of the 2008 students stayed with their friends. Reasons for this: increasing numbers renting houses surrounding their school, improving economy, increasing number of students from different cities, and familial problems. The students from 2006 and 2008 gave the same answers about their environment, except for their school. In general, it was determined that these environments had a positive effect on students. Therefore, we can say that these environments, except for the school in Trabzon, presented a quality service in general. Considering the answers given by students from 2006 and 2008 about cultural activities, we can see that students did not find these activities adequate. Therefore, it is necessary that cultural activities organized in KTÜ improve. To do this, a new service interested in cultural activities and arranging national and international cultural organizations should be established. In general, students said that Trabzon was a safe city. In particular, 80% and 60% of students from 2008 and 2006 thought Trabzon was a safe city, respectively. Reasons for this include: security measures in every field have increased as has the widespread provision of control systems in Trabzon. Most students said that their behaviours permanently changed during their education. Architectural education, the environment and friends affected their behaviours. Therefore, three factors should be improved to ensure positive change. It is shown that architectural education have been given trust to students for years. This is because most students hope to find a job as an architect or want to undertake a Master's degree after graduation. It was determined that 80% of students from the school were satisfied with their school; only student of 18% were not satisfied. It was determined that most students were not satisfied with the number of lessons and their content; also many students did not like the physical groundwork of their education-training. In terms of student satisfaction, the education-training programme should be rearranged. t-test results about answers given by students who graduated in 2006 and 2008 regarding social and cultural dynamics are given in Table 1. Table 1 is shown that there is a little difference among answers of two student groups according to mean and t values.

Note: Add table page # 6 <file:///C:/Users/ANI/Downloads/Documents/1-s2.0-S1877042815030827-main.pdf>

2.2. Interpreting the answers given by students who graduated in 2006 and 2008 regarding the dynamics of education 14 questions asked regarding the dynamics of education. The answers given by students who graduated in 2006 and 2008 are different. The students said the majority of lecturers were very good and they made use of the majority of research assistants. Most of the students from 2006 and 2008 said the level of lessons was medium. In general, students from 2006 and 2008 found the majority of lessons useful. Therefore, it was

not necessary to rearrange lessons. 80% of students stated they wanted the curriculum supported with lessons in other branches. This is necessary for architectural education and the authorities should rearrange the curriculum. When we examine the answers given by students, a double major undergraduate programme was preferred to a minor programme. The reason for this was that this programme provided a double degree. Most of the students followed this programme in 2006 and 2008. Most of the students who did not follow a double major undergraduate programme stated that they were not interested in this type of programme. 80 % of students did not follow a minor programme. This ratio slightly increased in 2008 compared to 2006. Most of the students who were not following a minor programme stated that they were not interested in this type of programme. If this type of programme is preferred, the authorities should explain its advantages to each student. It was shown that the computer skills of students from 2006 and 2008 were not very good for their professional life. It is clear that the computer skill of students from 2008 had increased. Therefore, there should be more computer lessons and students should be supported to participate in these lessons. To be a successful architect, it is necessary that there must be a very good use of Architectural CAD programs. In 2006 and 2008, most of the students used these programs at a good level, but this is not enough. In 2008, compared to 2006, there was an improvement. For students to reach a very good level in their use of CAD programs, courses should be opened up, and the participation of students should be stipulated. In 2006 and 2008 most of the students did not follow foreign language programmes. However, foreign languages are very important in the professional life of architects. Therefore, foreign language programmes in architectural education should be supported and obligatory. In 2008 no students thought they had adequate skills in foreign languages and information, with 58% of students saying that they did have not enough foreign language information and skills; in 2006 this ratio was as low as 40%. To increase skills in foreign languages, students should be encouraged, and some lessons taught in a foreign language. Most of the students from 2006 and 2008 stated that the information they received about professional life was at a medium level. To increase this level, lessons about professional life should be supported and the training period of students extended. In Table 2, t-test results about answers given by students who graduated in 2006 and 2008 regarding education dynamics. According to t-test result, there is no difference among answer of two group

Note: Add table here page # 5 <file:///C:/Users/ANI/Downloads/Documents/1-s2.0-S1877042815030827-main.pdf>

- 2.3. Interpreting the answers of older graduates to questions about the social, cultural and education dynamics that affect architects. To questions about the acquisition of Trabzon and Department of Architecture in KTÜ, most participants did not have a negative opinion. However, many participants gave a negative reaction to Trabzon because of a lack of opportunities. According to architects who had graduated from other universities 25% of the participants gave their response as very good, 70.8% as good and 4.2% as medium. While participants defined architecture as art, urbanization, sleeplessness, culture, living style, freedom, future, order, creativity, T ruler, science, aesthetic, Le Corbusier, design, AutoCad, concrete, discipline, confidence, profession, sketch, money, building, environmental

responsibility and friendship, and KTÜ. The Department of Architecture was defined in terms of my friends, success, togetherness, state of belonging, elder sister of Rabia, Aksoys, entertainment, project tables, responsibility, old classes, footstool, tea times, good days, Ganita and sharing. The Department of Architecture is thought of as a house, in that 87.5% of participants felt as being an owner, 8.3% being a guest, and 4.2% being a renter. 47.8% of the participants indicated that they were conscious of participating in social activities and of following current issues during their education. Questions about education were generally answered as positive. During their education, most participants wanted to become aware of architectural ethics and responsibility, obtain enough theoretical information, gain analytical skills, interpret and solve problems using modern technology and tools in order to arrive at optimum solutions with regard to professional problems. On the other hand, they said that architectural problems were taught in such a way as to solve considered environmental consciousness.

Conclusions

The education-training environment is formed by social, cultural and education dynamics. These dynamics should be carefully determined to provide a quality education-training environment. Successful student architects can only grow in such environments. To do this, the proposals below are based on the results of a survey that was carried out with students who graduated in 2006 and 2008, and with students who graduated before these dates.

- The university authorities should organize frequent cultural activities to improve the quality time of students.
- For education-training, shopping, eating and walking, safe environments should be provided to students.
- Students should be inoculated trust during their education to be a good architect.
- The number of lessons and their content should be controlled, and the best alternative determined for students.
- The physical groundwork of education-training, together with living conditions should be improved. The curriculum should be supported with lessons of other branches.
- Students should be informed about both double major and minor undergraduate programmes, and the advantages of these programmes explained to students.
- The computer skills and information of students should be improved. For this, new regulations should be introduced into the curriculum.
- Problems regarding the foreign language ability of students should be eliminated.
- Students' ability to use architectural CAD programs should be improved. More information about architecture as a profession should be given students during their education.

References:

- Anthony, K. H. (2013). Designing for diversity: implications for architectural education in the twenty-first century, *Journal of Architectural Education*, 55, 4, 257-267.
- Balamir, A. (1992). Meslek sorunlarımız içinde mimarlık eğitim programlarının yeri ve program başarısındaki etkenler, *Yapı Dergisi*, 122, 38-43.
- Bashier, F.(Article in press)). Reflections on architectural design education: the return of rationalism in the studio, *Frontiers of Architectural Research*
- Bergstrom, A. (2014). Architecture and the rise of practice in education, *Architectural Theory Review*, 19, 1, 10–21.
- Esin, N. (2008) Seçenek ömrü uzatır- tasarlamada seçenek üretmenin önemi üzerine düşünceler, *Mimar.İst*, 2, 12-19.
- Groat, N. L., & Ahrentzen, S. (1996) Reconceptualizing architectural education for a more diverse future: perceptions and visions of architectural students, *Journal of Architectural Education*, 49, 3, 166-183. Gropius, W. (1962). *Scope of total architecture*, Collier Books, NY.
- Lokce, S. (2002).
- Integrated technology into the architectural curriculum, *J. Fac. Eng. Arch. Gazi Univ.*, 17, 3, 1-16.
- Salama, A. (2005). *New trends in architectural education: designing the design studio* (3rd ed.).North Carolina: Tailored Text and Unlimited Potential Publishing.
- Savic, M., & Kashef, M. (2013). Learning outcomes in affective domain within contemporary architectural curricula, *Int. J. Technol. Des. Educ*, 23, 987–1004.