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Perceptions of Educators in Higher Education regarding Educational Affordances of Virtual Worlds in Turkey

Sevil ORHAN ÖZEN[a] *, Ridvan ATA[b], Ömer UYSAL[c]

[a]*Usak University, Computer and Instructional Technologies, Usak, 64000, Turkey*
[b] *University of Sheffield, School of Education, Sheffield, S10 2JA, UK*
[c] *Anadolu University, Computer and Instructional Technologies, Eskisehir, 26470, Turkey*

Abstract

The primary aim of this study is to develop a deeper understanding of educators' perceptions and feelings in using virtual worlds (VWs) for their teaching in Higher Education. VWs have been used by a great numbers of the institutions across the various disciplines in developed countries, yet few implications can be seen and there is still lack of awareness amongst the educators in Turkey. Likewise, the literature is well established around teaching and learning within VWs, this study seeks to find out teaching approaches and methods specifically used in their practices from the educators' perspectives. Therefore, in our work, we specifically examine whether educators perceive any significant pedagogical advantages of VWs as an educational environment. This study includes educators from different universities and disciplines. In-depth semi-structured interviews were conducted into SL to gather the data. We analyzed the data collected through chat logs by using the general inductive approach in order to construct emerged themes. We draw the conclusion by discussing educational benefits and limitations of VWs in Turkey context and by recommending how educators could adopt VWs in their teaching practices.

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Keywords: Virtual teaching, second life, virtual worlds, teaching and learning practices;

1. Introduction

Today's one of the most important aims of education is lifelong learning and learning to learn. In this context, online education is developed by technology, every day. But, it can be argued that there is one limitation of online education that it does not reflect real life adequately. Thanks to technological development virtual worlds (VWs)

* Corresponding author: Sevil Orhan Özen. Tel.: +90-0276-221-21-48
E-mail address: sevil.orhan@usak.edu.tr

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were designed in order to overcome to this limitation.

VWs started to be used for educational purposes, such as tradition, entertainment and communication. VWs can be learning environments by using different educational tools and for different educational activities. Educational tools consist of two parts (Dinçer, 2008, pp: 35-41): First part is called instructional tools. Educators use instructional tools as virtual laboratory, electronic white board, video curtain, instruction guide, desk for learner and chair etc. Second part is called communication tools. Educators use communication tools as text based chat, instant private message, voice chat, mimic, animation etc. Also educators can design and develop new characters and new tools when they require using.

VWs are engaging, stimulating spaces where students can meet online for normal class activities, including lectures, discussions, case studies, projects, papers, exams, and labs. Classes are a mix of synchronous and asynchronous activity (Calongne, 2008, p.36). All the special teaching methods such as lecture, question-answer, discussion, demonstration, brain storming, simulation applications, case study, role playing etc. can be implemented together for conducting educational activities. Therefore, enriched and satisfying learning environments can be provided to learners. Good examples of VWs designed for educational purposes can be found in literature such as listed below:

- Virtual court was designed for law education (Calongne, 2008, p.44),
- Virtual studio was designed for architecture education (Gül, 2011),
- Virtual courses were designed for information management, operation management etc. (Dinçer, 2008; Lee, 2009),
- Virtual platform was designed for avatar (Schutt and Martino, 2008, p.901),
- Virtual laboratory was designed for music education (Schwartz, 2009),
- Virtual consultation room was designed for consultant education (Walker, 2009).
- Virtual campuses were designed for virtual education (NMC, 2007).

Learning became simplified with these sort of education examples in VWs. VWs can support achieving learning outcomes. In literature, the results of the papers mention that educational activities conducted in the VWs can increase academic success of students (Jarmon et al., 2009). In this context, VWs are used for educational purposes all over the world. But, educational activities in VWs are not used sufficiently in Turkey. For that reason, this research was needed to be conducted.

2. Method

2.1. Participations

In this study, educators who have experience or study about teaching in SL are aimed to involve. Only 4 male educators were interviewed for a numbers of reasons. This is because there were a limited numbers of educators, who study in this area in Turkey, as well as interviews were conducted in English through SL which was time consuming and challenging for interviewees. In those interviewees, one has been using SL since 2005 for personal exploration, one has been using since 2008 through an online course, one has been using SL since 2005 through his friend and one has been using SL since 2011 through his supervisor.

2.2. Data Collection

Semi-structured interview were used to determine participants thoughts as part of research. Some of the interviews were conducted in the virtual environment like SL. Logs were used to analyze answers of the participants. Interviews were carried out with each participant separately at their times of convenience. Data collection tool developed by the researchers was an interview form which was consisted of 12 open-ended questions. Three experts revised whether interview form was appropriate and sufficient to address the research questions of the study. The form was ready for implementation by expert revisions as suggested by leading

methodology sources in the field of qualitative research (Miles and Huberman, 1994).

2.3. Data Analysis

The data obtained from the participants was analyzed by general inductive approach. A general inductive approach for analysis of qualitative evaluation data is described. The general inductive approach provides an easily used and systematic set of procedures for analyzing qualitative data that can produce reliable and valid findings. Although the general inductive approach is not as strong as some other analytic strategies for theory or model development, it does provide a simple, straightforward approach for deriving findings in the context of focused evaluation questions (Thomas, 2006). In the general inductive approach, collected data are coded, relevant themes are found out, data are organized in accordance with codes and themes. Findings are commented by the researchers and experts. The target of this analysis is to reveal themes and relations between these themes. In this method, findings are expressed with direct quotations to reflect participants' views exactly (Yıldırım and Şimşek, 2005).

In the research, collected data after semi-structured interviews were transferred to interview forms. Statement patterns that emerged by collected data were listed by the researcher and an expert in the field to find themes of research. The researchers and a subject matter expert were coded the themes which pointed out the answers in the interview coding key by reading data sheets. Then, the reliability of the coding key was examined through the formula proposed by Miles and Huberman (1994, p. 64) (i.e. reliability = number of agreements / total number of agreements + disagreements). The coding procedure was reliable due to all inter-coder reliability coefficients were above .70 suggested ratios.

3. Analysis and Findings

Data were gathered through SL chat logs and participants were anonymised as [P1, P2, etc.]. Data were coded carefully after reading transcripts several times. Following this, the themes were constructed. Four different themes emerged as "effect of SL usage", "teaching strategies in SL", "SL opportunities", and "SL limitations."

3.1. Effect of SL usage

Two participants noted that SL is similar to real life (RL) experience. For example:

"It was like real life because they have virtual campus. Same campus so it was real." [P2].

One participant stated that there is a lack of empirical study to indicate pedagogical implementations of SL, which is a niche to investigate. Another participant noted:

"Environment's user friendly structure. Students find SL funny and interesting so even being in SL environment is enough for some of them. So I didn't make an extra effort for them. [P3].

The data indicated that the students got entertained while they are experiencing within SL. Students found SL experience fun and participants stated this could be beneficial to adopt these sorts of environments.

3.2. Teaching Strategies in SL

Within those participants; three participants mentioned student-centered learning, two participants used a collaborative learning approach, one participant used a problem-based learning approach and one participant indicated a discussion approach in their teaching within SL.

3.3. SL Opportunities

Three participants found SL useful over traditional teaching specifically for language learning. For example:

If you teach language, SL is a good choice. You need a cinema; you want to role-play activities how can you find in classroom. But you can find in SL. I see some medicine cases, but for language is better. [P2].

Two participants stated that their students found SL fun in terms of its similarity to RL. Moreover, they noted that SL offers different opportunities for 3D modelling, multiuser interactions to design educational spaces. Further, One participant indicated that some of his students participated more in discussion activities in SL and three participants mentioned SL offers opportunities for education, which are independent from time and space. For example:

"Multi-user interaction, providing 3 dimensional modelling and communication opportunity motivates me to teach using SL environment. Students can have any roles -what they want- is important chance that SL served. ……. In my study, eight students declared that they like SL. In addition they said, SL was an enjoyable lifelike environment, and they highlighted the opportunities of communication and interaction……Different opportunities can be served in SL environment which mostly used for entertainment by increasing of educational contents and opening new SL courses in near future." [P1].

3.4. SL Limitations

Two participants stated challenges regarding class management and sustaining student motivation. Specifically, two participants indicated difficulties about assessing students' work in SL. Moreover, four participants indicated technological barriers and sophisticated hardware requirements. Three participants stated high cost of SL. Two participants indicated that SL is banned to access in their institutions. Lastly, two participants mentioned educators' insufficient technical skills into SL leads to limited educational practices. For instance:

"Many campuses forbidden VW in their campuses so students can't log in to these worlds easily." [P3]

"SL has opportunities and tools at the same time to provide different educational environment for learners of new generation. But, firstly educators must be equipped with skills which mean educators acquire this vision." [P1].

4. Discussion

In our study, educators view that adoption of VWs has a positive impact on students' learning activities. In particular, they perceived that SL is a favorable environment for student-centered learning as well as SL offer opportunities for collaborative and interactive activities. According to literature, VWs can afford these sorts of activities (Kapp and O'Driscoll, 2010; Kieron, 2010). On the other hand, it appears those main barriers within the Turkey context are; insufficient infrastructure and hardware, educators' awareness and institutional restrictions.

5. Conclusion

In this study, we discussed educational benefits and limitations of VWs in Turkey context. Overall, participants agreed that educators could adopt these sorts of environments in their teaching practices and students get benefit from practices within SL. This is not perhaps surprising, as the literature supports the view that VWs are of interest to educators and likely to gain value when they are adopted. Thus, the findings of this study offer a glimpse of the educators' opinions which are convenient with the literature. Nevertheless, educators' awareness and their professional development with/for VWs came forward to investigate with our study. Therefore, future work needs to investigate in detail how educators enhance their teaching skills such as self-efficacy or personal learning within VWs.

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Appendix A. Open-ended questions in interview form

1.How and when you first heard about Second Life?
2.How long have you been using Second Life as a teaching environment?
3.What first got you interested in using Second Life?
4.What motivates you to teach in this environment?
5.Were there any influences that affected your use of Second Life, or your decision to use it?
6.Tell me about some of your experiences as an instructor in Second Life comparing with traditional methods.(Positive-advantages, negative,-disadvantages, neutral-similarities)
7.Do you think VWs have any limitations? What are the limitations of SL for learning-teaching process-traditional methods?
8.Can you tell me about your teaching strategies/approaches into SL?
9.Do you use any other technologies besides Second Life in teaching your course such as wikis, blogs, social networking, and virtual online environments?
10.Based on your perceptions, does Second Life offer anything that other online communications tools do not?
11. Do you think virtual worlds will penetrate in higher education in the near future?
12.Are there any other things you would like to talk about in terms of your Second Life experiences in teaching and learning?