

# Philosophy of Instructional Technology

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Throughout our cognitive development from novice to more experienced learners, information is continuously imbedded into our minds using a range of methods. However, due to the fact that the world is a conglomerate of various learning styles, the methods used to foster learning do not always follow a constant or single process (Gardner, 2004). Echoing Gardner's (2004) multiple intelligence theory as the foundation for my instructional viewpoint, I feel that learning should provide the learners with the capability to process information in various ways in order to formulate meaning. It is during this process that the newly formed information shapes into knowledge that is available for application to existing events or available for reflective application in future events.

As a continuous learner of instructional techniques, I aspire to instruct using methods where "the unknow[n] can come know[n]" (Shulman, 1987, p.7) through active teaching with the purpose of cultivating an environment for active learning for the learner (Fenstermacher, 1993). This action oriented teaching style is more than a knowledge transmission (or regurgitation) in which I distribute the content, but instead a progression wherein the learner stores, examines and processed information into meaningful knowledge. It is through this learning experience that intertwines the short and long term memory of an activity/event through the action of remembering past actions and interpreting new actions to make meaning (Mezirow, 1991). In other words, I like to think of learning as a bank transaction in which the instructor deposits conceptual information into receptive minds of learners, which allows the learner to transfer the information into meaningful knowledge available for withdrawals for use in practical application. With the understanding that a receptive state of mind is not a common occurrence of many learners, I feel that effective communication aides in changing this learning orientation. Using John Dewey's "reflective approach" (as cited in Cheesebro, O'Connor, & Rios, 2007, p.136; Mezirow, 1991, p. 7), fostering an environment where reasoning and lived experiences are used as tools to develop conceptual understanding as depicted in the Figure 1.

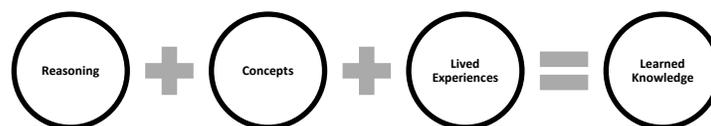


Figure 1

Although learning takes place while the learner is sometimes unaware through lived experiences, it can be unintentionally jeopardized in unfamiliar milieus (i.e. asynchronous environments and the use of other instructional technology mechanisms) which can hinder the learning process. Technological changes of this nature are difficult for many learners to grasp. Therefore providing methods to bridge the gap of turning information into knowledge with technology requires a unique approach (Hirumi, 2002; Mezirow, 1991). Such approach should be cognizant of the limitations of the technological skill set of many learners. Using a balanced

approach to support learning through technology, I feel that providing learners with various learning mechanisms fosters unrestricted learning environments that are conducive for comprehensive learning (Krathwohl, 2002).

The evolution of technology for instructional purposes aides in migrating information from short to long term memory (Mezirow, 1991) by allowing more extensive access to information beyond synchronous environments. In order to advance the learning curve development of long term memory using Jerome Bruner's (2004) constructivist approach, I prefer to use technology tools that allow for practical hands-on and problem based activities to increase the learner's ability to retain and process information into useful knowledge. For starters, the ability to transition knowledge from short to long term memory requires a sense of self awareness as an instructor. My lived experiences as a researcher and instructor allow me to formulate narrative style instructions based on practical and conceptual knowledge (Bruner, 2004; Fenstermacher, 1993; Mezirow, 1991) in order for learners to reflect on their personal and professional experiences which helps in interpreting information from various cultural perspectives (Mezirow, 1991). According to Freeman (2002) and Krathwohl (2002), learners use their existing understanding of an event/problem/situation in order to interpret new content. This allows learners to make modification and reconstruct "new ideas on the basis of what they already know and believe" (Freeman, 2002, p. 6).

From a philosophical viewpoint, there are multiple solutions and approaches to one problem so as a leader (i.e. instructor, facilitator, coach, or manager) the techniques used to achieve the desired outcome should take into consideration the learners involved and what impact the end solution(s) has on learning and knowledge building. As I evolve as a researcher and instructor, using a multi-layered consciousness approach applicable to various cultures will further develop my pedagogical knowledge and allow me to serve as a change agent for a broader learner population (Mezirow, 1991).

During my pedagogical interactions with learners, I've observed two events taking place: 1) instructional dialect from the instructor to the learner(s) and 2) instructional interpretation from the learner perspective. Recognizing the variation of what is said and what is heard leaves room for ambiguity, which causes a communication barrier (Cheesebro, O'Connor, & Rios, 2007) and reduces trust of the instructor as an effective communicator. With that said, I feel that incorporating technology that engages the visual senses, such as through the use of instructional demonstrations followed by problem-based activities (Bruner, 2004) provides a greater opportunity of knowledge retention for the learner and being a change agent for the use of more instructional technologies.

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