Student Learning Objective #2: Theoretical Understanding

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**Student Learning Objective (SLO):** 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.

**Description of assignment:** This assignment was a current event assigned during SED 600 in which we were required to write a current event critiquing research in science education in the area of literacy. This class was in my first semester as a graduate student.

**Connection to SLO:** The assignment required that I read a research paper in which the authors studied scientific literacy. In order to complete the assignment I also had to analyze and evaluate the research performed by the authors as it related to “As Short Guide to Action Research” by Andrew Johnson.

**Reflection on learning and teaching:** Since this assignment was one of the first assignments that I completed upon entering as a graduate student, I was new at analyzing research performed in an educational setting. This assignment helped me begin to understand what to look for when reading research articles based in the field of education. Although I knew what I was supposed to be looking for in good research, it was great practice for me to have to look into a real research article and find the “good” and the “bad” parts.

I briefly summarized the article written by Brill, Falk, and Yarden (2004) and then analyzed the study for its strengths and weakness. In this manner I was evaluating the study in regards to the way data was collected and whether their methods were effective and allowed them to make accurate claims. This was important in me preparing for my own action research project. When I was beginning to do the background research for my own study, the experienced I gain from reading this study as well as
others helped to have a discerning eye for “good” research as well as “bad” research. This directly affected the research articles that I chose for my own literature review which in turn helped me to formulate the methodology of my own study.

Another specific way in which completing this assignment and others like it was directly related to the research performed by the authors. As a teacher of an Advanced Placement science class, I have wanted to try to incorporate the reading of some simple scientific articles into my curriculum in order to help tie the material being covered in class to current research in a related field. The study provided me with ways to properly scaffold this process so that in the future I my students will be exposed to research in chemistry.