

## Incorporating Deep Learning Strategies into Distance Education Courses

I chose the topic of incorporating deep learning strategies into distance education courses because I am currently interested in developing effective online courses that lead to higher levels of retention. Because I have had experiences with online courses as a student, I am currently skeptical of the effectiveness of distance education courses and wonder about the retention levels.

To describe my overall experience with online courses, I remember it to be positive because there was plenty of online interaction with other students. The online discussions were established by the instructor who posed specific type of questions based on the assigned readings. Then, it was required for the students to respond to the discussion questions and to each other's responses. When responding to the discussion questions, I noticed that most of students basically copied and pasted information directly from the reading materials. I also noticed that the only time students would respond to each other's posts was when they agreed with each other.

After completing the online courses, I realized that I did not have a thorough understanding of the subject matter; I only remembered the basics. Apparently, I did not retain the information that was taught. The goal of any type of instruction (face to face or distance education) is for the student to retain information that was taught and for him/her to apply the newly learned

information in other settings. So, what went wrong with the online courses that I completed? How can instruction result in higher retention levels?

Deep learning strategies that are incorporated into distance education courses can be a way to increase retention levels. According to an article by (Du et al, p. 208), “deep learning leads to understanding and long term retention of information through the critical analysis of new ideas”. Therefore, during instruction, the process of critical analysis is required. In addition, deep learning strategies also rely on constructivist approach to learning where “new learning is combined with existing knowledge for problem solving in unfamiliar contexts” (Du et al, p. 208). Therefore, it is important for instructional designers to apply a constructivist approach and to implement deep learning strategies, such as critical analysis, when designing distance education courses.

How do instructional designers implement strategies that result in deep learning or require critical analysis? The first strategy could be to implement specific types of online discussions requiring the use critical analysis. According to an article by (Du et al. p. 213), there are three types of discussion questions that could be implemented in an online environment. They are: Flexible peer discussion, structured topic discussion, and collaborative task discussion.

In flexible peer discussions, “students are presented with two questions each week and must respond to the questions presented, and are further required to critique the response of one other peer” (Du et al. p. 213). This strategy is similar to the online experience that I had as a student, however, the main difference is that in this format, the student is required to critique the

responses of other students. By critiquing the responses of other students, the student is analyzing the information and offering alternative viewpoints, thus resulting in the use of critical analysis.

In structured topic discussions, the instructor develops questions for the students to analyze and to clarify. The students must go beyond answering the questions: They are required to dissect the questions posed by the instructor to gain a further understanding of what is being asked. The process of analyzing, clarifying, and dissecting the questions will ultimately lead the students into formulating their own research topics for further understanding (Du et al, p. 214). In this format, the students are participating in more of a dynamic online discussion session.

In collaborative task discussions, the instructor does not pose questions. This is a strategy that is commonly used when students are assigned to an online team project and have to come up with a specific and uniform team topic. "Each member (student) proposes a topic and must negotiate online to determine which topic the group will agree on for the final product" (Du et al. p. 214-215). The objective of this type of online discussion is for the students to develop ideas, argue their viewpoints, and then come to a consensus on a topic.

Flexible, structured, and collaborative on line discussions can be used to incorporate deep learning or critical analysis.

There is another strategy that can be used in distance education that incorporates deep learning. It is called the jigsaw learning technique. Essentially, the jigsaw learning technique is a strategy that requires the student to research a

specific topic and then teach their peers on that topic (Blocher, p. 272). This strategy gives the student an opportunity to analyze information when researching a topic and then use critical thinking to devise strategies to 'teach' the newly learned information to his/her peers.

Deep learning strategies result in higher retention levels. Therefore, distance education courses that incorporate deep learning strategies would be more effective. Flexible peer discussions, structured topic discussions, and collaborative task discussions are all effective in promoting deep learning in an online environment. All three types of online discussions create an opportunity for the student to interact with his/her peers, come up with ideas or concepts, and to challenge the status quo. The jigsaw learning technique is another strategy that engages the learner and allows for critical analysis by transforming the student into a teacher role. All of these strategies described in this paper will assist instructional designers in developing online courses that are more effective and that lead to higher retention levels.

### Work Cited

Blocher, M. J. (September 2005). Increasing learner interaction: using jigsaw online. *Educational Media International*. Vol 42, issue 3, p. 269-278.

Du, J., Havard, B., & Li, H. (September 2005). Dynamic online discussions; task oriented interaction for deep learning. *Educational Media International*. Vol. 42, issue 3, p. 207-218.