Creativity and knowledge in architectural education

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Abstract

One of the most important problems in architectural education is that students do not have the ability to transfer theoretical knowledge into practice. Architectural students generally have some difficulties about creating their own design ideas due to their habit of learning by rote instilled by their pre-university education. Students cannot find enough encouragement and ability to develop individual projects as a new design which uses all kinds of information from previous periods. For example, in architectural education students need to use the basic design principles learned from the first level all the way up to the final level, and even for their whole lives. Students have to acquire some skills such as drawing and design in addition to their theoretical training. In their architectural education, students need to design and draw through learning by trial and error in addition to their theoretical training. In this study, the emphasis will generally be on the rules of transferring theoretical knowledge into practice, and some advice will be given on this subject.

1. Introduction

In the last few decades, universities have made important efforts to improve the quality of design education. Concepts such as innovative ideas, emotional intelligence and creativity have started to be seen as very important in recent years. (Yürekli and Yürekli, 2004; Casakin and Kreitler, 2009). Creativity and design courses are the backbone of architectural education. Architectural design involves some concrete skills, including knowledge of drafting, architectural materials and structural elements, as well as other abstract elements such as time, space, environment and character (Yürekli and Yürekli, 2004). The architectural design process needs to interpret the

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The interaction consist of the following variables inherent in creativity: cognitive (intelligence-information-technical skills-specific capabilities), personal (political and religious factors-cultural factors-socio-economic factors) and environmental (intrinsic motivation-belief-personal creativity feature) (Eysenck, 1994; Kahvecioğlu,
If student don’t learn to understand the cognitive variables of creativity such as knowledge and technical drawing skill, she/he cannot be successful enough at design, due to a lack of ability of the structural knowledge and presentation even if she/he has the innate ability of creativity. Architectural education should give students cognitive development, and the ability to use it in the creative process.

3. Conclusion

Generally, creative thinking is believed to occur within a good knowledge hardware. However, every person who has the knowledge cannot create innovative designs. For that reason, it has been shown in a study by Weisberg (2004) titled “Creativity and Knowledge: A Challenge to Theories”, knowledge does not bring creativity every time, and it is not to possible to explain creativity exactly. Weisberg (2004) said, “if we wanted to explain the problem maybe we could say "creativity is a phenomenon. In architectural education, if the knowledge is given to the student first, then a creative action is expected from student after a few weeks, the solution is often not so good, and suffering from the lack of integration of knowledge and application. The result of the design can be more successful if you provide the knowledge when the student needs it. But of course, we must not ignore some personal flair or creativity. It is not possible to expect the same improvement from every student, but it is observed that in design courses, knowledge which is given at right time is from increases the success ratio of the result of the design.”

As a result, giving the knowledge to the student on time as a seminar etc., referring the student to research and gaining the habit of doing research, providing integration between theoretical and practical courses, and using theoretical knowledge in the practical application of design will promote a certain amount of creativity. All authors are required to complete the Procedia exclusive license transfer agreement before the article can be published, which they can do online. This transfer agreement enables Elsevier to protect the copyrighted material for the authors, but does not relinquish the authors’ proprietary rights. The copyright transfer covers the exclusive rights to reproduce and distribute the article, including reprints, photographic reproductions, microfilm or any other reproductions of similar nature and translations. Authors are responsible for obtaining from the copyright holder, the permission to reproduce any figures for which copyright exists.

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