## Abstract Submitted for the OSS12 Meeting of The American Physical Society

Helping teachers in middle and high school to do selfevaluations of teaching<sup>1</sup> JENNIFER ESSWEIN, Ohio State University, GOR-DON AUBRECHT, Ohio State University at Marion, BILL SCHMITT, Science Center of Inquiry — Formative assessments can allow teachers to immediately understand what is and is not working in their classrooms for the purpose of changing how they teach various content. We encouraged teachers who are participating in a project funded through the Ohio Department of Education to do real formative assessments as an application for the development of formative assessments in the classroom in a rurally located, city high-needs district in the state of Ohio. The authors wrote formative assessments (CFAs) for the teachers in differing categories. Teachers had the opportunity to provide feedback, the CFAs were changed if necessary, and then they analyzed the CFA at the both the beginning and the end of the quarter. The emphasis in the analysis was on what student thinking as expressed in writing reveals. The pretests reveal what students think at the beginning, giving the teacher an idea of what ideas might already exist, right or wrong; the posttest should reveal to the teacher whether the instruction succeeded. The final quarter of the year, we asked the teachers themselves to draft assessments for their classes. Results indicate changes not only in the way teachers view their pedagogical approaches, but also in how teachers consider student personal epistemologies.

<sup>1</sup>Work supported in part by the Ohio Department of Education under grants 60018325 (2008-2009), 60021887 (2009-2010), 60028273 (2010-2011), and 60032359 (2011-2012).

Gordon Aubrecht Ohio State University at Marion

Date submitted: 16 Mar 2012 Electronic form version 1.4