(RE)PRODUCING GOOD SCIENCE STUDENTS: GIRLS’ PARTICIPATION IN HIGH SCHOOL PHYSICS

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ABSTRACT
In this ethnographic study, the author describes the meanings of science and science student in a physics classroom in an upper-middle-class high school and the ways girls participated within these meanings. The classroom practices reproduced prototypical meanings of science (as authoritative) and science student (as “dutiful”). The results highlight girls’ embrace of prototypical school science. Yet at the end of the school year, the girls did not consider themselves “science people,” nor did they want to pursue physics further. The author’s interpretation of these results takes seriously girls’ agency in producing the meaning of the physics class (as a way to polish one’s transcript) and draws attention to the promoted identities (prototypical good student identities) in the classroom. The author argues that students’ agency in resisting or accepting the practices, identities, and knowledge of school science is worth understanding for the improvement of science education.

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Even with similar grades, high school girls rank themselves less able to handle tough math material. That may steer them away from math and science careers. Even when male and female high school students receive the same math grades, girls tend to feel they are less competent than boys, a new study shows. And that may affect her choice to pursue science — or not. And without those courses in high school, girls may continue to steer away from math- and science-heavy college majors. Perez-Felkner and her colleagues wanted to know how students’ perception of their own abilities might influence what classes they take and careers they pursue. They turned to the Educational Longitudinal Study of 2002.