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Assessment of basic design course in terms of constructivist learning theory

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Abstract

Design education is a process that allows multiple solutions and different points of views, where individuality in interpretation and expression are encouraged. Design courses take place in a studio environment where students deal actively with projects related to everyday life and evaluation is an indispensible part of learning. Due to its structure, design education appears to be compatible with constructivist learning theory. Basic Design is the common course of different design departments, which establishes the required foundation for any kind of professional design training. The purpose of this study is to analyze the Basic Design course from a constructivist point of view.

*Keywords:*Design education, basic design course, constructivism, constructivist learning theory

1. Introduction

Design education is defined as a process that allows multiple solutions and different points of views, where individuality in interpretation and expression are encouraged (Saranlı, 1998; Sausmarez, 1983; Teymur, 1998). Design courses take place in a studio environment where students deal actively with projects related to everyday life and evaluation is an indispensible part of learning. Due to its structure, design education appears to be compatible with constructivism.

Basic Design is the common course of different design departments such as Graphic Design, Industrial Design and Interior Design, which establishes the required foundation for any kind of professional design training. The purpose of this study is to analyze the Basic Design course from a constructivist point of view by applying to design students the scale on assessing constructivist learning environments developed by Arkün and Aşkar (2010). The first stage of the study is to investigate the appropriateness of the scale for the field of design education and then to assess the Basic Design course according to the 6 factors in the scale: whether the course is student centered, thought provoking, collaborative, life relevant, enables different viewpoints, concurs learning and assessing.

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2. Literature

2.1. Constructivist Learning Theory

The traditional teacher-centered method of educational systems has been changed; modern education theory has focused on skills like creative thinking and problem solving which are today's needs. It seems the most appropriate approach for gaining these skills is the use of constructivist environments (Tse-Kian, 2003).The growing influence of constructivism and increase of research studies on the subject have affected the teaching approaches of universities as well (Herrington, & Herrington, 2005).

Constructivism provides an alternative epistemological aspect to the objectivist tradition, which suggested that the goal of instruction is help the learner to find 'the' correct (Duffy, & Jonassen, 1992). In objectivism, the world exists independently of us, experiences don't have any role in understanding the world and knowledge exists independently of instruction (Duffy, & Jonassen, 1992). Wilson (1996) emphasizes how the perception of knowledge influences the view on instruction. In constructivist view, knowledge is made by learners, in other words, learners construct their own understandings, and knowledge cannot simply transfer from one person to another because it is not a pure copy of the external world (Baki, & Bell 1997; Jonassen, Peck, & Wilson 1999; Phillips, 2000). Therefore learners may express what they have learned in different ways, even if they have shared the same learning process (Phillips, 2000).

Wilson (1996) defines constructivist learning environment as:

'a place where learners may work together and support each other as they use variety of tools and information resources in their guided pursuit of learning goals and problem-solving activities'

According to Jonassen (1999) constructivist learning environments' components are: a question, case, problem or project as focus of the environment; related cases, information resources, and cognitive tools for supporting to understand the problem; conversation/collaboration tools for negotiation of the problem; social/contextual support systems.

2.2. Basic Design Education

Basic Design is the common foundation course of different design departments such as Graphic Design, Industrial Design and Interior Design. The idea that a foundation course is needed for a professional design training was introduced in 1919 by the founders of the famous and very influential design school Bauhaus (Westphal, 1991). Before Bauhaus, transfer of knowledge and experience from master to apprentice, known as the "Beaux-Arts System", was the common practice in most art and design schools (Güngör, 2005). As a result, the students were usually adopting the style, work methods and aesthetic sensibilities of their teachers, with little chance of developing their personal approaches and producing creative and unique works (Çekil, 1989). In order to overcome the problems of the traditional method, Basic Design was established as a course where students deal actively with projects in a studio environment, where only knowledge gathered through experience is valued (Sausmarez, 1983) and students are "no longer passive receivers of knowledge from their teachers or manuals but rather acquired their knowledge through experimenting, creating, discovering" (Boucharenc, 2008).

The discipline of design is multivariate, versatile, relies fundamentally on creativity and deals with multiple subjects and data (Teymur, 1998). Furthermore, design is closely related to human life which is ever changing (Sausmarez, 1983), therefore designers need the ability to creatively solve problems of various kinds, for various situations and in various mediums. In order to give the students this degree of versatility and flexibility, Basic Design is not considered "as an end in itself, but as a tool that helps the student realize the expressive possibilities at his/her command" (Sausmarez, 1983). With this tool, students' way of thinking, defining problems, searching for solutions and achieving creativity is reshaped and reinforced.

Creativity, which is an essential element of successful design, can be defined as "producing a new idea or object by reorganizing old or familiar elements" (Odabaşı, 2006). In Basic Design, to stimulate their creative abilities, students are encouraged to look at the problem from different points of view, generate as many ideas as possible in a