

Abstract Submitted
for the APR16 Meeting of
The American Physical Society

The Sound of Steam: Acoustics as the Integrator Between Arts and STEM CALEB GOATES, JENNY WHITING, Brigham Young University, MARK BERARDI, Michigan State University, KENT L. GEE, TRACIANNE B. NEILSEN, Brigham Young University — This paper describes the development and presentation of a Science, Technology, Engineering, Arts, and Math (STEAM) workshop for elementary school teachers designed to provide ideas and tools for using acoustics in the classroom. The abundant hands-on activities and concepts in acoustics naturally link science and music in an intuitive way that can assist teachers moving forward on the STEAM initiative. Our workshop gave teachers an introduction to acoustics principles and demonstrations that can be used to tie STEAM techniques with Utah State Education Core standards. These hands-on demonstrations and real-world applications provide an avenue to engage students and support learning outcomes. Feedback indicated that the participants learned from and enjoyed the initial implementation of this workshop, though many elementary school teachers did not immediately see how they could integrate it into their curriculum. While additional efforts might be made to better focus the training workshop for the K-6 level, curriculum developers need to appreciate how acoustics could be used more broadly at the elementary school level if the emphasis changes from STEM to STEAM. ?

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Date submitted: 08 Jan 2016

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