Abstract Submitted for the PHYSTEC17 Meeting of The American Physical Society

Air-Pulsed Carts and Modeling Aid: Instruments for Student Model-Based Reasoning¹ MARK LATTERY, University of Wisconsin Oshkosh — This poster describes two emerging and specialized tools for student model-based reasoning in introductory physics: programmable air-pulsed rolling carts and Modeling Aid. This project extends recent research on student models and modeling in elementary mechanics (Lattery 2016) and explores new ways to teach the nature and content of scientific model building in a university-level physical science course. Lattery (2016). Deep Learning in Introductory Physics: Exploratory Studies of Model-Based Reasoning. NC: Information Age Publishing.

¹Funding sources include: Spencer Foundation 200800161, University of Wisconsin System 106-01-7000-2, and University of Wisconsin Oshkosh Faculty Development Board (FDR 913, FDR 982).

Mark Lattery University of Wisconsin Oshkosh

Date submitted: 14 Jan 2017

Electronic form version 1.4