Guide

Socratic Dialog Inducing Laboratories

Indicates a research-demonstrated benefit

Overview

Guided-inquiry, introductory mechanics labs designed to promote students' mental construction of concepts.

Type of Method	Curriculum supplement
Level	**Designed for:** High School , Intro College Calculus-based , Intro College Algebra-based , Teacher Prep Course, Teacher Professional Development, Intro College Conceptual **Can be adapted for:** Intermediate, Upper-level Undergraduate
Setting	**Designed for:** Lab , Studio **Can be adapted for:** Lecture - Small (<30 students)
Coverage	Few topics with great depth
Topics	Mechanics
Instructor Effort	High
Resource Needs	TAs / LAs, Advanced lab equipment, Tables for group work
Skills	**Designed for:** Conceptual understanding , Lab skills, Making real-world connections, Using multiple representations **Can be adapted for:** Problem-solving skills, Metacognition
Research Validation	**Based on research into:** theories of how students learn , student ideas about specific topics **Demonstrated to improve:** conceptual understanding **Studied using:** research at multiple institutions
Compatible Methods	Peer Instruction, PhET, UW Tutorials, JiTT, Ranking Tasks, ILDs, CGPS, Physlets, Context-Rich Problems, RealTime Physics, TIPERs, ABP Tutorials, SCALE-UP, OSP, OST Tutorials, Thinking Problems, Workbook for Introductory Physics, LA Program, CAE TPS, MBL, CPU, TEFA, Tools for Scientific Thinking, Tutorials, Clickers, Responsive Teaching

Similar Methods	RealTime Physics, Tools for Scientific Thinking
Developer(s)	Richard Hake
Website	http://www.physics.indiana.edu/~sdi/
Intro Article	11763,2733
Intro Articles	11763 2733