

Implementation and Assessment of In-class Activities Designed to Improve Critical

Theoretical Framework

Critical thinking can be defined in terms of argument skills, cognitive processes and intellectual development. Argument skills focus on detecting and avoiding fallacious reasoning as well as analyzing deductive and inductive arguments. Cognitive processes focus on creating and testing a model based on previous knowledge, reasoning and evidence. Intellectual development focuses on the transformation of students' beliefs in regards to the variability of knowledge and truth.¹⁰ The course goal aligns well with the cognitive processes definition since students will be trained to create well-reasoned evidence-based models and representations to solve problems.

Studies have shown that it is difficult to obtain a valid assessment for critical thinking skills.^{11,12} The separation of critical thinking skills from simple problem solving and knowledge acquisition is not a trivial

Timeline

Summer 2016:

Submit

