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DBER Speaker Series

Discipline-Based Education Research Group

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## Learning Catalytics Workshop

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# **Abstract for DBER Group Discussion on 2014-02-27**

**Presenter(s), Department(s):**

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**Title:**

Learning Catalytics Workshop

**Abstract:**

Come and participate in a demonstration using Learning Catalytics in the classroom. Experience how this system takes a step behind clickers, facilitating peer learning and active learning pedagogies in even very large classrooms. Hear about experience of using this system from instructors at UNL. Note, attendees are encouraged to bring a laptop computer, smartphone, or tablet to the workshop and to contact Chad Brassil [cbrassil@unl.edu](mailto:cbrassil@unl.edu) beforehand to set-up a demonstration Learning Catalytics account.

# Learning Catalytics

Chad Brassil, [cbrassil@unl.edu](mailto:cbrassil@unl.edu)

# Register in system one-time

- Pack of licenses can be purchased
- Free with many Pearson “Mastering” products
  - Or students purchase individually: \$12 / semester
- For workshop:
  - Go to [lcatalytics.com](http://lcatalytics.com) or [learningcatalytics.com](http://learningcatalytics.com)
  - Use existing Pearson Account or click on “Create instructor account”
    - Register with access code:

# General Outline

- Being a student
- Being an instructor
  - Building questions
  - Pulling questions from cloud
  - Administering during the class
  - Pulling stats after class
- General discussion and questions

# Instructional Models

- Interactive Classrooms
  - Feedback to students (and instructors)
- Peer Instruction
  - Answer by themselves
  - Discuss with neighbor and answer again
  - Share justification with class

# Voting Methods

- ***Fingers***



- ***Index Cards***



- ***Personal Response Systems***



# learning | catalytics

Product

Tour

Stories

Pricing

About Us

Create instructor account

Create student account

Log in

A "bring your own device" student engagement, assessment, and classroom intelligence system.

✓ Instructors: Get started now

The screenshot displays the learning catalytics web interface. At the top, the URL is <https://learningcatalytics.com/courses/11/lectures/203>. The user is identified as Brian Lukoff | Harvard University | Log out. The main navigation includes Courses, Participate, Review, Classrooms, Account, and About. The current session is 766079 with 69 students. The interface shows a lecture slide with a diagram of two perpendicular mirrors and a light ray. The text on the slide reads: "Light enters horizontally into the combination of two perpendicular mirrors as shown below. Indicate the direction of the incident light after off of both mirrors." Below the slide, there are two rounds of student responses. Round 1 shows 57 responses with 58% correct. Round 2 shows 51 responses with 73% correct. A feedback and support button is visible at the bottom right.

Assess students in real time, using open-ended tasks to probe student understanding.

- Students use any modern web-enabled device they already have — laptop, smartphone, or tablet.
- Engage students by creating open-ended questions that ask for numerical, algebraic, textual, or graphical responses — or just plain multiple-choice.

ALWAYS LEARNING

PEARSON



Do It

# Peer Instruction Tools

## LearningCatalytics

- Put questions into system
- Digital distraction potential
- Switch screens
- Master Control
  - Need “Extended display” or second device.
- Expands types of questions
- Single word graded, word clouds, or short answer
- Requires laptop, tablet, or smartphone

## iClicker

- Takes picture of PowerPoint
- Can ban computers
- Optional control panel
- Master Control
  - “Extended display”, base, or blue controller
- Multiple choice questions
- Word questions clunky
- Requires iClicker device

# Peer Instruction Tools

## **LearningCatalytics**

- Pool of shared questions
- Known location of students
- Assign groups feature
- Student performance summary
- Team-based Assessment

## **iClicker**

# Grades

- You choose:
  - Participation or Correctness
- I do:
  - 50% of automatically graded points to get full credit
  - Reason: invested in answers
    - Can still miss
    - Still a learning tool, not assessment

# Future

- Practice sessions?
  - Create a few questions
  - Deliver them to us
  - Feedback from us
- Eric Mazur, Harvard University
  - “Engaging Students with Learning Catalytics”
  - Monday, March 10, 1:30-2:30 pm, City Union, Heritage Room