

Comparison of Persuasion in the Real and Virtual Learning Environment

First Author: Alireza Gharbaghi

Dept. Multimedia, Faculty of education
Islamic Azad University, South Tehran Branch
Tehran, Iran
E-mail: Alireza_Gharbaghi@Yahoo.com

Second Author: Baharoddin Ben Aris

Dept. Multimedia, Faculty of education
UTM, Johor Branch
Johor, Malaysia
E-mail: bba@utm.my

Third Author: Majid Hamdani

Dept. Multimedia, Faculty of education
Islamic Azad University, Roudehen Branch
Roudehen, Iran
E-mail: Majid_Hamdani@Yahoo.com

Abstract— Facing with two parallel worlds, i.e., real and virtual world in the learning environments (LEs) can be an opportunity for reaching educational goals if properly recognized and used them. Persuasion as a main factor for efficiency LEs is so important. Language, communication and physical learning space are three keys to reach objectives in the real LEs. Against these keys there are three roles for computing produce include computer as tool, as media and as social actors according to Captology theory that providing possibility to persuasion in the virtual LEs. In this paper, use of persuasion have been discussed and compared in the real and virtual LEs.

Keywords- persuasion; real learning environment; virtual learning environment; Captology

I. INTRODUCTION

Throughout history, human always have had a real world and a virtual world in their faiths and imaginations. In the recent decades especially after appearance of computer that followed with internet, the virtual world is stronger and tangible than previous. Nowadays, websites, social networks, etc. created a new world parallel to the real world that this new world is an arena for competition versus the real world. Of course, the virtual world could help the real world; one of the domains that could help is learning environments (LEs). This domain is so important for official and unofficial educations. LEs have different aspects that one of them is persuasion that has been an effective factor in the teaching and learning situations. However, employing this technique has differences in these two worlds. The real world by especial features that is full of emotion, interaction, verbal skills, etc. and for long time has been mastered on LEs. Moreover, seems that teachers have been dominated on these methods. After appearing virtual LEs, the situation had changed because in new condition, there was a need to examine carefully the computer based LEs. For achieving this goal and similar goals, a precise definition and appropriate cognition is needed. Moreover,

currently cognitions have been used in these areas, were incomplete in addressing the wide range of cognitive and pedagogical issues. Also, there is a lost ring in this chain that its name is "Persuasion". This lost ring is a link between users and LEs. In the recent years from 2003, Captology theory came for helping to solve this problem. Captology is an acronym based on the phrase "computer as persuasive technology". Briefly stated, Fogg (2003) defined Captology with a structure that it "focuses on the design, research, and analysis of interactive computing products created for the purpose of changing people's attitudes or behaviors"[1]. On the other hand, there are studies that show the effects of persuasion roles on teaching and learning process such as Alexander and her colleagues proposed teaching as persuasion as a guiding metaphor for conceptual change pedagogy (Alexander, Fives, Buehl, & Mulhern, 2002)[2]. Moreover, Murphy's (2001) view of persuasion suggests that the teaching as persuasion metaphor would be more successful embedded in an instructional context designed to broaden teachers' epistemological worldviews[3].

In the next parts will attempted this issue will be reviewed in the various aspects for real and virtual world..

II. IMPORTANCE OF THIS REVIEW

According to evidence and reports, LEs have been in a transition stage. It means, although schools, universities and other LEs have used virtual world for teaching and learning, they are following traditional methods. Seems teachers and programmers are confused between virtual and real world. No doubt, that lack of full understanding of these two learning environments' applications is one strong cause of this confusion. Hence, this paper has tried to provide a clear definition and prepare bright route for using of real and virtual environments in the LEs.

III. DEFINING PERSUASION

Persuasion is an effective factor in the LEs. Awareness of persuasion principles by teachers can be used to increase efficiency and preparing an effective condition for learning via students. Nevertheless, to achieve the predetermined goals need to a complete and appropriate definition. Although scholars, psychologists and philosophers have been reviewed persuasion for more than twenty centuries, not everyone agrees on a single definition of persuasion and what is the term really means. For example, Reardon defines it as "the activity of attempting to change the behavior of at least one person through symbolic interaction" (Reardon 1991, p. 3)[4]. Some scholars believed persuasion more broadly, as Zimbardo and Leippe (1991) extend persuasion to encompass changing a person's "behaviors, feelings, or thoughts about an issue, object or action" (Zimbardo and Leippe 1991, p. 2)[5]. Other scholars expanded persuasion beyond the idea of "changing"; persuasion includes shaping and reinforcing (Stiff 1994)[6]. In addition to differences in definition, there is another problem in this matter; it comes from mistakes in the usage of word. It means, sometimes have been used other behaviors and actions rather than persuasion. To crystallize the issue it is necessary to say, a full cognitive and correct image to usage of words such as coercion, deception etc. prevents mistake and confusion in the works or study. For example, coercion implies force; while it may change behavior, it is not the same as persuasion, which implies voluntary change in behavior and attitude or both. The line between persuasion and coercion can be a fine one that someone say persuasion is a subtly coercive [1]. Similarly, persuasion and deception may be confused. For example, while such ads might change what people think and do, they work through deception, not persuasion. It should note that interring to this arena need to full cognitive of all aspects and perspectives of persuasion especially in the LEs

IV. PERSUASION IN THE REAL LEARNING ENVIRONMENTS

Using of language, communication and physical learning space are three factors are mentioned in this paper presents for real LEs. First of all, the teachers' verbal patterns that use them to persuade students are so important. When we controlled the messages which sent to learner in fact is controlled the ways that learner feel and think about messages and be controlled their attitude and behavior or both. Carefully chosen words and messages can actively create the mental images and mood needed in learner to move them away from noncompliance and oppositional behavior and closer to do what we asked them to do. When learner is persuaded to behave, is controlled their behavior through language, using influence rather than power and domination. For second, it is necessary to say that effective persuasive means that we are able to communicate by using just the right words to get the predetermined outcome. Persuasive contains specific verbal patterns and ways of talking to learner to shift the emotional state of them, so that we influence and promote positive behavioral change. The third and last key in the LEs is physical learning space,

which can be helpful factor to achieve learning objectives. Using this key need especial plan and subtly design because it has a hidden role in the real LEs. It means, providing a useful learning space has principles to persuade learner that some of them are light, color, temperature, boards, comments, layout, etc. Totally, using these three keys is reasons to increase persuasion and followed it efficiency in the real LEs that them came from teacher role, method role and condition role. In addition, they will be compared with similar factors in the virtual LEs.

V. PERSUASION IN THE VIRTUAL LEARNING ENVIRONMENTS

In the recent years, it seems that persuasion in the virtual world could introduce itself to users especially to teachers and students. This event can be seen most clearly, because of using very much and in some cases the addictive use of this technology by users. In this condition appeared new methods that one of them was Captology. This theory defined by Fogg (2003): "persuasion as an attempt to change attitudes or behaviors or both (without using coercion or deception)"[1]. This is a wide definition, and one on which many persuasion professionals, such as academic researchers, marketers, and clinical psychologists, would agree. It also fits with how the word is used in everyday life. In summary, this theory has a framework that called "functional triad" for thinking about the roles that computing produces be played, from the perspective of the user. In its simplest form, the functional third shows that interactive technologies can operate in three basic ways, computer: as tools, as media, and as social actors, see Figure1.

A. Computer as Tools

Computers as tools have come a long way in just over 50 years. The goals of computing products are to make easier activities or more efficient to do. Although in earlier steps computer used for two basic functions-sorting data and performing calculation- now this tool has many usage in our life because it comes for help human.

B. Computer as Media

Computers can play roles like a medium. In the recent years computer as processing power has increased and networking has become common. There are two categories of computer as media: symbolic and sensory. Computers function as symbolic media when they use symbols to convey information (for example, texts, graphics, charts and icons). They function as sensory media when they provide information- audio, video and even smell. Virtual reality and virtual environments fit into this category, as do a range of other computer simulations. When a condition is simulated, it is more effective for changing people's attitude and behavior or both. In the other words, computers can shape attitudes and behavior by providing simulated experience.

C. Computer as Social Actor

Fogg (2003) believes that the fact that users respond socially to computer products has significant implications for persuasion. It opens the door for computers to apply a host of persuasion dynamics that collectively described as social influence- the type of influence that arises for social situations.

Totally, awareness of detailed, principles, and methods of persuasive technology are important factor to achieve the goals in the virtual LEs [To more information about persuasive technology refer to "persuasive technology" Fogg (2003)]

VI. DISCUSSION

This part begin with a question: Why persuasion is important in the virtual and real LEs? This paper is intended to find an appropriate answer for this question. In the first step for answering this question, it should be specified in order, our consideration is effectiveness for the users or providers. In some cases, teachers or programmers are satisfied but students or users are not. If the cause of appearance of LEs is reminded, it is so clear that whom satisfaction are important? Actually, teachers and programmers' satisfaction should be directed to users and students consent based on predetermine educational goals. Persuasion is one of the most important factors to attract students or users in the real and virtual LEs. After attraction, can be hoped for reaching objectives. In spite of similarities in the goals, LEs have differences in act. As was said, three keys and factors had been recognized in the real LEs include language, communication and physical learning space. According to previous studies like Ng & Bradac (1993)[7], Smith & Shaver (1995)[8], Holtgraves (2001)[9] and Areni (2003)[10] using of language during relationship and teaching is a powerful key that use to translate information. In addition, using of teamwork capacity and relationship within groups that language has important role to them. According to Blasio & Milani (2008)[11] investigation, results show that there were fewer opinion changes in the chat condition (subsequent to the introduction of the persuasive message) than in the face-to-face condition. Moreover, learning spaces have a hidden role that could not be ignored. Educational researchers (eg, Biggs 1999[12], Ramsden 1992[13]) have identified qualitatively different student approaches to learn that can be used to characterize the context-dependent ways in which students engage with learning tasks and their learning environment. This key is less available to teachers in comparison to other factors, but they can be tailored to the need to change shortly such as change class layout or environment, change position, and others. Thus these keys are available to persuasion and motivation by real LEs regardless educational subjects. On the other hand, there are three principles for virtual LEs i.e. computers: as tools, as media, and as social actors based on Captology theory. Persuasive technology forced to use of virtual world properties to motivate and persuade users. In

the first principle, computer produces make activities easier or efficient to do. This role of computing produces as tools and is a method to doing other function in virtual LEs. It can help to achieve goals with reducing the complexity of work, design the virtual LEs, make a friendly condition, and take awards and so on. This part and another principle i.e. computer as media are strong causes that can simulated real or imaginary LEs. This is ability or it is better to say a difference between real and virtual world. Findings of the study indicate that different persuasion strategies are emphasized in computer-mediated communication (CMC) than in face to face communication, implying that need to persuade is an important factor in choosing effective media for a given communication (Vance Wilson, 2003[14]). In the virtual world some conditions can be provided that in the real world more difficult are achieved. In addition, in this role computers can simulate effects that obtained changing in the normal conditions. In addition, activities in the virtual world can be kept and re-start. Now, computers as social actors; this role create relationship between users and computers but it has different conditions in comparison with real world. Although reactions in the real world are emotionally, there are hidden benefits in the computers' social actor role. Virtual world by using five kinds of social cues can influence and persuade users that they are include physical cue, psychological cue, influencing through language, social dynamics and adopting social roles. Totally, the psychology of persuasion has been had incredible results for people who influence to others. For this target, awareness of the power, capability and persuasion differences in real and virtual worlds can making the best decision for persuasion. The ability to persuasive is a skill that can be used in all aspects of teaching career.

VII. CONCLUSION

Human's needs have been a cause for appearing new methods, technologies and devices. In addition, it is necessary that be learned proper using of these innovations. Learning environments as one of the main parts of society have been involved them. Appearing new methods or technology is not cause for forgetting previous because they have had capabilities to help us. In this study has been tried to comparison persuasion in the real and virtual LEs. As a result, despite similarities there are differences between them, especially in the Strengths. In the real LEs, the strong point is on emotion relationship and this point is on simulation in the virtual LEs. So, should be attention that cognition of all aspects of these strengths can be beneficial and useful for teachers and programmers.

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Figure 1. The functional triad: Computers in persuasive roles (Fogg 2003, p.25).