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Abstract for an Invited Paper
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Using Physics Education Research to Inform Development of Online Interactive Videos.¹

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Physics education research (PER) has revealed many evidence-based practices that best support student learning. As more and more courses move to the flipped teaching model, however, there is an increased use of online traditional lectures that do not necessarily include these practices; such as targeting known student difficulties by engaging students in scenarios that involve making predictions, discussing alternate views, and receiving immediate feedback. As part of an NSF grant, the LivePhoto Physics group is developing a set of 4-8 minute, single topic, interactive video vignettes viewed by students on the web outside of class. This presentation will discuss how PER is informing the development of these online vignettes as well as the research the group is conducting to determine impact on student learning. See compadre.org/ivv for more information. *Work supported by the NSF TUES Program (DUE #1123118 & 1122828).

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