My original ideas for LITT

- Find/develop software to convert Backyard Brains audio of action potential spikes into visual graphs to allow quantitative analyses
  --do electrophysiology on a shoestring budget
  replace $40,000 e-phys rig with a few hundred $$ of parts and software
  Verdict: no go, too course-specific

- Develop guided reading videos with my voiceover + textbook
  Verdict: no go, publisher won’t allow it—copyright issues

- Try to integrate TurningPoint clickers with Moodle gradebook
  Verdict: Idea approved for an application to LITT
Background

Fall 2012—introduced clickers into Bio 110 Intro Bio quizzes at start of most classes, groupthink exercises in middle of many classes not used for actual grading—new technology (for Lyco)

Fall 2013—clickers in Bio 110 Intro Bio quizzes at start of most classes—graded but only worth 25 course points out of 1100 total used randomly selected quiz results as a sample

Fall 2014—clickers in Bio 110 Intro Bio quizzes at start of every class—graded worth 50 points out of 1150 total using all quiz results for each student
LITT proposal Strategic Goals

- Get students to look at course material in between classes
- Assess students’ learning of key concepts
- Reduce grading time, allow more teaching time
- Reduce data entry time and potential for clerical errors
- Increase students’ ability to see their quiz results quickly
LITT proposal tactics

Allow students to register their own clicker devices within Moodle—instead of me typing it all in.

Export participant lists with device IDs from Moodle to TurningPoint.

Import clicker quiz results to TurningPoint each day.

Aggregate clicker quiz scores across weeks/semester within Turning Point.

Export quiz scores daily/weekly etc. from Turning Point to Moodle grade book for student access—attempt to get this to work automatically, rather than by manual upload or .csv conversion.
LITT proposal progress

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--attempt to get this to work automatically, rather than by manual upload or .csv conversion
The plus side

- Students get to class on time!
- Most students report doing some review for the clicker quiz
- I get to see what they “get” and what they don’t, every day
- No more typing in student names/device IDs for me!
- Ability to automatically email unregistered students reminders to enter their clicker IDs
- Automatic quiz grading—easy to set up correct/incorrect answers within TurningPoint
- No more separate spreadsheet for aggregating quiz grades
- No more hunting and re-sorting for students who drop, withdraw, or aren’t taking the class for a grade
- Easy and quick to corroborate attendance within TurningPoint
Sticking points—clicker logistics

Lycoming bookstore keeps clickers behind the cash registers, so students think they’re out of them when they’re not.

Lycoming bookstore charges $40 for clickers, when students can order them directly from TurningPoint for $28 or buy them used from other students → next year I’ll email them the link to do that in August.

Non-student/non-clicker Moodle users for the course e.g. Diane, Study Group facilitators, Teaching Assistants, Bio majors reviewing for the MCAT and sitting in, fellow Professors touring for Moodle ideas → take care to upload/download only data for “students” with devices used on any given day.
Sticking points—Automatic uploads not yet a reality

Option 1: manually re-enter the results from TurningPoint into Moodle gradebook (yuck!)

Option 2: convert TurningPoint results files to .csv files and upload those to Moodle gradebook, IF the student names lists match exactly (more yuck!)

Option 3: integration macros
So far—these are not working as advertised
TurningPoint is aware of the problems
I toyed with learning to program myself--but settled for harrassing the TurningPoint rep instead
LITT proposal Strategic Goals

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LITT committee—for providing some incentive and recognition for those working with new technologies on campus