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Acoustics as a tool to enhance physics education TRACIANNE B. NEILSEN, KENT L. GEE, Brigham Young Univ - Provo — The use of acoustics in physics pedagogy, whether in stand-alone courses, or as examples, analogies, or demonstrations in other contexts, can enhance student learning. At most, a typical physics student receives only a few weeks of instruction in acoustics, despite its potential ability to enhance class discussions of source, resonance, and traveling-wave phenomena in both introductory and advanced settings. A recent annotated bibliography, K. L. Gee and T. B. Neilsen, Am. J. Phys. **82**, 825 (2014), includes specific resources for incorporating acoustics-based demonstrations into physics courses. Acoustics analogies can be used to illustrate wave phenomena in advanced contexts, such as diffraction, scattering, refraction, reflection, method of images, resonance, dispersion, tunneling. This presentation will review the Resource Letter, highlighting specific demonstration ideas, as well as offer additional perspectives gained since its publication.

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