

Exploring ideas and possibilities of Second Life as an Advanced E-learning Environment

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진보된 E-learning 환경으로써 Second Life의 탐색 아이디어와 가능성

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Web 2.0 is changing the paradigm of using the Internet which is affecting the e-learning paradigm.

E-learning 2.0 based on the Web 2.0 has a bottom-up approach which learners work on content with social networking and collaboration in their own cyberspace.

Second Life is presented as a new e-learning environment.

- Flexibility,
- Strong social networking,
- Residents' creative activities of Second Life

⇒ Unlimited potential to educators

Second Life is a classroom built in 3D cyber space.

1. Introduction

Until now, classrooms have been the primary locus in teaching and learning.

World Wide Web has emerged as the primary way most people use the Internet and has occupied the digital generation's daily lives.

The Web has evolved to expand its service to hold

- ⇒ blogs,
- ⇒ user-created content,
- ⇒ and collective intelligence for a problem

⇒ According to this expansion, people using the Web have begun to change - they want to be more open to the public, participate more actively in their interests, and try to share their knowledge with others. Changes on the Web and its users "are sweeping across entire industries as a whole and are not unique to education; indeed, in many ways education has lagged behind some of these trends and is just beginning to feel their wake [2]" The new Web is called Web 2.0 and people using it are called "digital natives" These new users approach work, learning, and play in new ways - they absorb information quickly, in images and

video as well as text, from multiple sources simultaneously. They operate at "twitch speed," expecting instant responses and feedback [4]. They prefer random access to media, avoiding sequential processing information. They want to be online, expecting to be in constant communication with their friends. They are as likely to create their own content and want it to be delivered free to others. New learners with new traits expect new e-learning strategies. Traditional e-learning with digitized material content in the classroom cannot guarantee active participation in learning and vivid representation for their real lives.

The new Web does not refer to an update to any technical specifications but to changes in the way software developers and end-users use the Web. These trends manifest themselves under a variety of guises, names, and technologies: social computing, user-generated content, software as a service, podcasting, blogs, and the read-write web. Taken together, they are Web 2.0, the next-generation, user-driven, intelligent web [3]. It is a set of economic, social, and technology trends that collectively form the basis for the next generation of the Internet characterized by user participation, openness, and sharing.

There are a number of Web-based services and applications that demonstrate the foundations of the Web 2.0 concept and they are already being used to a certain extent in education. "These are not really technologies as such, but services built using the building blocks of the technologies and open standards that underpin the Internet and the Web [1]" These include blogs, wikis, multi-media sharing services, content syndication, podcasting, and content tagging services. Many of these Web technology applications are relatively mature, having been in use for a number of years, although new features and capabilities are being added on a regular basis. It is worth noting that many of these

newer technologies are concatenations, i.e. they make use of existing services. Second Life is one of them. It has built-in Web 2.0 concepts: social networking, wikis, communication tools, collaborating and sharing information. More importantly, it is being used for educational purposes.

Second Life is a virtual world. It is a 3D online space, totally created by its users. Within Second Life, anything imagined can be done, created, and realized. Adopting Second Life as an educational environment enables educators and learners to be more creative and adaptive in how they use the environment and in developing new ways of learning, rather than purely replicating real-life into second life. Learners and educators can work together anywhere using the Second Life environment. Using Second Life as a supplement to traditional classroom environments provides new opportunities for enriching an existing curriculum. Educational organizations using Second Life include universities, libraries, and museums, national and local organizations. For example, there are some campuses, help islands, and schools such as science.

E-learning 2.0 is currently finding most interest from both academic and industrial communities. It is based on the Web 2.0 vision that refers to a second generation of Internet services that let people collaborate and share information online in previously unavailable ways. Thus, this chapter aims to explore Second Life in its possibilities, functions, and learning strategies as an e-learning environment. This chapter expects to bring up new trends and an e-learning horizon based on a new e-learning environment and traits of new learners.

2. Changes of e-learning and its strategies

2.1. Changes to Web 2.0

- The web as platform
- Harnessing collective intelligence

- Social networking in own space
- User generated content and openness
- Lightweight programming models
- Long Tail

2.2. Tools needed for e-learning 2.0

2.3. E-learning strategies for net generation

2.4. Cases of teaching and learning in Second Life

- Case 1: Building objects
- Case 2: Interactive Group Work

3. Learning in Second Life: Ideas, Possibilities, and Functions

- Classrooms in Cyberspace
- Knowledge Construction in Collaboration
- Social Networking in Own Space
- User Generated Content and Openness
- Lightweight Programming Models

4. Conclusions and Suggestions

4.1. Conclusions

E-learning 2.0 places a high value on participant's creation, participation, sharing, and cooperation. These values also should be pursued in the classroom learning. They facilitate knowledge construction and consumption useful for people's quality of life. Until now, the web provided already made universal menus of quality food, while the Web 2.0 provides cooking utensils. It leaves cooking to its participants. Thus, they can cook what they like to have in their own way. They have to cook good food and frequently cooperate with others. After all, they sit together in a table in order to serve themselves. It is enjoyable because they prepared a meal together. In this process, participation, cooperation, creation, and sharing have taken in order.

In web-based learning, there are many restrictions for adopting the four values of E-learning 2.0, that is, participation, cooperation, creation, and sharing as in traditional classrooms. In the traditional classroom, the role of teachers is a knowledge deliverer and that of students is a passive recipient. In Second Life, both teachers and students can co-create a learning environment. In addition, e-learning can be implemented with management system by simple scripting in Second Life.

E-learning has been trying to secure efficiencies in digital sources and on cost-effectiveness of developed courseware. In reality, the interaction which hyperlink, drag and drop, and click can bring out in e-learning has been extremely limited. The interaction was not exuberant enough to draw learner's active participation and cooperation. Accordingly, e-learning designer's important task was to encourage learner's participation and maintain elevated motivation to learn. E-learning, in spite of efforts of educators, designers, and developers, is an alternative to traditional classroom when required condition is not met in the classroom. We had no choice but accept it as an aid to the traditional classroom teaching for time convenience and impersonal way of communication in a web-prevalent society. Thus, many teachers and students found e-learning attractive and efficient.

Several traits of Second Life we discussed includes 3D visioning, cooperative knowledge construction, realistic ways of communication, social networking, inhabitant's creative activities, openness, and easy scripting. These traits all together support new learning paradigm in on-line education. Especially, three dimensional vision and avatar in Second Life enhances player's sense of being present and control, leading to a high participation. Learning in Second Life is not simply an aid to classroom teaching, but it is new learning for social skills which traditional teaching cannot achieve, collective intelligence,

value sharing, and reaching affective domains of instructional objectives. It provides students with enhanced and expanded learning opportunities. It overcomes timing inefficiencies of traditional instruction and limited communication of e-learning. It can further reflect high quality of social experiences and interaction. In this sense, Second Life can be a second classroom for students in addition to their real classroom.

4.2. Suggestions

Second Life provided us with a blank-second classroom. Educators need to decorate the classroom with our imagination to build an ideal environment for teaching and learning. To accomplish this, we suggest the followings,

First, Second Life for learning is currently implemented in many classes and institutes. Their uses of Second Life need to be documented and shared in order to develop effective use of Second Life in learning.

Second, there is a need for developing guidelines and principles for integrating real-time instruction with e-learning.

Third, Second Life needs to be integrated with other technologies such as Wikipedia, blogs to enhance student learning.

Fourth, to maximize the use of Second Life in learning, the design and implementation of a learning management system in Second Life is necessary.

Second Life provides more powerful context than real situation. For Second Life to become a more advanced learning environment, designing learning based on context is required.

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- [2] Downes, S. (2005). E-learning 2.0. *eLearn*. Retrieved September 2, 2008, from <http://www.elearnmag.org/subpage.cfm?section=articles&article=29-1>
- [3] O'Reilly, T., & Musser, J. (2006). Web 2.0 Principles and Best Practices: O'Reilly radar. Retrieved September 2, 2008, from <http://radar.oreilly.com/2006/11/web-20-principles-and-best-pra.html>
- [4] Prensky, M. (2001). *Digital Game-Based Learning*. New York: McGraw-Hill.

References

- [1] Anderson, P. (2007). What is Web 2.0? Ideas, technologies and implications for education. JISC Technology and Standards Watch. Retrieved September 2, 2008, from <http://www.jisc.ac.uk/media/documents/techwate>