

Abstract Submitted
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Where do Students Go Wrong in Applying the Scientific Method?¹ LOUIS RUBBO, CHRISTOPHER MOORE, Coastal Carolina University — Non-science majors completing a liberal arts degree are frequently required to take a science course. Ideally with the completion of a required science course, liberal arts students should demonstrate an improved capability in the application of the scientific method. In previous work we have demonstrated that this is possible if explicit instruction is spent on the development of scientific reasoning skills. However, even with explicit instruction, students still struggle to apply the scientific process. Counter to our expectations, the difficulty is not isolated to a single issue such as stating a testable hypothesis, designing an experiment, or arriving at a supported conclusion. Instead students appear to struggle with every step in the process. This talk summarizes our work looking at and identifying where students struggle in the application of the scientific method.

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