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Abstract for an Invited Paper for the PHYSTC16 Meeting of the American Physical Society

Inducing Principles About Effective Practice: Teacher Research Teams¹ VALERIE OTERO, Colorado

The goal of Teacher Research Teams (TRTs) is critical examination of our own practice through systematic research in our own classrooms leading to defensible, evidence-based claims. Each TRT consists of veteran, novice, and prospective teachers, teacher educators, and prospective teacher educators (education graduate students). Anticipated outcomes include: (a) preparing future teachers for their first year of teaching, (b) recruiting, inducting, and retaining novice teachers, (c) developing master teacher-leaders among veteran teachers who have agency for educational change and voice in the national dialog about teaching quality, and (d) building practical, up-to-date perspectives and practices among teacher educators. The mechanism by which these goals are met is systematic, publishable educational research on problems of practice identified by each team. Each team gives research presentations, submits manuscripts for publication, and provides workshops for other teachers on both findings from their research and on the value and practice of teacher research in general. This inductive model of learning is aligned both with inquiry-based models we promote for our students and with the way scientists build knowledge. Over the past two years, physics TRTs have been implementing and studying the new Physics and Everyday Thinking-High School curriculum. I will outline the TRT model, goals, challenges, and outcomes and discuss mechanisms for sustaining the program.

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