Envision a large enrollment, general education, Freshman-level course in which attendance is 100% everyday! Now, imagine that every student prepares for and participates in class every day! Sound impossible? It is not. There is a technological revolution taking place in education that really works.

There have been great strides in learner-centered teaching methods that can significantly enhance the engagement process. One method that has received little attention uses state-of-the art technology that is not very expensive. It starts with every student purchasing from the bookstore a hand-held remote control unit (much like your TV remote control) that has embedded into it a unique transmission code. When the student comes to class, questions are asked as illustrated below (left panel). Both the instructor and the students receive instantaneous and accurate feedback regarding the degree to which the material is understood, as also illustrated below (right panel). Those concepts, which are unclear, as evidenced by incorrect responses, may then be reviewed. The unique transmission code allows every student's answer to be tracked for grading purposes.

In my talk, I will provide a “how-to” lecture for implementing this new technology along with a mock-classroom demonstration. I will also discuss how our students have reacted to this new technology. Furthermore, I will discuss the benefits of combining this technology with the worldwide web.