

Abstract Submitted
for the PHYSTC16 Meeting of
The American Physical Society

A model for data-centered teacher professional development¹

MICHAEL WITTMANN, CAROLINA ALVARADO, University of Maine — In the professional development activities of the Maine Physical Sciences Partnership (MainePSP), we emphasize teacher content knowledge, knowledge of students' ideas, and discussion of the pedagogical strategies which best address student needs while building on student strengths. Our workshop will focus on the teaching and learning of mechanical energy and accelerated motion. In our professional development workshops with teachers, we use student data as anchors for discussion - what do we, as teachers, need to know in order to answer the content questions, think about our students' thinking, and respond in the classroom? Student data are gathered using formative assessment questions either taken from existing sources or written by teams of teachers and researchers. In our workshop, we present data gathered from teachers answering the student questions and analyzing student data as a way of engaging workshop participants in discussions of teacher knowledge of content, students, and pedagogy. We use these activities to discuss the overall structure of MainePSP professional development design.

¹Supported in part by NSF MSP-0962805 and DRL-1222580

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Date submitted: 29 Nov 2015

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