

Abstract Submitted
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Developing Problems to Promote Real-World Transferrable Problem-Solving Skills¹ KATHLEEN A. HARPER, ZACHARY S. GOLDMAN, CHENGENG ZENG, Dept. of Physics & Astronomy, Denison University, RICHARD J. FREULER, JOHN T. DEMEL, KRISTA M. KECSKEMETY, College of Engineering, The Ohio State University — Student problem-solving in physics has been the subject of study for approximately 50 years, and yet only a handful of studies have yielded even a faint signal that students transfer problem-solving skills from physics to other disciplines (or even from one physics domain to another). Perhaps part of the reason is that most typical problems in introductory physics textbooks do not require or foster general (i.e., non content-specific) skills. We have been developing problems that we believe require students to apply these more general skills. Currently we are implementing these problems in an introductory physics course for science majors. Examples of the problems and some initial reports of student reaction will be shared.

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