

## Chapter 12

# Engaging Learners in the Digital Age through Self-Discovery Learning

**Ramesh C Sharma**

*University of Guyana, Guyana*

**Paul Kawachi**

*Open University of China, China*

### ABSTRACT

*The development of social networking, Web 2.0, and virtual worlds has opened new avenues for online collaborative communication. For learners in this digital age, there is a need to devise new models and metaphors to examine the learner and teacher interactions with technologies and for models which can help in designing effective and innovative learning interventions. In this chapter we examine some models and discuss how learners can be guided to become engaged in self-discovery learning.*

### INTRODUCTION

One of the hallmarks of the digital age is online education or e-learning. Almost all types of educational settings have employed e-learning, some with low-cost technology and others with expensive technology. The learning experiences are acquired by learners with the help of ICT (information and communication technologies) tools which develop, deliver, support and evalu-

ate learning content. Not only at the institutional level, at the individual level also, e-learning (in one form or another) is being used. Institutions have adopted the ICT mechanisms either as solitary or complementary mode for offering educational services to the learners. Mishra (2001) called it a “new generation of distance education” (p.2) as it comprises the best of both mediums: asynchronous (print-based) and synchronous (tele-learning). There are different terms we use to describe e-learning, like web-based learning, Internet-based learning, virtual education, blended learning,

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online learning etc. Whatever the name we give to it, it offers asynchronous and synchronous forms of interactions between the teachers and learners. Becta (2008) and the European Commission (2008) in their reports also predicted a seamless interchange of classroom interactions and collaborations with ubiquitous and ambient technologies. If we look at the developments in technologies (Pea & Wallis, cited in Borgman et al. 2008:13) whereby simple face-to-face instruction was supported with radio, television and telephone and then networked computers to the use of web 2.0 and social networking in education, Pea & Wallis report, “We can now interact at a distance, accessing complex and useful resources in ways unimaginable in early eras.” These technologies have altered the ways the students were engaged in learning either by the teacher or by the student alone.

The 2011 Horizon Report (Johnson et al. 2011) identified the highest ranking challenge as digital media literacy which continues to rise in importance as a key skill in every discipline and profession (p.3). It recognizes that the Internet technologies have increasingly facilitated interactions and collaboration in such a way that teams now work together to address the issues which are not easy for a single worker to resolve alone. There is a great surge in user-generated content, new ideas, information and opinions are coming forward on all possible themes that we need to sift through a mountain of information on a weekly or daily basis (p.4). Thus there is a change in the way we communicate, access information, collaborate and socialise with peers and colleagues. Thus dynamic learning environments have been developed which engage the learners for learning through self-discovery. An examination of Web 2.0 technologies will reveal that they have great pedagogic value (Conole, 2009a) for example, Web 2.0 technologies have shifted the focus from individual to social, blogging is good for reflective thinking, Virtual or 3D immersive world software or gaming is good for experiential learning.

However, studies also indicate a gap between the potential these technologies have and the real utility or practical value from the use of these technologies (Conole, 2009b; Conole & Culver, 2009). Oblinger & Oblinger (2005) also reported a lack of understanding among the learners on how to use technologies for academic purposes which was later found to be still valid by other research by Kennedy et al. (2008).

## **ENGAGING LEARNERS**

As explained above, e-learning courses are everywhere and on all possible subject areas. To help students take full advantage of these e-learning courses, we use all sorts of media-mix: quizzes, video, tests, links to extra resources etc. Hazel Associates (2005) projected that by 2015 the online higher education market would exceed \$69 billion and found it to be the fastest growing sub-sector in global education market. In an urge to be technologically advanced (some with proper thinking and some without any thought) educational institutions and teaching community adopted online education in its rudimentary form where the lecture notes and presentations were uploaded onto institutional servers. These measures failed to engage students as reported by Weigel (2000) that these lacked any pedagogical considerations, rather being “little more than an exercise of posting on the Internet an enhances syllabus that includes lecture content, reading assignments and practice tests along with using discussion groups and e-mails to respond to students questions.” This disappointment was also echoed by Carr-Chellman and Duchastel (2000) related to effectiveness of web courses:

*It is also evident that many online courses lack basic design consideration and that the web is simply being used as a medium for delivery of instructions created within another framework. Such transposition from one medium to another*

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