Scientific Inquiry: A Problem-Based Approach for Improving Teaching and Learning

PETER SHELDON, PEGGY SCHIMMOELLER, TATIANA TOTEVA, Randolph College — We describe a research project that had two goals: (1) to design and develop a content specific science inquiry institute to improve teachers’ instructional practices in the sciences and thus students’ achievement in science; and (2) to investigate students’ perception of scientists as a measure of their attitude toward science, and to see whether an inquiry science curriculum can improve attitudes. We report that certain stereotypical images of scientists are prevalent among students. Teacher participants increased content knowledge and familiarity with using inquiry and hands-on methods in the classroom.