PRISMS PLUS

Indicates a research-demonstrated benefit

Overview

A high school physics curriculum and professional development program that uses a learning cycle pedagogy, inexpensive materials, and technology.

Type of Method	Instructional strategy, Full curriculum
Level	**Designed for:** High School , Teacher Professional Development **Can be adapted for:** Teacher Prep Course, Middle School, Intro College Algebra-based, Intro College Conceptual
Setting	**Designed for:** Lecture - Small (<30 students) , Studio **Can be adapted for:** Lecture - Large (30+ students), Recitation/Discussion Session, Lab
Coverage	Few topics with great depth, Teachers can select from many topics, but only cover a few in depth.
Topics	Mechanics, Electricity / Magnetism, Waves / Optics, Thermal / Statistical, Modern / Quantum
Instructor Effort	Medium
Resource Needs	Computers for students, Simple lab equipment, Advanced lab equipment
Skills	**Designed for:** Conceptual understanding , Problem-solving skills , Making real-world connections , Using multiple representations, Designing experiments **Can be adapted for:** Lab skills, Metacognition
Research Validation	**Based on research into:** theories of how students learn , student ideas about specific topics , research into instructional practice **Demonstrated to improve:** conceptual understanding , problem-solving skills , beliefs and attitudes **Studied using:** classroom observations , analysis of written work

Compatible Methods	Modeling, CPU
Similar Method	None
Developer(s)	Lawrence Escalada, Roy Unruh, Timothy Cooney, and master high school physics teachers
Website	http://www.physics.uni.edu/prisms/prisms-plus