AAPT 2008 summer conference in Edmonton, Canada:

Robust Assessment Instrument for Student Problem Solving Jennifer Docktor, Kenneth Heller, University of Minnesota

Problem solving is one of the primary teaching goals, teaching tools, and evaluation techniques of physics courses. Unfortunately, there is no standard way to evaluate problem solving that is valid, reliable, and easy to use. Such an assessment instrument is necessary if different curricular materials or pedagogies are to be compared. This tool might also be useful to diagnose student difficulty and direct instruction. The main challenges with constructing such an instrument include defining relevant categories and obtaining evidence for validity and reliability. We will report progress on instrument development, including results from our ongoing pilot study.