

WS2 – WEBILD: Web-Delivered *Interactive Lecture Demonstrations*

Creating an Active Science Learning Environment On the Internet *

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Interactive Lecture Demonstrations (*ILDs*) are a proven, research-based strategy for significantly improving conceptual learning in large (and small) lecture classes where most physics students are taught. In some settings, up to 90% of students learn kinematics and Newton's Laws conceptually after four 50-minute *ILDs*. After a semester of good traditional instruction, the gain is typically 10 to 20%. We have adapted the pedagogically successful *ILD* procedures for internet delivery as a proof of concept. In trials of *WebILD* delivery involving relatively small numbers of students at Tufts (60) and the University of Oregon (32), we were pleasantly surprised at the result. To prove the generality of the method we will extend this strategy to additional physics content areas and to other science disciplines. We intend to use these materials to be used for teacher education and distance learning. High schools have shown interest. Come see these techniques and see if they have any relevance to your teaching.

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