SLO V. Critical Thinking

Students will apply critical thinking and scientific methods of thinking (Including logical and empirical reasoning) to issues regarding children well-being.

As future Child Development professionals, we the students, should be able to think critically and be able to apply our knowledge to all situations we encounter in our field. Students should not take information at face value for what it is, but first question it logically, and determine its credibility and merit. Being able to critically think and use scientific methods of thinking when we are looking at issues about children's well-being means that we will be able evaluate the credibility of the source, identify the main issues, recognized personal bias, and communicating this information clearly and effectively. We should be able to state hypothesis or purpose solutions or plans based on empirical facts or theories. We should be able to use formal or informal methods to gather information and formulate our results. Lastly, we should be able to provide information in a clear and logical manner that supports our hypothesis or plan, or lead us to a new one.

To have critical thinking skills one must be able to identify the main issues regarding a topic and be able to ask questions about it. One must be able to evaluate the credibility of sources of information, while recognizing inconsistencies and contradictions within sources. One should be able to recognize one’s own biases that arise and be open to other perspectives on a topic. One should also be able to form hypotheses based on already formulated information or theories. Then they should be able to use scientific criteria to evaluate the information found and be able to make plausible consultations based on the evidence presented. Once information has been questioned, evaluated, and consultations have been made, one should be able to accuratly communicate the information to others.

When we first started attending California State University, Chico (CSU, Chico) as Child Development majors, we had little knowledge about critical thinking skills and what they entailed. Before we gained comprehension on critical thinking, we would believe professionals that gave us information without questioning it because they were the ones with more education than us. When Quinci took a course Methods of Inquiry she was able see that the information could be false or inaccurate or incomplete. However, with our many classes at CSU, Chico, we began to learn and understand what it meant to be a critical thinker and what skills and abilities a critical thinker should possess. When we took a course Methods of Inquiry we learned how to effectively search for empirical, research-based articles. We learned how to summarize the information from the empirical articles in such a way, and we were able to convey the importance of the study to others, through a written summary. We also learned how to write logical hypotheses based on past information and theories.

In this area, regarding our application of critical thinking skills to promote children’s well-being, we have struggled with critical thinking itself because even though we had the knowledge, it didn’t necessarily mean that we were able to apply it. In our previous education, teachers didn’t teach us how to critically think, instead they expected us to know how. Therefore, we were always confused on what it actually meant to critical think and how to use it. We also found that research and the skills surrounding research were the hardest for us to comprehend. We found assimilating empirical articles and being able to accurately summarize them to be a difficult task. We also found that our biggest frustrations were data collection and data analysis; this mainly included using Statistical Package for the Social Sciences (SPSS). We had a hard time understanding how to use SPSS and how to acutely relay the information we formulated into our research papers.

The best of what we have achieved in this area is being able to evaluate the credibility of the sources information from different types of sources (e.g., nonempirical and empirical). We gained the skill of evaluating sources through scientific criteria, we began to notice that a lot of the sources out there aren’t credible and most of them are based on opinion with no evidence or no support from actual research. Now that we have an understanding of this topic, we feel confident on evaluating sources and situations when we encounter them. Although, it was one of our biggest struggles, assimilating empirical articles and being able to accurately summarize the information is now a skill we all feel like we have mastered it. We don’t find empirical article to be overwhelming, as we once did. We have a great understanding for questioning information and knowing that we shouldn’t settle for information that isn’t fact based. We have achieved a greater enjoyment for statics and research because of the significance they bring to child development.

As a member of the child development profession, we can offer curriculum and information that is evident-based. We are able to do this by using our skills as a critical thinker to the environment and to the children that we work with. We have learned how to use observation to gather information and analyze the information to come up with possible solutions to problems or to target specific needs for children in the classroom. Additionally, we can offer our professional thoughts, which will help us to collaborate and communicate effectively with others professionals, families, and colleagues about information and ideas regarding children's well-being.

One assignment that we feel has documented our growth was in our Child Development Method of Inquiry class, we were asked to write a summary of an empirical article. We had to first locate an appropriate empirical article that met the requirements of discussing children and parent relations. One way to make sure it is an empirical article is to confirm that there are methods, results, and discussion sections. Once we found an empirical article that met the requirements, we had to read it extract key information to create an objective and accurate summary.

    Another assignment that documented our growth in our research and methods class, was to write a complete, research paper. We had to gather and summarize different empirical articles surrounding the topics of children anxiety and parental involvement. We then were given data that we had to analyze using SPSS to report and interpret the results of our statistical analyses. We had to organize the summaries into the beginning of our paper, in a logical manner.  Then we had to input the information from the participants who we gathered the data from in the paper. We also had to state what methods we used to gather and formulate the information. Then we had to state the results in a concise manner in a discussion format. Lastly we had to discuss the implications of the finding from the study.