Broadening Middle-School Student Images of Science and Scientists

Angela Zabawa,[1,2,3] David Schmitter,[1,4] Gayle A. Buck,[2] and D.L. Leslie-Pelecky[1,4]

1. Department of Physics and Astronomy, University of Nebraska, Lincoln, NE, USA.
2. Department of Teaching, Learning and Teacher Education, University of Nebraska, Lincoln, NE, USA.
3. Lincoln Public Schools, Lincoln, NE, USA
4. Center for Materials Research & Analysis, University of Nebraska, Lincoln, NE, USA.

ABSTRACT

One factor influencing K-12 students' decisions to study science is their perceptions of science and scientists. The 'mad scientist' stereotype is alive and well - and not an image most kids want to identify with. Project Fulcrum is a NSF program that teams science graduate students with middle-school teachers. The 'Image of Science and Scientists' project is designed to challenge and broaden student stereotypes. Teams base their projects on classroom specific information they gather. All the activities involved scientist visits; however, the implementation and activities surrounding the visits were tailored to specific needs. For example, students at one school wrote that "all scientists do is work", so the team had students investigate the visiting scientists' hobbies and other outside interests. Most assessments focused on comparing students and scientist characteristics to emphasize the similarities.

This work was supported by the NSF GK-12 program under DGE-0086358 and DGE 0338202.