

1035-97-1294 **Ann H Pham*** (bi426@yahoo.com), Department of Mathematics, WSU, PO Box 643113, Pullman, WA 99164-3113, and **Andy Wekin** (andy@smarttouring.com). *The Sound of Mathematics and The Standards for Introductory College Mathematics.*

Over the past several decades NCTM, MAA and AMATYC, have promoted reform mathematics teaching, in order to help students build a foundation in mathematics to be successful in their future life. It is often unclear to teachers what a reform classroom would look like and what kind of mathematical content would be in a reform curriculum. We were graduate fellows working in the Culturally Relevant Engineering Application Mathematics (CREAM) Project, funded by NSF. CREAM has an over arching goal to develop curriculum to offer K-12 students a chance to use conceptual understanding of mathematics in engineering applications. These goals fit with the standards of both NCTM and AMATYC. In this talk we will discuss one project that we developed; the expectations of each student; the mathematical connections used; share samples of the student work; and discuss how this project fits with NCTM standards and the standards in Crossroads. The three week project had engineering design teams comprised of high school precalculus students, study the mathematics that explained the relationship between sound and the design features of musical instruments. For a capstone project each design team built a musical instrument that would produce sounds that matched a pre-chosen scale. (Received September 19, 2007)