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Jeremy Case* (jrcase@taylor.edu). *The problem of transfer: Explicitly teaching critical thinking in a bridge course.* Preliminary report.

How effective is the explicit instruction of critical thinking skills in a bridge course to motivate students to learn mathematics and to transfer these thinking skills beyond mathematics? In order to overcome some students' aversion to proof, the presenter attempted to connect the process of proving mathematical statements with critical thinking in general. He received training to explicitly teach critical thinking and guidance to integrate mathematical thinking with critical thinking. As part of the training, a researcher observed and evaluated the presenter's teaching of critical thinking skills during every class period in an introduction to proofs course. This presentation will provide results from the daily observations, from the pretests and posttests measuring students' growth in individual critical thinking skills, and from student interviews. While the quantitative results are encouraging, the presenter will share personal insights regarding the effects of having an observer in the classroom and the challenges of motivation and transfer. (Received September 16, 2013)