Abstract for an Invited Paper
for the NWS08 Meeting of
The American Physical Society

Philosophy and Physics by Inquiry in a liberal arts setting
ADAM CLARK, Willamette University

This talk will discuss a recent effort at Willamette University to hybridize the Physics By Inquiry\(^1\) curriculum with an introduction to philosophy of science. The nature of the Physics By Inquiry curriculum naturally lends itself to many interesting philosophical questions that often resulted in a positive feedback effect. However, philosophical questions sometimes bogged down progress on physics. We will discuss the unique challenges and opportunities associated with presenting philosophy of science side-by-side with the physics. The class covered parts of three modules: Electric Circuits, Kinematics, and Dynamics. On the whole, the class seems to have been successful both in teaching physics and in teaching philosophy of science. Preliminary pre-test/post-test data from the class will be presented, and suggestions for future improvements of this hybrid course will be discussed. Additionally, we will reflect on differences between implementation for teachers and implementation for liberal arts students.

\(^1\)Physics by Inquiry, L.C. McDermott and the Physics Education Group at the University of Washington, Wiley (1996).