ISLE for Remote Instruction

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Video Recording: https://bit.ly/3d0znFM

Background

- The Integrated Statistics Learning Environment (ISLE) is a browser-based eLearning platform designed for interactive, real-time collaborative instruction.
- Core of my PhD thesis project advised by Rebecca Nugent and Chris Genovese
- We have been working on ISLE for over three years and it is by now used in multiple classes at CMU and beyond

Sketchpad Functionality

- Can upload existing lecture slides in PDF format to ISLE
- Instructors and students can make annotations
- Instructor annotations are transmitted in real-time to all logged-in users
- PDF with annotations can be generated and made available to students through the platform
- Other interactive ISLE components (think of widgets, simulations, R code shells, point & click data exploration tools) can be embedded on the slides

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Clicker-style Questions + Real-Time Answer Visualization



(a) Free-Text Questions

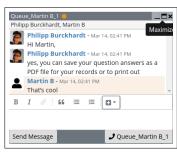


(b) Response Visualizer

Facilitating Student Interactions



(a) Queuing system allows students to post questions for instructor



(b) Chat functionality for student communication



(c) Instructor can collect slide feedback via feedback buttons

Recording + Broadcasting



(a) Record lectures



(b) Transcripts and live captions



(c) Broadcast Video

Taped Lecture: Planning to Flip the Classroom?

- Video lectures can include any ISLE component (e.g, questions, chat, feedback, widgets)
- Support for adaptive, branching video lectures
- Successfully implemented by Marian Frazier at College of Wooster in Fall 2019

Setup & Help

- ISLE runs natively in any major web browser, no installation required from students
- Instructors can author lessons using the ISLE Editor
- We will hold regular office hours and be available for instructor support for the duration of remote learning
- For more information, visit http://stat.cmu.edu/isle

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The End