THEORETICAL UNDERSTANDING by reading, synthesizing, and evaluating educational theory and research in their field and applying research findings to their practice in diverse classroom settings

Summary of Assignment: Position Paper

The position paper assignment dictated that the student select a controversial topic in science education, research the arguments on all sides of the argument, and then take and defend a position. For this assignment, I chose to examine the dichotomy between discovery learning and traditional instruction.

Connection to student learning objective (SLO): Theoretical Understanding

In order to successfully complete this paper, I needed to not only understand my position on the topic, but I needed to have a firm understanding of that of the opposing side. If I wanted to make a case for my position on the argument, I needed to be able to anticipate and rebut the evidence presented by the other side.

Research played a large role in both the development of arguments as well as the decision as to which side to support. The existing research tended to be one sided, with each article supporting the side that corresponds with their research findings. However, the fact that there were conflicting studies available further complicated the issue. The validity of each of these studies needed to be analyzed before the conclusions could be evaluated.
Person Implications of Assignment within the SLO

While this assignment allowed me to develop an opinion in favor of discovery learning, analysis of the published studies provided me with more insight as to the classroom applications of both discovery learning and traditional instruction. After some trial and error using both of the methods in my classroom, I managed to find a balance, or a happy medium between the two.

Guided inquiry is the process in which the teacher provides some instruction, either in the form of a small amount of traditional instruction or specific directions for project completion. I found that this combination was both practical and effective in my classroom setting. This was influenced primarily by the size of my classes. Traditional instruction, in large doses, simply does not hold the attention of 30+ middle school students for very long. Additionally, unguided, pure inquiry takes some time, and results in the need for excessive individual instruction. Both of these constraints are not always practical in the average classroom.

This project was also beneficial to the development of my action research project. My project was centered on the relationship between the two types of instruction. Completing the position paper allowed me to conduct some preliminary research for my project. It also gave me the opportunity to experiment with this instruction before conducting my actual research.