Essential Characteristics of Cyberspace and Analysis of Cyber Educational Institutions

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ABSTRACT

In a circumstance that the human has a run for the space, cyberspace was created by them. Then, education in cyberspace is started, because people appreciated that as learning environment. Now, we need research about how effective an essential characteristic of the cyberspace is at the cyber institution for education. By literature review, essential characteristics of the cyberspace were analyzed. Among these characteristics, educational features were drawn. As a result, the finding is that the cyberspace has characteristics that give positive or negative effect in terms of Education. They divided into three classes; space as virtual world, for interaction, for information. And then, using these features, some cyber institutions for Education were analyzed.

Keywords: Cyberspace, Cyber Educational Institution, Virtual world

INTRODUCTION

The human beings can’t do anything without space. Recognizing the fact, they have searched the space around in order to get something for survival (Clark, 1994). But, a problem was that the physical space is limited (Hall, 1966). In a circumstance that the human has a run for the space, they found a solution. They recognized spiritual world as space and created cyberspace. And distance between human beings gets short (Kern, 1983). In addition, education in the cyberspace became to start its journey as humanity appreciated it learning environment. Now, in consequence, cyber learning has grown quantitatively. But it is questionable in regard to qualitative development, if it effectively implies the characteristics of cyberspace and meaningful discussions lack. Now, so we research on how effective an essential characteristic of the cyberspace is at the cyber institution for education.

RESEARCH METHODS & GOALS

Research has been preceded through literature review. We tried to research for essential characteristics of cyberspace fun various looks dealing with cyberspace and time. Among the critical characteristics of cyberspace, features meaningful for educational practices were selected and introduced. These selected features were applied to evaluated two cyber educational institutes in S. Korea.

ESSENTIAL CHARACTERISTICS OF CYBERSPACE

The essential characteristics of cyberspace are categorized into three classes including space as virtual world, interaction, and information. Specific features are as follows:

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Virtual world

Second life space
Cyberspace is a new domain for second life (Wertheim, 1999). It’s different physical space. A User can make electronic personality as long as they have a time and energy (Kollock, 2001), because electronic personality consists of user’s information. Based on anonymity, Individual in web can expresses his or her personality. In cyberspace, a user is able to have several electronic personalities, and acts them (Wertheim, 1999).

Reality of virtual world
A User believes that cyber personality exists and cyberspace is part of real world (Wertheim, 1999). The confidence can make activities on cyberspace fall into a state of absorption. The more a state of absorption, a boundary between of cyberspace and physical space disappears. In addition to having a role, people take part in activities on cyberspace (Hang, 2000). It makes cyberspace feel more reality.

Interaction

Social interaction and entertainment
Cyberspace is a new domain for social interaction and entertainment (Wertheim, 1999). When it’s used as private space, common value or idea makes social network. Social interactions of this kind are chatting on internet community, on-line game, and club on website, and so on. Through these activities, people throughout world have cyber social interaction (Hang, 1999; 2001).

Community for common interests
People desire space to share their idea and information for business or work (Wertheim, 1999). Website or internet network is used for this. A work or information on web is shared and utilized for everyone’s each goal.

Public space equality
Web is impartial space. There are not racial or religious or sex prejudice (Wertheim, 1999). Horizontal relationship (Hang, 1999) exists between members in cyberspace. Activities and benefits (Social communication and information, and so on) on cyberspace are open to everyone who can use it.

Destruction of public communications (negative)
People in cyberspace give loose to communicate each other. There is not a supervisor or controller. So public communication can be break and intergenerational communication gap (Jung, 2008) is able to become serious. So far, there is not a rule or a regulation about cyber communication. And anonymity makes control of communication in cyberspace impossible.

Cyber egoism (negative)
In fact, nobody can control or regulate actions on cyberspace. There is possibility of cyber egoism and irresponsible behaviors have a negative effect (Wertheim, 1999; Park 2001) on realities of life. So far, there is not a rule or a regulation about cyber communication. And nobody can punish a criminal act on web.

Information Source

Systematizing or structuralizing of information
Information of cyberspace builds up network around nodes (Buchanan, 2002). The node means what kind of information, which contents, and so on. Information on web is systematized or
structuralized around these nodes (Wertheim, 1999).

**User as a knowledge creator**

In cyberspace, anybody can be a writer or an author (Jung, 2008), and anybody can show their music or essay that they have created. Users on web make information as well as take it. A boundary between user and creator is ambiguous.

**Web resource accessibility**

Web resource is open to everyone (Wertheim, 1999). In cyberspace, information is shared and circulated free (Hang, 1999).

**Information Standardizing**

For more use, Information in cyberspace needs to be standardized (Wertheim, 1999). Currently Most of web contents are produced as standardized form. So user can apply them without converting.

**Hypertext**

World Wide Web is huge network that is connected each site as hypertext link (Jung, 2008). Through hypertext, without map of information, user can get web resource easily.

**Meta search engines**

Internet provides search engines (Jung, 2008). Web is like a huge sea. In order to surfing successfully, user needs an implement that can find information.

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**CYBER INSTITUTIONS**

**Moodle in Sejong University**

Moodle (Modular Object Oriented Dynamic Learning Environment) is learning management system for on-line learning community. In 1998, The Ph.D. candidate in Australia developed it. Now users throughout the world have expanded and operated it as open source. Moodle supports off-line classroom. Professors can manage learning activities (submission, quiz, forum, and Wiki, and so on). And web storage is offered to keep information or data about courses or students.
Korea Cyber University

In Cyberspace, students of KCU (Korea Cyber University) take a lesson and a course. Various materials are offered as web contents. Since 1997, 270,000 students take a degree from KCU. Now, throughout world, 30,000 students are studying in KCU. KCU give a mobile device to students. Using it, they can have lesson anytime and anywhere.

EVALUATION RESULTS OF TWO CYBER INSTITUTIONS

In relation to virtual world, representation of potential personality is free in both two institutions. Because nobody can see face, another appearance, displayed character, activities in Moodle and KCU website are not restrictive. And both Moodle and KCU website are being managed for leaning. Therefore performance in Moodle and KCU website feel real to students in there.

In relation to social interaction and entertainment, KCU website supports mentoring for employment or on-line clubs for students. But Moodle in Sejong University mainly back up off-line lessons. There is not activity for social interaction and entertainment. On the other hand, both Moodle and KCU website are lively used as community for common interests. And, without qualification, students can use Moodle or KCU website, as long as belong to these institutions. About destruction of public communications, both Moodle and KCU website is for learning and students have learning activities along with professor. Users try to communicate formally each other. Also, peers or professor play a role as supervisor. Nobody does damage other users in Moodle and KCU website.

In relation to systematizing or structuralizing of information, In KCU, faculty manages information in website, but in Moodle, professors do it. So management of information in Moodle is less systematical. As Knowledge creator, Students in both Moodle and KCU produce knowledge (project outcome, reports and so on) and share it with peers. About Meta search engines, Search engine is not offered in Moodle, and KCU website services search engine, but it can be used within KCU website. Both Moodle and KCU website need Meta search engines that can search information throughout web. About web resource accessibility, users in two institutions can take a resource that is serviced from the institution as well as general website (web resource accessibility is high). But common user can not use information or resource in these two institutions. Only one who belongs to these can access to web resource that is offered from these institutions (web resource accessibility is low).

CONCLUSION

By literature review, essential characteristics of cyberspace that have educational values were introduced. Cyberspace has characteristics that give positive or negative effects in terms of Education. A good point of cyberspace’s characteristics is freedom from anonymity. It makes potential competence of learners reveal. Therefore Educational outcome results from this freedom. But also anonymity has negative aspect. Freedom in cyberspace can not be controlled. A rude word or behavior in website can cause damage to other users. We should know this feature when designing educational environment in cyberspace in order to support users to live, enjoy, and learn well within cyberspace as a learning environment. Educational potentials should be intensified; negative features are kept off by designing and scaffolding cyber learning space based on full understanding of cyberspace and time.
REFERENCES


Korea Cyber University http://www.kcu.ac/

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