

Session AB: PER: Evaluating Instructional Strategies

Location: Nautilus Hall 5
Sponsor: AAPT
Date: Sunday, January 4
Time: 10-10:40 a.m.

Presider: Hunter Close

AB01: 10-10:10 a.m. Assessment and Instructional-Element Analysis in Evidence-based Physics Instruction

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Decades of investigation by hundreds of research and development groups worldwide have yielded an impressive array of curricular and instructional innovations in physics that show evidence of improved student learning. [See, for example, D. E. Meltzer and R. K. Thornton, “Resource Letter ALIP-1: Active-Learning Instruction in Physics,” *Am. J. Phys.* **80**, 478-496 (2012).] In this brief review I will survey the range of assessment instruments and methods that have been used in this work, as well as the extent to which the relative effectiveness of specific elements of the instructional methods has been subjected to analysis.

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