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**Assessing the Integration of Computational Modeling and ASU Modeling Instruction in the High School Physics Classroom** JOHN AIKEN, Georgia State University, MICHAEL SCHATZ, Georgia Institute of Technology, JOHN BURK, The Westminster Schools, MARCOS CABALLERO, University of Colorado at Boulder, BRIAN THOMS, Georgia State University — We describe the assessment of computational modeling in a ninth grade classroom in the context of the Arizona Modeling Instruction physics curriculum. Using a high-level programming environment (VPython), students develop computational models to predict the motion of objects under a variety of physical situations (e.g., constant net force), to simulate real world phenomenon (e.g., car crash), and to visualize abstract quantities (e.g., acceleration). The impact of teaching computation is evaluated through a proctored assignment that asks the students to complete a provided program to represent the correct motion. Using questions isomorphic to the Force Concept Inventory we gauge students understanding of force in relation to the simulation. The students are given an open ended essay question that asks them to explain the steps they would use to model a physical situation. We also investigate the attitudes and prior experiences of each student using the Computation Modeling in Physics Attitudinal Student Survey (COMPASS) developed at Georgia Tech as well as a prior computational experiences survey.

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