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Procedia Social and Behavioral Sciences 2 (2010) 2514–2516

Procedia
Social and Behavioral Sciences

WCES-2010

# Analysis of multi-user video games in teacher training

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Received October 21, 2009; revised December 30, 2009; accepted January 12, 2010

**Abstract**

Purpose of this study is to examine video games and to analyze common practices, game purposes, contents and features of these games in general terms. Today, video games have become the most attractive and entertaining technology environment particularly for children. Most of the children prefer video games as an entertaining spare time activity. In spite of these features of video games, many studies have been carried out about game based learning environment in literature. These studies are mostly focusing on how these video games are adapted and integrated to learning environment in their most efficient and suitable forms by means of video games.

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*Keywords:* Video games; learning management.

## 1. Introduction

Video games are one the most predominantly entertaining activities preferred by individuals and particularly children in today's world. As stated by Brand, Knight and Majewski (2003), video games are increasingly gaining popularity day by day among people and this popularity results from the features of games on which factual characteristic of sounds and images are given in virtual environment. With the increasing popularity of video games for entertainment among people, world of games has started to take its place in entertainment sector and we can say that game sector has become a huge industry within this world. Game industry has become a study topic for the game companies, which are employing hundreds of experts, with video games costing millions and giving thousands of people the opportunity to play multi-user games on the same virtual environment. In these days, games are not only a part of entertainment sector but also have been used in education, health, military and business areas; therefore studies carried out about the games shows variety. Students' preference of game and effects of games (Sancar, Inal & Cagiltay, 2005), cutting edge technology features and effects of video games (McCarthy, 2003), the reason why people play video games (Garris, Ahlers & Driskell, 2002) or examining of the games prepared for educational and social purposes and using these in school environment (Tüzün, 2005) are the areas that can be shown as examples. In their studies Garris, Ahlers ve Driskell (2002) state that people are willingly playing video games as entertainment activity which are unconnected with the real world and are limited with the rules specified before.

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doi:10.1016/j.sbspro.2010.03.364

**Situation 2:** ***Games including historical themes***

The main purpose in such games is to give players a general framework about history and make it possible for the players to beat their enemies by taking into consideration political, scientific, military and economic problems which are embedded within the history itself. In these games, the player has to be successful in controlling economic process according to his/her place in the game, using his/her resources accordingly and keeping the economic condition in a particular level in order to save his/her country and struggle with enemies. Such online and historical games as *Civilization III* or *Revolution* provide entertaining activities for students, give them history based responsibilities about their daily lives and make it possible for the student to learn historical information by living in that environment. There are lots of studies about historical games. Squire (2005)'s study about *Civilization III* can be shown as an example. It is seen that these studies mostly focus on analyzing parts and activities of the games. Educators are looking for alternatives in order to encourage students, who are unwilling to learn history or think history as unnecessary and do not show any effort for learning it, to love history (Squire, 2005). According to Squire and Jenkins (2003), the game *Civilization III* possesses such elements that gathers science, religion, art and revolutionary developments together and shows the effect of 6000 years of technological development to the advancement of civilizations. In addition, these kinds of games make it possible for the students to realize their ability of shaping history with their movements in the game by giving them the opportunity of gaining different roles. The game *Revolution* is composed of short parts prepared for explaining 40 minutes of a particular period or situation and it seen that making the length of game short gives teachers the opportunity of taking feedback from students (Square and Jenkins, 2003). On the other hand, historical themed games or similar activities are more difficult to bring into a classroom environment when compared to other games. Historical games are among the most important ones which give information to students about basic features of national culture, introduction of clans and how the human being has been affected by these historical developments. While playing these games, students also have the opportunity of learning historical events and their results along with the connections with their own real lives. According to Squire and Jenkins (2003), students can acquire real experiences by bringing these kinds of games into the classroom environment and they can easily make sense of the whole historical process and the effects of their own choices made in the games.

**Situation 3:** ***Military games***

Among the increasingly popularity gaining online games are military games in recent years. Such games are generally used for training soldiers, pilots, captains and tank drivers who are responsible for using precision equipments in dangerous situations. According to Prensky (2000), these kinds of games are used for making it possible for the commando groups to make contact with each other and work in groups. In addition to this, these games are used so as to train soldiers against terrorist attacks, teach them using some dangerous weapons and execute such complex military logistic processes (Prensky, 2001). With the inclusion of online games into the training process, it is aimed to train new soldiers within the frame of military rules before they are isolated from the military environment. With these kinds of games, features of acting as team and overtaking responsibility of leadership are gained, and the players can imagine their future possibilities and make connection between their skills and life styles. Therefore, players are able to observe the characters they are playing with and add various features to them during the process of training. The most important purpose of this is to make players see how they progress in the game (Prensky, 2001). For example, with its 1.3 million registered users and more than 800 000 basic trainings, *America's Army* is one of the most popular games used for military training (http://www.americasarmy.com). On the other part, with its three dimensional battle environments and the opportunity for the players to be integrated with the battle environment, *Battlefield 1942* is another popular online game. Although it is possible for the players to play these games individually, the main purpose is encouraging group work. Hence, playing with groups gives the opportunity to easily observe the activities carried out by creating interaction environments among players.

## 2. Method

In this study, multi-user video games have been examined and common practices about games, along with their purposes and features have been roughly analyzed.

## 3. Discussion Conclusion and Recommendation

Video games are among the most popular games. This increasing popularity not only attracts attention, but also makes it possible to carry out researches about games academically. Actually, it can be said that one of the basic reasons of the usage of games in classroom environment is to draw students' attention and make it possible for the students to keep their motivation and attention in high levels. Moreover, we can say that video games shorten the learning processes of the students and present meaningful learning acquisitions with rich visual contents of these games. In the light of these and similar reasons, video games come into importance among educators and students in terms of their usage in the process of education. As Prensky (2001) has stated before, video games have the effect to increase conceptual learning among students. When we think of the speed and extent of learning in 21$^{th}$ century, it is not hard to say that video games will increasingly gain more importance by providing an interaction environment among students and enabling meaningful learning among different dimensions. According to Prensky, dealing with the environment of interaction and games are the key words for game-based learning, since it is necessary to develop an active interaction and dealing ability between students and the video games when integrating video games into the classroom environment. Thus, video games should have the design features, which will keep active the interaction of students during games, and make it possible for the students to support their socialization through interaction of students both in video game and physical environments. Video games are already very suitable materials for socialization. Both educators and game designers should act together in order to spread game-based practices in education or use video games as supporting materials of the education-training process. Doubtlessly, video games which can transfer educational content efficiently and effectively to the target population will be useful in students' learning process. However, analysis of the student groups' demographic structure environment in which video games will be applied is gaining importance. It can be said that extensive researches should be carried out so as to see the application of video games within the classroom environment in Turkey.

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