Logging Opportunities for Online Programs in Science

How can technology supply teachers with timely data that provide insights into student learning?

Research Questions:

- What LOOPS data give insight into student learning?
- What is the impact of LOOPS on instructional practice?
- What is the impact of LOOPS on student learning?

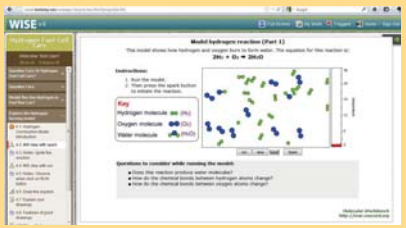
Characteristics of LOOPS systems

- Student work with inquiry activities is aggregated and summarized for teacher.
- Teacher-friendly UI enables easy review of student work.
- Teacher reviews student work and summary data to tailor instruction.
- Student work may be displayed for class discussion, reflection, and revision.

Curriculum Topics

Grade 6 motion and graphing (MA)
Grade 8 motion, graphing, and chemistry (CA)

California



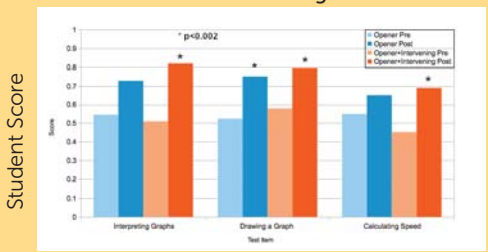
Visualization Used as Evidence in Opening Discussions

This material is based upon work supported by the National Science Foundation under Grant No. DRL-0733264. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

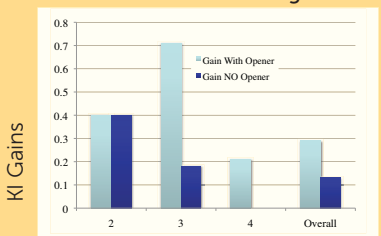
Massachusetts

Research focus for 2011-12:Classroom patterns for teacher-led discussion of student work

Do intervening discussions during class lead to increased student learning?*



Do opening discussions lead to increased student learning?**

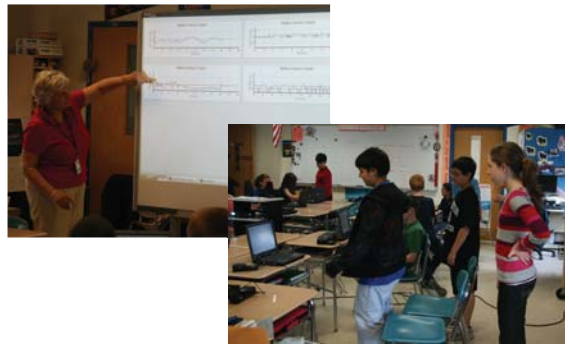


Kimberle Koile (PI), **Paul Horwitz** (Co-PI), **Bob Tinker** (Co-PI)
The Concord Consortium • Concord • MA 01742

Marcia Linn (Co-PI)
University of California • Berkeley

Jim Slotta (Co-PI)
University of Toronto

LOOPS
Informing Learning With Feedback



"I could see many students weren't getting the concept by my walking around and looking over their shoulders, listening to their conversations, or looking at their work on my screen. Then I could choose a couple of examples and stop everybody so we could talk about it in real time. You saw their 'aha' moment." **- LOOPS teacher**

Visit us: **concord.org/loops** and **wise4.berkeley.edu**

The Concord Consortium

* K. Koile, R. Tinker, N. Kimball, S. Pryputniewicz, A. Unger, S. Cytacki
** M. C. Linn, L. Gerard, A. Zertuche, D. Kirkpatrick, J. Lim-Breitbart, H. Terashima, G. Kwan