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Abstract for an Invited Paper for the APR14 Meeting of the American Physical Society

Massive Open Online Courses (MOOCs) for Physics - and for You?¹ DAVID E. PRITCHARD, Massachusetts Institute of Technology

We will describe several of the currently available Massive Open Online Courses in Physics—the topics, level, author, and special features of each. Then we will discuss the interesting demographics of the students taking them, presenting evidence showing that students of widely different initial skills and students of all major demographic groups learn at least as much conceptual knowledge as students in a traditional classroom. We will present MOOC research on student habits, use of eTexts and other resources, and indicate what resources impart measured learning. We'll describe a collectivistic MOOC where you can help develop instructional and assessment resources that will be in a library for future use by you and other teachers. Many of these resources are designed for blending with on-campus introductory courses in college or Advanced Placement courses in High School. They will ultimately be displayed in a searchable library with lots of useful information from which you can assemble your own course in the free and open edX.org platform (or simply download them for in-class use).

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