

Chapter 10

Use of Virtual Classrooms in Online Learning Environments

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ABSTRACT

With the help of enhancements in communication technologies, especially within the framework of opportunities provided by the internet, learning can be done both in traditional environments and online environments. Besides numerical content, online learning content has the ability to offer multiple learning tools together. The one which steps forward among these tools for providing communication and interaction is virtual classroom applications. In this study, virtual classroom structure in online learning environments is examined. Within the framework of the study, academic personnel who have experience with distance education and who have given courses in virtual classroom application are defined. In order to gain detailed information, research is designed qualitatively. After the data is analyzed, suggestions are provided by reporting the research. Action research design of qualitative methods is used in this study.

INTRODUCTION

Due to opportunities provided by internet in distance education technologies, use of online environments have become widespread. Virtual classroom applications as online learning environment are widely used. Virtual classrooms can be used in simultaneous programs and as communication tool of an online course. Thanks to wide

range of tools which increases level of interaction in the learning environment both simultaneous communication and interaction can be done. Ma et al. (2003) stated audio, visual and text based communication can be settled between instructor and learner. In this study, place of virtual classrooms in online learning, types of virtual classroom which are used today communication type of interaction used in virtual classrooms evaluation and presen-

tation tools are mentioned. Besides, in the study some tips are provided for the ones who online learning designers and the ones who would like pursue in this field. According to structures, we can group management of online environments as learning management systems, content management systems and virtual classrooms. The use of virtual classrooms in this group can be examined in three steps. 1- Chose of virtual classroom which is going to be used 2-Design of virtual classroom 3-Management process of virtual classroom. Under these steps planning of the course given in this virtual classroom and determination of tools need to be made. In order to make sure that learners and instructors are integrated to the environment, guides should be prepared.

Virtual classrooms provide us to have a face to face communication in an online environment. In some learning management systems, which use Web 2.0 technologies virtual sharing tools are used. However there are differences between them and virtual classroom software. Today, we have examples of virtual classroom applications in which learning management system is integrated.

In a distance learning program, before online environment decides on which structure to use the factors such as level of interaction, presentation of content, (student, content, system) management tools, number of students link speed should be considered. Advantages and disadvantages of virtual classrooms should be considered and then decision about using it as a learning environment should be made.

THEORETICAL BACKGROUND

What is virtual classroom? Enhancement in today's internet technologies has affected education technologies and increased the number of simultaneous tools of learning management systems. Various educational technological tools use in online learning and face-to-face classroom. Bernard et al. (2005) found that computer-delivered training

resulted in more effective learning than classroom learning and vice versa. Their study shows effect sizes from over 300 studies comparing learning from various forms of electronic distance technology to learning in face-to-face classrooms. Virtual classrooms are the online learning environments which let us use education tools of traditional classrooms for distance education.

In short, giving the opportunity to communicate simultaneously via internet, learner-learner, learner-instructor and learner-content interactions are involved in online learning environments. Virtual classroom allows organizations to provide learning at a lower cost and concentrate on amount of time. This application of information technology to support of learners working together under the guidance of instructor (Rada, 2001). Virtual classrooms include simultaneous events, online conversations and online presentations (Horton, 2006). Online conversations are simultaneous and interactive events. Online Presentations provide information as a part of online conversation or by putting together individual events. Online presentations are no interactive and then they can be distributed if they are needed, they can be recorded and played. The biggest difference between them and learning management systems is massive number of simultaneously used education tools and architecture based on audio visual communication. In this context there is an important situation. It is important design decision regarding this applications involves whether should be synchronous or asynchronous (Horton, 2000). Mainly asynchronous course materials of learning management systems are used; synchronous materials of virtual classrooms are preferred. Many educational institutions add virtual classrooms into the course presentation environments of online programs at learning management systems. In virtual classrooms tools such as synchronous fundamental education tools are presented. Audio and video tool which can be used both by the instructor and learner, presentation window, question-answer window, instant questionnaire,

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