Teaching online meetup 1

When

1600UTC, 20 Nov 2020

What

This was the first of a series of meetups in **#teaching** about remote (or virtual, or online) teaching and learning. It was motivated by a chat between Thomas Martin and Matt Hall about the things we've been trying, and the realization that a lot of it is just really hard — or at least there are a lot of ways of tackling it. So we thought a get-together might bring more ideas into the mix and result in better practice.

We met on jitsi.softwareunderground.org. The meetup lasted 90 minutes.

Who

Martin Bentley, Brian Burnham, Matt Hall, Lindsey Heagey, Zane Jobe (briefly), Rob Leckenby, Thomas Martin, Jesse Pisel, Brian Romans.

Summary

Brian Romans kindly agreed to share his experience of constructing a remote-learning curriculum in Canvas, and especially teaching the lab segments of the class. What follows combines notes from Martin and Matt...

Online is much more difficult to feel the vibe of a classroom. Engagement is really hard: the interface, body language, etc. In the classroom, one can adjust on the fly, in real time; you can 'feel the vibe'.

Undergrads are also very stressed out and anxious. We need compassion, empathy for their situation. Cannot reasonably ask them to have video on for video calls. Some courses have not even really changed, so that is not helping either.

Brian's approach: one synchronous session per week, 'office hours', and lecture content is pre-recorded. Keep the lectures recorded short (under 15 minutes).

Using 'formative assessment'. Low-stakes, but frequent questions. There's one short-answer question for each mini-lecture. Assessments are always due at the same time. Brian is doing one each Monday and Wednesday. Gets into a rhythm.

Peer learning — the sort of thing students normally do in labs, during breaks, etc. — is lacking at the moment. Therefore had some activities in break-out rooms with 2 to 4 students per room. About 10 mins per breakout. Shared document (Google Jamboard -> https://jamboard.google.com/) that is prepared ahead of time (one for each group), then during the breakout they can fill one in. Brian and TAs can watch as it get fills in, but they are not part of the session and cannot hear the students in their breakout.

Jamboard is very basic, which is good because students can't add polish, they have to keep it rough and can focus on content and learning. These are not evaluated per se (though they are aligned with other graded assignments), the students are not 'on the hook'. Keep it low-stakes. Groups then come back and report back or engage in discussion — this replicates in-person whiteboarding things.

The remaining contact sessions were office hours, scheduled during what would have been the in-classroom lectures. They are optional and completely unstructured, but students that participate report being very happy they did.

Brian recommends staying focused on big learning outcomes — like 'thinking like a scientist' — rather than, say, the specifics of some lecture or exercise.

Thomas Martin is doing a completely asynch course, and has a mandated group project (recognizing these can be unpopular with students). Also gets student cohesion: people start talking to each other and helping each other.

Ideas for future meetings

Matt:

- 3 ways to engage students on Zoom.
- 3 tech tools for teaching online and asynchronously.
- The 3 'digital epiphanies' we need students to have.
- The 3 things I wish I could figure out.

Rowan: I could share some of the stuff we are trying to do at #iooxa on creating interactive content/linked computation/textbooks/stuff.

Lindsey: Simply hearing from someone about their setu-up and experience teaching. [Matt: I like this too; I think we'll do this for now and see where it leads.]

Thomas: Learning resources in general, but specifically: how to get students to a point where they are ready to learn (e.g. pre-beginner Python tutorials).