Chapter 6
Internet Technologies and Online Learning

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ABSTRACT

This study analyzes whether or not active learning can be taught online. There are many definitions of
learning, all reflecting the academic specialties from which each discipline is conducted: It is the pro-
cess and the sum total of acquiring knowledge, skills, attitudes, values, beliefs, and emotions. However,
active online learning is also defined as methods by which learners actively participate in the learning
process (e.g., online discussion groups, problem-solving, experimentation, and the like). Many Web 2.0
platforms help promote active as differentiated from passive learning in which learners are unparticipa-
tory learners. Among theoretical presuppositions such as informal learning, contiguity, reinforcement,
repetition, social-cultural principles and andragogy guide the assumption that active learning can take
place online. It is widely believed that active learning may lead to the creation of new knowledge and
new skills needed by learners. Because of this belief in active learning, both educators and practitioners
have been avidly promoting active online learning since Web 2.0 Technologies were used for online
teaching and learning.

INTRODUCTION

Not all scholars agree at how knowledge is acquired or even what it is for. After musing this notion,
Noam Chomsky, the world-renowned linguist, intellectual and political activist posed a question for the
21st Century, Education is for whom and for what? Education was first designed for the responsible men
and then others—the spectators. The “responsible” ones were the ones making key decisions, these elites
needed to manufacture and engineer the consent of the people, so the rabble would stay at their feet and
do the bidding of the decision makers (Chomsky, 2015).

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What is education for? Dewy said, “It is immoral to cause children to study just for study alone.” Bruce Albert took the enlightenment view of education and alleged it should be a string strung with beads of the joy of discovery that is filled with unending breaths of exploration. Immanuel Kant said, “The goal of education is the pursuit of knowledge for knowledge’s sake, which leads to the process of self-cultivation” (Taylor, 2010, p. 22). The point of education should not just inculcate a body of knowledge, but to develop capabilities: the basic ones of literacy and numeracy as well as the capability to act responsibly towards others, to take initiative and to work creatively and collaboratively.

The history of Western education stems from the medieval period. Back then, education was a Trivium, which represented a systematic method of critical thinking which was to derive factual certainty from information perceived from the five senses—sight, sound, taste, feel, and smell. In the medieval university, the Trivium was the lower division of the seven liberal arts, being comprised of grammar, logic, and rhetoric. Back then the ultimate value to education was to arrive at truth not research. As time ticked on, the history of higher education evolved with the needs of an expanding social infrastructure. Somewhere around 1636-1850, early New England settlers which included alumni from the royally chartered Cambridge and Oxford needed a place of learning for their clergy. The idea was to transmit American values such as independence, property ownership and economic development. Privileged White men needed to understand documents such as those found in the Federalist’s Papers, therefore education was valued as a means to an end, to develop leaders in the church, state and business. Education taught these men business civics and how to be a moral person, and it was the great equalizer for men. The saying in 1848, was, “You should be ashamed to die unless you have given something back to society” (Barsky, 1998).

Knowles, Holton and Swanson (1998, 2005, 2011) defined education and learning as emphasizing the person in who change occurs or is expected to occur. They defined education as emphasizing the change agent who influences changes in others. Other scholars (Boyd et al., 1980) consider learning as the act or process by which behavioral change, knowledge, skills, and attitudes are acquired. Gagne (1985) defined learning as a process that leads to a change in a learner’s disposition and capabilities that can be reflected in behavior.

Likewise the German social theorist, Habermas (1971) suggested that human beings have different interests or needs in life: to control their environment, to get along with others, and to be free from oppression and constraints. Each of those elements led to the acquisition of knowledge in order to satisfy human need. Habermas further indicated that human beings render learning through instrumental knowledge, practical knowledge and emancipatory knowledge. Instrumental knowledge allows us to manipulate and control the environment, predict observable physical and social events, and take appropriate actions via empirical research or teacher directed education.

According to Dewey (1933), learners during his day were faced with learning problems and these learning problems perplex and change the mind so that it made belief uncertain. It was this perplexity that led to reflective thinking, and hence learning. Without reflective thinking, learning may not occur.

Twenty-five centuries ago, Confucius viewed learning as focusing on the cultivation of the inner experience, both as a way of self-knowledge and as a method of true communion with the other (Tu, 1979, p. 103). To Confucius, the goal of learning was to free one completely from four things: arbitrariness of opinion, dogmatism, obstinacy, and egotism (Wang & King, 2006, 2007). Further, Confucius thought of learning as emphasizing meditation to control oneself. Upon the basis of Confucius’s thinking regarding silent reflection, scholars have made the distinction between active learning and passive learning.