The Role of Experiential Learning Strategies in Interior Design Education: Environmental Design Course and Case Studies in Yenikapi Coast Landfill Area, Istanbul

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Abstract

This paper mainly concentrates on experimental learning strategies and the role of experience in evaluating, analyzing and designing space. As a pedagogical strategy, doing case studies drawn from real-life situations, at the same time completing hands-on projects and assignments that emphasize applied learning over theoretical knowledge is essential for learning by doing processes. In this context, the study presents a descriptive reading through the experiences in the Environmental Design Course that was held in the 2016 Spring Semester at Istanbul Kultur University, and in this sense evaluates the outcomes and the educational process. Case studies which were done in scope of the course and the design process are discussed. The students worked as groups on the selected site which is located in Istanbul’s old historic peninsula. The site had a specific morphological characteristic; it was a giant urban square in Yenikapi Coast and was constructed for mass meetings and celebrations that had a 700,000-1,000,000 people capacity within 700,000 square meters. Therefore, it had changed the map of the historic peninsula. The students were encouraged to go and visit the site, make analyses and evaluations within the site and experience space. Referring to the students’ experiences at the site, semantic evaluations were analyzed. The analyses were structured as tests that were trying to find out the semantic and morphological evaluations of the students according to the assumption that each of them was the users of the space. At the end of the course, each group developed design ideas that pointed out their evaluations and analyses. It was observed that the students achieved to analyze, evaluate and find out the problems related with the site from their own perspective, and made design proposals related with the determined problems.

Keywords: Environmental Design, Experience, Experimental Learning, Interior Design Education, Morphology.
Introduction

This paper mainly concentrates on experimental learning strategies and the role of experience in evaluating, analyzing and designing space. Consideration that the design process must include experience is based on the fact that experience plays an important role in the learning process. Regarding the experiential learning theories (ELT), design activity can be better learned by understanding the relation between learning and experiencing.

To learn is not the special province of a single specialized realm of human functioning such as cognition or perception. It involves the integrated functioning of the total organism thinking, feeling, perceiving, and behaving. According to Kolb (2015), experiential learning is a holistic perspective that combines experience, perception, cognition and behavior.

Design courses give opportunity to understand the relation between the design activity, emotions and experience in Interior Design Education. And the structure of the Environmental Design Course considers the “environment” and “experience” as the starting point within the design process. On the other hand, learning is a change in the individual caused by experience, however, how people create and manage their “experience” is crucial to the process of learning (Dewey, 1938). Kolb (2015) defines the concept of experiential learning as broader than that commonly associated with the school classroom. In this sense, the students were encouraged to go and visit the site, make analyses and evaluations within the site and experience space as real users.

Kolb (2015), emphasizes the Lewinian Learning Model with two basic concepts. First, the “concrete experience” as a basic part of learning and secondly the “feedback process” as the activity of using the information for generalizations and testing implications for new situations (Figure 1).

Figure 1. The Lewinian Experiential Learning Model (Kolb, 2015)
This paper is based on a research which was carried out during the Environmental Design Course that was held in Istanbul Kültür University, Turkey. The aim of the study is to understand the role of experience on the learning process and to put forth the role of the emotional states regarding spatial experience on design activity. Two basic questions are given below;

- Can experience be effective on environmental design?
- How self-emotions can guide environmental design?

Referring to the experiences at the site, students’ semantic evaluations were analyzed. The analyses were structured as tests that were trying to find out the semantic and morphological evaluations of the students according to the assumption that each of them were the users of the space. At the end of the course, each group developed design ideas that pointed out the evaluations and analyses.

Coast Landfill and Urban Space

Specifically for the last 35 years, big cities in Turkey have been under pressure, mainly because of the increase in the population and the highways which are constructed in order to overcome the traffic problems. To cope with the rapid changes, many coast areas have been filled and new highways or living spaces have been generated. In spite of these particular functions, more often these spaces have been used in unpredicted ways. These radical changes can be interpreted not only as a new urbanization mentality, but also as formal implementations on the natural structure of the coast line. Besides all these discussions, these areas can be used to understand the attitudes of designers for proposed new handmade environments and understand how these environments’ characteristics could give possibility for new design strategies.

Environmental Design Course which was held in Istanbul Kültür University, department of Interior Architecture and Environmental Design aims to combine experiential learning strategies and Environmental Design in design education. The scope is specifically determined as the “leftover spaces in the urban fabric”.

The Area

Yenikapı Coast Landfill area has a size of 700,000 square meters and estimated to host 1 million people during the celebrations and meetings. Being finished in the year 2012, the landfill was criticized because of the radical change on the Historical Peninsula Coast Line where the Ayasofya Mosque, Sultanahmet Mosque, Topkapı Palace and many other historical landmarks stands (Figure 2). The area was used as a part of the political display and presented to the citizens as a place where people can gather and meet. On the other hand, the massive size of the area (Figure 3), the psychological effects of the place on the users and its impact on urban memory are significant points that should be discussed.
The Study

According to Beard and Wilson (2006), the great strength of experiential learning can be explained as experiencing something is a linking process between action and thought. Action is an activity of exploring and learning about the environment, and thinking about the action and environment refers to using the previous knowledge to make new decisions and actions. In short, action and thought are continuous facts.
which are inseparable. Architectural design activity offers a good opportunity to observe that relation.

14 participants who took the Environmental Design Course were asked to design a multipurpose unit that would be used for a purpose which was proposed by the designer. Students were encouraged to develop ideas related with their individual environmental experiences (Figure 4). The study was conducted in two steps; firstly attendees experienced the whole area and replied the questions of a test given to them; and in the second step, they were asked to generate a design proposal regarding their evaluations.

**Figure 4. Participants who Took Part in the Study**

![](image)

**Procedure**

The participants were asked to write the most appropriate three words which can describe the place. This open ended question was used to find out the environmental cues that define the characteristics of the field due to the experiences of the students (Table 1). The words were grouped and categorized. Positive and negative uses of the words are presented in Figure 5 in order to understand the attitudes of the students.

**Table 1. Descriptive Words used by the Participants**

<table>
<thead>
<tr>
<th>emptiness</th>
<th>soil</th>
<th>endless</th>
<th>green</th>
<th>huge</th>
<th>security</th>
<th>exaggeration</th>
<th>artificial</th>
</tr>
</thead>
<tbody>
<tr>
<td>far away</td>
<td>blue</td>
<td>concrete</td>
<td>useless</td>
<td>order</td>
<td>similarity</td>
<td>pleasent</td>
<td></td>
</tr>
</tbody>
</table>
Another question was asked to the students by using the adjectives which were used previously within the studies of Mehrabian and Russel, (1974), and Bradley and Lang (1994) for measuring emotions. The semantic differential scale technique was used in order to gather data about the most significant adjectives that define the space and comparison of gender differences.

A semantic differential scale that represents 14 participants’ responses (Figure 6) put forth dominant emotional descriptions such as “relaxed” (0.79), “calm” (-1.08) and “controlling” (-0.66).

The comparison between male and female students shows some differences. While male students described the area with the adjectives “controlled” and “submissive”, female students preferred to describe the area with the adjectives “controlling” and “dominant” (Figure 7). Although the gender differences are not deeply crucial for the current study, the analyses show that male and female students have different attitudes related to the study field. The future studies examining the relation between spatial experience and design in design education can handle gender differences in detail.

Figure 5. Descriptive Words were ranked as Positive, Negative or Neither Positive Nor Negative

Figure 6. Semantic Differential Scale Showing the General Attitude of Students
Figure 7. Semantic Differential Scale Showing the Comparison of the Attitudes of Male and Female Students

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>happy-py</td>
<td>-1</td>
<td>-0.5</td>
</tr>
<tr>
<td>annoyed-please-d</td>
<td>0.625</td>
<td>0.5</td>
</tr>
<tr>
<td>melancholic</td>
<td>0.625</td>
<td>-0.16</td>
</tr>
<tr>
<td>bored-relaxed</td>
<td>1.25</td>
<td>0.33</td>
</tr>
<tr>
<td>calm-excite</td>
<td>-0.43</td>
<td>-1.16</td>
</tr>
<tr>
<td>sluggish-frenzie-d</td>
<td>0.125</td>
<td>-0.33</td>
</tr>
<tr>
<td>contro-lilling</td>
<td>0.5</td>
<td>0.75</td>
</tr>
<tr>
<td>submis-stive</td>
<td>0.55</td>
<td>0.33</td>
</tr>
<tr>
<td>guided-autonomous</td>
<td>0.625</td>
<td>0.33</td>
</tr>
<tr>
<td>strong-weak</td>
<td>-1.25</td>
<td>0</td>
</tr>
<tr>
<td>energetic-lazy</td>
<td>0.425</td>
<td>0.33</td>
</tr>
</tbody>
</table>

Figure 8. Designs, Keywords and Scenarios

- **open source book station**
  - Design group proposed an “open book station”. Considering the idea that filled area could serve as a place where people can meet and share their books and magazines for free.

- **floating theatre**
  - “Floating theatre” is designed to serve as an alternative experience for meeting and shows. The platform is place that people can feel and touch the water.

- **fluctuated exhibition**
  - The new way of “exhibition” provides cultural activity that aims to create environmental and cultural consciousness.

- **urban ambrella**
  - “Urban ambrella” is a design that create a social place, which provides an environment-controlled unity proposed activity area.

- **rounded**
  - The “rounded sitting units” are programmed to collect students from neighborhood thus children can study there and experience the different way of learning.

- **kamelya**
  - “Kamelya” is proposed to be a place where people can meet in small groups. The design discusses the privacy issue in scope of public realm and common areas.

- **ney**
  - Design group proposed an system consist of “cupes” which can be reorganised in different ways and could create new sub places for ac-
In the second step of the study, students were asked to develop ideas and compose design proposals which take the problems of the area into consideration, and try to enhance the quality of the current context. Figure 8 presents the ideas, spatial proposals, key-words and the design scenarios. The students worked as groups, and discussed the problems by searching, and brainstorming. At the end of the course, each group developed design ideas that pointed out their evaluations and analyses.

Conclusions

The design studio, is quite important in design education and it is the core of the learning process of architectural students. The research done by Demirbas and Demirkan (2003), claim that, the design studio is an experiential learning process, and every student has a different learning style in every different stage of the design.

As a pedagogical strategy, doing case studies drawn from real-life situations by ones own is essential for learning by doing processes. In this context, the study presents a descriptive reading through the experiences in the Environmental Design Course that was held in 2016 Spring Semester at Istanbul Kultur University, in this sense evaluates the educational process. The study tries to concentrate on the design process related with the idea that designing activity should be interrelated with the spatial experience and sense of place. “Experiencing the problem site as the users” strategy was carried on with the test which consisted of open-ended questions and semantic ratings.

It was observed that the students achieved to analyse, evaluate and find out the problems related with the site from their own perspective, and made design proposals related with the determined problems. The students as “designers”, in majority, discussed the challenges such as the huge size of the area, and social connection problems. Being distant from the dwelling zone and the disconnection to the city center was also a problem specifically for security.

Experiencing the place and answering questions about the area gave opportunity to understand “how students think and feel about the field”. It is obvious that, as it is the case in all areas of design, also interior architectural design problems cannot be considered independently from the environment. Providing that the “environment” is considered as the starting point within interior design processes, it can be observed that established connections between experience and design process trigger creativity, and constitute interrelation between the outcomes and the real-life problems.

It was clear that, experiencing the project field played a significant role during the design process. Related with the first question (Can experience be effective on environmental design?), the final designs revealed that, experiencing the area, not only helped designers to understand the field, but also to encourage them to criticize both, space and also the given architectural program.

To understand the influence of self-emotions on design, the semantic differential scale was used and the meaningful connection was found.
between the context of final designs and the descriptive words expressing the self-emotion of designers.

As an activity, the architectural design process is a process of creativity, which consists of brainstorming, generating multiple solutions and creation the new knowledge. Therefore beside the positivist theories we must benefit from experiential learning theories which offer a fundamentally different view of learning.

The experiential learning differentiates from the rationalist and other cognitive theories of learning that tend to give primary emphasis to acquisition, manipulation, and recall of abstract symbols, and from behavioral learning theories that deny any role for consciousness and subjective experience in the learning process (Kolb, 2015). Regarding the Lewinian Experiential Learning Model, which emphasizes the importance of “concrete experience”, learning can be seen as a process of creating new knowledge. And this knowledge can be affective during the design process itself. Learning by doing and concrete experience which contain observations and reflections, that can be efficient in students’ education which is mainly based on design and creation activity.

References