A Method in Connection to Student Centred Architectural Design and Studio

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Abstract

The emphasis that is placed on the design curriculum works against this objective. A great deal of time is spent learning drawing and presentation techniques that may never be used again. Every professional educational system has to have a base. In law and medicine this base is founded by a good general education of sciences or humanities. This general exposure is followed by graduate training first of a general nature and becoming ever more specific as the education and training proceeds. The methodology in architectural education is about the teaching methods, which are used in architectural education system. These methodologies for the architectural design education are about education schedules and in fact the methodologies used in the education implicates the physical characters of the design studios. The social, physical characteristics of the 'studio' space depends on methodology and the methodology of the architectural design education effects the organizations of the materials in the architectural design studios such as tables, computers, tables for making models, the spaces for desk critics, panels. In this context, tables that show the relations between the basic teaching methods, methodologies in architectural design education and the ordinary shaped design studio plans are prepared. The teaching methods that are described by the methodological thinking and also which are related to the occupants of the design studios are utilized by the help of the teaching methods in the architectural education and physical properties of the design studios. Thus, the help of these data generates the typologies of the ordinary shaped design studios. By the idea, a case study, includes the relations between the architectural design teaching methods and physical uses of the design studios in Department of Architecture at The Anadolu University, is accomplished and as a conclusion the problems in the physical usage in design studios are determined ,new and useful utilization are proposed. In the case study there are four steps for developing the experimental method in connected with studio:

- Interaction: During that critique supervisors had been particularly hard on the students for all basic architectural concerns (in the limited time allowed for studio projects, some things become emphasized and some are neglected).
- Tools: All the students incorporated basic access in their buildings. Many of their project themes were one story and they were pre-occupied with the form and symbolic meaning of their building designs.
- Knowledge and Method: The technical knowledge necessary on accessibility is not extensive for the studio projects at this level. Design method which developed according to not only a systematic curriculum but also spontaneously existance process for students and teachers.
- Studio Environment: Physical uses of the design studios.
Introduction:

The design studio remains the core of architectural methodologies and architectural curriculum and its content is highly varied among schools, students and teachers. The methodologies for the architectural design education are about education schedules and in fact the methodologies used in the education implicates the design methods of the design studios. The methodology in architectural education is about the teaching methods, which are used in architectural education system. For more than a century, studios have been focusing on the design education in various fields such as industrial design, architecture, etc. The studio has developed a venue and a pedagogical medium for design education (Shoshi, B., Oxman, R., 2000). Today studio still remains at least the core of the curriculum in professional design education and interpreted as a coherent whole. This paper reports on a study of the ‘Architectural Design Studio I’ in Anadolu University (A.U), as to consider the design methods in the studio. Following a description of design methods in the ‘architectural design studio I’ the paper describes the assignments in the studio as working processes through the whole time in the studio. By the idea, a case study, including the relations between the architectural design teaching methods and the physical uses of the design studios in Department of Architecture at A.U, is accomplished and as a conclusion the problems in the physical usage in design studios are determined, new and useful utilization are proposed.

Portrait of A Studio

Architecture Design Studio I”

The final assignment of the “Architecture Design Studio I” was to design a house for occupants who were determined by students. The proposed sites for the house were given from various parts of Turkey that have unique climatic topographic and social-cultural properties. Thus the themes of the studio were centered on the relations between the building, site and the context and also centered particularly on the relationships between occupants and their requirements. Student’s designs also addressed the problem of utilizing the topographic slopes of the sites through the design phase and creating personal spaces for the occupants.

There were five assignments through the semester:

- The first assignment asked students to write down a scenario which determines the occupants of the house and their requirements. They also were asked to examine a particular precedent for the project; a building or a building complex that showed how other architects have dealt with issues of context and community in similar settings.

- The second assignment asked students to explore the site of the project to determine the physical features, directional characteristics of the plot (north, west, east, south) and, its surroundings. They also produced a scaled model of the site to present the slopes and environmental properties.

- The third assignment asked students to represent their conceptual schemes, by the help of scaled models or drawings. They have been asked to prepare programs for the requirements of the occupants and to show the relationships between the concept, site and occupants. Students prepared poster presentations to explain their conceptual schemes and the relations that are mentioned above.

- The next stage of the class focused on developing this basic model in more details. Students drew sketch plans, sections and elevations by hand and developed scaled
models. This led to a smaller-scale examination of one or more details of the building to find out how the different elements of the building are related to the overall design strategy. For some students this meant developing a more detailed model of the house. Other students focused on the relations between the personal and social spaces of the house such as the bedrooms and the living room. Some others focused on the social-cultural properties of the society in the environment of the site.

- The last assignment asked students to think about the construction problems of the project, to generate solutions for each part of the project and to bring these various investigations of the project into a single presentation that illustrates both a proposal for the project and its thinking process.

All these assignments are crucial to understand that they represent a cycle of design and criticism that culminated in a presentation of some kind. The exploration of an architectural precedent led to a group discussion where students pin their sketch drawings and models on the board, describe their work in progress and get feedback from the faculty and from other students. In “Architectural Design Studio I” this process of the feedback is the most important part of studio methods. Based on the feedback, expectations are described and the summary of assignment processes is explained. ‘Guest crit’ is also one of the most crucial elements of the feedback process (Shaffer,2002). An outside supervisor in the related area is invited to comment on the student’s work. This essentially has the same effect on the process as a pin-up but it is more formal. Figure given below illustrates this process as a diagram:

![Diagram of the assignments of the “architectural design studio I” as a series of presentations. (The structure of the diagram taken from Shaffer,2002)](image)

During the process of the feedback, students began to evaluate the critics they had received. As questions came up in the process of design in the studio, as students ran into problems in their emerging designs, or when students completed some coherent stages of their design they had a chance to sign up for individual critics. These critics are known as ‘desk critics’ and are in a sense of the studio process. Critics can be short or long though they usually lasted somewhere between 20 and 40 minutes. During this process, student describes his or her work, including areas of particular interest or concern in the design. As student present possible solutions, the implications of various design choices suggesting alternative possibilities are explored, solutions to the student to proceed in his or her exploration of the problem are offered or examples from other architects with similar design problems are showed.
By the time, students return their projects for another desk critic with other students before the pin ups, to work on some of the details of their projects. The basic process of the studio is this cycle where expression of an architectural idea leads to feedback leads to expression leads to feedback eventually producing a design presentation. By this expression there is a cycle of expression and feedback in the studio that would be expressed by a diagram such as given below:

![Diagram](image)

**Figure 2:** The cycle of expression and feedback in the architectural design studio-1 (Ketizmen, 2002)

By the help of this classification, general architectural design methods are commented, and put in an order that are fit with design process in A.U at architectural design studio and new explanations are made to all these methods as a general concept. Additionally, figure 3 shows the relation of the design methods and working processes in the studio. This approach can only be done on the basis of an understanding about the concept of the studio environment. At the outset, design is presented as a given, spontaneously experienced totality, and at the end it appears as a built environment, illuminated by the analysis of the aspects of space and character. Teachers and students are voracious consumers of visual images, which play a crucial role especially in conceptual and creative design in an architectural design studio as an environment. The assessment of design is an action, which has profound effect upon teaching and learning methodologies.

Successive assignments allowed students to revisit their design choices and incorporate feedback from reviewers from a new perspective. In this way the class was able to move forward even as circled set of important design questions, developing a richer understanding of the problem of their projects. As the example of the end of these processes are given below by the photos of a student work from the “architectural design studio 1”:

![Assignment Student work Presentation Desk Critic](image)

**Figure 3:** The explanation of the design methods and working processes in A.U (Ketizmen, 2002)
- A house for a Writer (Ursula K. Le Guin) and her family

**Student Name:** Sinem Surucu  
**Supervisor:** Res.Assist. Gokce Ketizmen

This project has actual occupants: Ursula K. Le Guin who is an author and her family. At the beginning of the design stage, the student wrote a letter to Ursula Le Guin to know more about her life and what would she desire if an architect would design a new house for her and her family. After a while she received a letter from Le Guin, which explains all her requirements in details. By the frame of these requirements the student started to design the house. She designed an office space, which is separated from the rest of the house, but partly has a connection with her bedroom. The designed rest of the house in parallel to the initial scenario and the occupant requirements.

**Concept poster and first conceptual sketches (photo: Ketizmen, 2002)**

![Concept poster and first conceptual sketches](photo:Ketizmen,2002)

**Site plan, elevations and construction studies (photo: Ketizmen, 2002)**

![Site plan, elevations and construction studies](photo: Ketizmen, 2002)

**Conclusion:**

**Proposal for Anadolu University: as the physical formation of design studios**

Architectural design studio plan schemes of A.U are proposed in the light of the general design methods of the general architecture education in relation to the ones used in
A.U. Their relations, the present situations, and new functional uses for the design studio in the School of Architecture in A.U where the studio described above taking place is proposed.

The functional uses of the design studio in A.U. in the future that would provide more comfortable spaces for studying were proposed by renewing the existing functions of design studios. The methodology that is developed through this case study was also consisting the surveys those were answered by the occupants: students, teachers.

Based on the investigations on the design methods in A.U., and the determination of the deficiencies of the functional uses and the materials of the design studio, a new plan is offered to provide more comfortable uses. Besides, at the end of the investigations it is realized that the studio methods are not suitable for the functional uses of studio such as design studios are not suitable for group discussion more than 15 students.

The deficiencies and proposal of the design studios are as below:

• The design studios in the department of architecture in A.U. are rectangular in shape. There are six different types of studios in the school that have two different dimensions. In this study two of them, which were adjacent to each other were chosen as examples. Besides, there is a courtyard in school plan, and there is a corridor between the courtyard and the studios.

• In the School of Architecture in A.U there are two different computer laboratories (IBM-MAC) that have relations with the design studios. After some investigations and the analyze of the answers given to the surveys, it is comprehended that, the laboratories are not sufficiently used by the students however teachers are supporting computer drawings in their design studios. Students thought that labs are so far from their studios and it takes long time to reach at that point. Since it is important to use the computers as a design tool, they have to be used in the process of design in the design studios.

By the means of these deficiencies, the computers in the laboratories are proposed to be moved into the design studios. By the means of the importance of computers in the design process, computers are relocated in working areas in the design studio.

There is a wall between the studios that divide the whole space into two rooms. Based upon the review of the precedents of the design studios, reports of the surveys, and observations, it is proposed to demolish the wall between the studios and the other wall between the courtyard and the studios. At the end there will be a whole area for the design studio to meet the required sizes of a design studio to perform the actual design methods.

• By the help of the investigations, the location of the library in the school found to be inconvenient in the means of the relationship between the studios. Because of the same reason with the location of computer laboratories, it is proposed to put the library into the studios.

• An important part of the architectural education is the evaluation process. It is clear that, the evaluation process can be divided into three main sections which are jury critics, group critics and desk critics (Antony, 1992). Desk critics are provided in the working areas of the students as an individual study. For these reasons there should be appropriate areas in a design studio for those critics. Two areas for the jury and the group critics are proposed to provide space for the big group of critics.
• Through the evaluation process, working areas for students have a great importance in the studio. By the help of the surveys, it is comprehended that students want to study in two different types of space: one is group-working area, and the other is individual working area. So these **two types of working areas are proposed in the studio.** In these areas drawing tables are designed to provide both drawing and model making. **The tables are designed L shape to provide two processes of designing: model making and drawing.**

• In the studio method, conferences are taking place as a part of working process. It is called the **presentation area; where the teacher gives conferences, and is proposed to be placed in the short side dimension of the design studio so that provides appropriate sight from the whole space.**

• During the studio studies students need to take a rest for a while. **A resting area is offered in the second floor, at the same level with studios** to provide this requirement. It is designed as a balcony that students could see the courtyard.

The goal of this study was to develop schemes to conduct the future technologies and techniques to these studios in the context of present conditions as well as to allow them to expand in the future. The proposed schemes of architectural design studios that are given below figure 4,5 are developed and supported by the previous investigations. We hope this model to be a basis for a better awareness of the great possibilities, which exist in studio teaching and to show the importance of the organization of design studios.

*Figure 4. The existing plan of architectural design studios in A.U. (Ketizmen,2002)*
Figure 5. The proposal plan for architectural design studios in A.U. (Ketizmen, 2002)

References: