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Particle Physics Masterclass as a Context for Learning about NOS MICHAEL WADNESS — This research addresses the question: Do secondary school science students attending the U.S. Particle Physics Masterclass change their view of the nature of science (NOS)? The U.S. Particle Physics Masterclass is a national physics outreach program run by QuarkNet, in which high school physics students gather at a local research institution for one day to learn about particle physics and the scientific enterprise. Student activities include introductory lectures in particle physics, laboratory tours, analysis of actual data from CERN, and the discussion of their findings in a conference-like atmosphere. Although there are a number of outreach programs involving scientists in K-12 education, very few of them have been formally evaluated to determine if they provide adequate learning of NOS. Therefore, the significance of this study is that it investigates the claim that science outreach programs may be designed to address science literacy, specifically as a context for explicit NOS instruction.

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