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Online Interactive Video Vignettes (IVVs)

PRISCILLA LAWS, Dickinson College

Interest in on-line learning is increasing rapidly. A few years ago members of the *LivePhoto Physics Group*¹ received collaborative NSF grants² to create short, single-topic, on-line activities that invite introductory physics students to make individual predictions about a phenomenon and test them through video observations or analysis. Each Vignette is designed for web delivery as: (1) an ungraded homework assignment or (2) an exercise to prepare for a class or tutorial session. Sample IVVs are available at the ComPadre website <http://www.compadre.org/ivv/>. Portions of Vignettes on mechanics topics including Projectile Motion, Circular Motion, the Bullet-Block phenomenon, and Newton's Third Law will be presented. Those attending this talk will be asked to guess what predictions students are likely to make about phenomena in various IVVs. These predictions can be compared to those made by students who completed Vignettes. Finally, research on the impact of Vignettes on student learning and attitudes will be discussed. ¹Co-PI Robert Teese, Rochester Institute of Technology ²NSF #1122828 (Dickinson College) & NSF #1123118 (Rochester Institute of Technology)