

Constructivist Approach to Creating Web-Based Design Education

EunSook Kwon

Dept. of Industrial Design, KAIST

Abstract

This study is designed to investigate the needs of an epistemological shift towards new paradigm in design education, and to develop new ways of constructing design curriculum with constructivist theories and the Internet. As an alternative epistemology in opposition to the objectivism tradition in the field of education, constructivism supports active, authentic, collaborative, and constructive learning. Both constructivist theories and the Internet provide new learning environments for a learner-centered meaning making theory and tool. This study conducts a case study of creating and using Web-Based Instruction (WBI) to analyze the effectiveness of constructivist approaches to creating design curriculum in the university. It focuses on the development of WBI, which provides an explicit representation of a learner-centered education model, emphasizing collaborative and social knowledge construction. This study shows how the web environment can be used as an alternative learning platform for educators and students holding the frame of constructivism in design education.

Keywords

Constructivism, Web-based Instruction, Design Education

Extensive Exploration Process for User Needs in Innovative Product Development through Video-ethnographic Methods

Seo, Jong-Hwan

TongMyong University of Information Technology

Lee, Tae-Il

Inje University

Oh, Ki-Tae

Korea Advanced Institute of Science and Technology

Yi, Sun-Young

Korea Advanced Institute of Science and Technology

Lee, Kun-Pyo

Korea Advanced Institute of Science and Technology

Abstract

One of the problems of conventional product development and usability evaluation processes is that they concentrate too much on use situations of product itself that they often lost opportunities possible from various perspectives. This arises a gap between observational findings and product idea generation. The study seeks to find the ways to bridge the gap and provide smooth connections between two phases in a product development process.

The study approaches with three major stages: observational research, user modeling and cooperative ideation session. It first applies a number of ethnographic research tools and methods including video-ethnographic methods, interview techniques and supportive software tools? Video! that is developed for these specific purposes and so on - to explore everyday experiences of people within/beyond the product usages. Then, it develops the experience model and user modes that simplify complicated relationships of entities in use environments. With the findings from the above, the study comes up with a framework that applies in the cooperative ideation session. In the ideation session, the framework provides clear views on user needs while giving active opportunities for creative ideation.

The resulting model turns out to clarify the interconnected user contexts, so that it enables designers and developers to grasp emerging product opportunities. The proposed method also proves to smoothly link observational research findings and generated product concepts by giving a wide and quick view in understanding users and their needs.

Keywords

Video-ethnography, Product Development, Idea Generation