



RealTime Physics

 Indicates a research-demonstrated benefit

Overview

A series of introductory laboratory modules that use computer data acquisition tools to help students develop physics concepts and acquire lab skills.





Type of Method

Curriculum supplement





Level

Designed for: Intro College Calculus-based  , Intro College Algebra-based 
Can be adapted for: High School



Setting

Designed for: Lab  , Homework
Can be adapted for: Studio 



Coverage

Many topics with less depth



Topics

Mechanics, Electricity / Magnetism, Waves / Optics, Thermal / Statistical



Instructor Effort

Low




Resource Needs

Computers for students, Advanced lab equipment, Cost for students, Tables for group work






Skills



Designed for: Conceptual understanding  , Lab skills, Using multiple representations



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  , research by multiple groups 




Compatible Methods

[Peer Instruction](#), [PhET](#), [UW Tutorials](#), [JiTT](#), [Ranking Tasks](#), [ILDs](#), [CGPS](#), [Physlets](#), [Context-Rich Problems](#), [Workshop Physics](#), [TIPERs](#), [ABP Tutorials](#), [SCALE-UP](#), [OSP](#), [SDI Labs](#), [OST Tutorials](#), [Workbook for Introductory Physics](#), [LA Program](#), [CAE TPS](#), [MBL](#), [CPU](#), [TEFA](#), [Tools for Scientific Thinking](#), [Tutorials](#), [Clickers](#)



Similar Methods

[ILDs](#), [Workshop Physics](#), [SDI Labs](#), [MBL](#), [SCL](#), [Tools for Scientific Thinking](#)

 **Developer(s)** David Sokoloff, Ron Thornton, and Priscilla Laws

 **Website** http://pages.uoregon.edu/sokoloff/Active_Learning.html