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Andes: An intelligent homework helper BRETT VAN DE SANDE, KURT VANLEHN, University of Pittsburgh, DON TREACY, BOB SHELBY, MARY WINTERSGILL, US Naval Academy — Andes (www.andes.pitt.edu) is an intelligent tutor homework system designed for use as the homework portion of an introductory physics course. It encourages students to use good problem solving techniques and provides immediate feedback on each step of a problem solution along with hints on request. I will discuss how Andes works, from a student perspective, and present research demonstrating its effectiveness as a pedagogical tool. Then, I will discuss using Andes as a tool for conducting education research, briefly reviewing several studies conducted using Andes. Finally, I will show how logs of student solutions to Andes problems can be used to develop cognitive models of student learning.

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