

Abstract Submitted
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Improving clicker questions for enhanced learning in the interactive physics classroom¹ ERTAN SALIK, Cal Poly Pomona — Classroom response systems, or clickers, have become widely used in physics classes in the last decade. Physics education research has demonstrated clearly that it is not the clicker as an electronic tool, but the interactive learning that occurs through clickers is what improves student learning. For clickers to work as expected, however, many subtle details need to be addressed. An instructor can start using many questions developed for the purpose of peer instruction. For a particular student population, and for a particular learning environment and constraints of the educational institution, questions used and the instructor's teaching style may need to be altered over time. We will present a systematic way of improving clicker questions and one's own teaching style utilizing data collected during clicker sessions. In addition, by adding a small writing component to some clicker questions, one can simply peek into student reasoning in order to determine preconceptions and misconceptions. Such direct knowledge of student reasoning in one's own class may be very revealing, and help improve learning ultimately.

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