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Becoming a physics teacher: A perspective on learning and teaching Physics by Inquiry¹ ANNE ALESANDRINI, Garfield High School, LILLIAN C. MCDERMOTT, University of Washington — For many years, the Physics Education Group at the University of Washington has been helping prepare preservice and inservice K-12 teachers to teach physics and physical science. The program includes special physics courses offered for undergraduates planning to pursue careers in teaching as well as an NSF-funded Summer Institute and academic-year Continuation Course for inservice teachers. These courses and institutes reflect the emphasis that the National Science Education Standards place on the role of inquiry in the K-12 science classroom and on the need for teachers to be prepared to teach using this instructional approach. They provide an opportunity for teachers to deepen their understanding of topics they are expected to teach and to experience a pedagogical approach that facilitates inquiry-based learning to the classroom. Physics by Inquiry, a research-validated curriculum, guides teachers in developing this understanding and serves as a model for addressing these ideas in their own instruction. Results of student learning will be presented as well as reflections on the ways that ongoing collaboration between teachers contributes to professional growth.

¹L.C. McDermott and the PEG at the University of Washington, Physics by Inquiry, New York, NY, John Wiley & Sons, Inc. (1996).

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