**Interactive Lecture Demonstrations**

Indicates a research-demonstrated benefit

**Overview**

Worksheets for use in lecture. Students predict results of demos, discuss in small groups, observe results, compare with predictions and explain.

<table>
<thead>
<tr>
<th>Type of Method</th>
<th>Instructional strategy, Curriculum supplement</th>
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| **Level**       | **Designed for:** Intro College Calculus-based 🕵️, Intro College Algebra-based 🕵️  
**Can be adapted for:** High School |
| **Setting**     | **Designed for:** Lecture - Large (30+ students) 🕵️  
**Can be adapted for:** Lecture - Small (<30 students), Studio |
| **Coverage**    | Many topics with less depth |
| **Topics**      | Mechanics, Electricity / Magnetism, Waves / Optics, Thermal / Statistical |
| **Instructor Effort** | Low |
| **Resource Needs** | Cost for students, Laboratory equipment for instructor to do demonstrations, but not laboratory equipment for all students |
| **Skills**      | **Designed for:** Conceptual understanding 🕵️, Using multiple representations 
**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 🕵️, peer-reviewed publication 🕵️ |

**Compatible Methods**

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

**Similar Methods**

Peer Instruction, RealTime Physics, Workshop Physics, CAE TPS, MBL, TEFA, Tools for Scientific Thinking
Resources, training, & community


Articles about ILDs:


Workshops:

The developers of ILDs regularly offer in-person workshops, with dates regularly updated on their website.