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Reza O Abbasian* (rabbasian@tlu.edu), 1000 W. Court St., Dept. of Math & Computer Science, Texas Lutheran University, Seguin, TX 78155, and John T Sieben (jsieben@tlu.edu), 1000 W. Court St., Dept. of Math&Computer Science, Texas Lutheran University, Seguin, TX 78155. A Brief Tutorial on Building a "Flipped" Classroom.

The authors will outline the steps to design a "flipped" classroom which is an inverted version of the traditional lecture-based instruction. Students watch lectures outside the classroom at their own pace and spend their class time in group activities and working problems with their instructor. The Khan Academy's web site contains more than 3000 mini-lectures and tutorials which can be viewed on YouTube or directly from the Academy website. These videos contain most of the topics in undergraduate mathematics ranging from College Algebra to Multivariable Calculus. For those topics where the online resources are not available or do not fit your course, we will describe the details of creating your own mini-lectures. We will demonstrate the steps leading to the production of a sample 10-minute lecture using a pen-tablet with a brief discussion of the technical complexities and the choice of software and hardware. Our presentation is intended for mathematics and/or statistics educators with interest in using technology in their classroom teaching. (Received September 25, 2012)