

I. Context

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A. General Psychology (PSYC 1001) Course Information

- Large introductory course taken by approximately 50% of students in the College of Arts and Sciences, both majors and non-majors.
- Strong correlator with retention; students that perform well in this course tend to remain enrolled at the university.
- → As a result of 1 and 2, positive changes to this course will have a *disproportionately positive impact* on the undergraduate student experience.
- Current structure: 3 credits, 3 sections of 400 students each, different instructor for each section with lots of autonomy, taught F2F in auditorium classrooms.

B. Making A Good Thing Even Better

- Important note: course *already* receives positive student evaluations.
- This isn't about rescuing a course that's already in dire straits; it's about taking a good course and striving for excellence.
- Similarly, some faculty (such as Prof. Randall O'Reilly, whose syllabus is seen here) are already encouraging interaction and engagement in those large rooms, even if it's simply through iClickers and other audience participation tools. (Also reflected in student feedback.) O'Reilly is also using live Q&A tools. So faculty are establishing a digital presence for the course at various levels, both inside and outside of the learning management system.
- → There is fertile ground here that we want to nurture, rather than ignore. Faculty engagement needs to be at the core of any change process.

C. Student Feedback – Common Themes

- Data collected and synthesized by ATDT reflects this concept of “making something good even better”
- Common Theme #1: **High-quality delivery of content.** Students want enthusiastic and well-organized presentations of academic content that are inclusive of real-world examples.
- Common Theme #2: **Active Learning.** Students want to engage with simulations and demonstrations, seek opportunities for reflection and conversation, and are interested in case studies.
- Common Theme #3: **Flexible Modalities.** Most students learn best through a combination of some or all of these: lectures, activities, online, f2f
- → These are all *very reasonable* desires that we should be able to accommodate.

II. Moonshot Ideas

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A. Introducing and Defining NGDLE/Learning Ecosystem Framework

- Core idea: as emerging technologies become more mainstream, educational institutions can best leverage them by thinking through a framework of 5 interconnected domains.
- Goal: to get beyond the LMS (which is an administrative tool, not a pedagogical one) to a holistic ecosystem of tools designed to optimize the experience for both students and faculty. This is often applied at an institutional level.
- Adapting it for this course (and this presentation) because:
 - a) what PSYC 1001 students say would make this good course excellent directly maps onto these standards*
 - b) the concept of a learning ecosystem reflects my interest in starting an ongoing cycle of development, rather than implementing a one-time change*

B. Mapping Student Interests to NGDLE Framework

- Lots of overlap—as you can see, students already want us to head in this direction! Some of their wishes are better reflected in the NGDLE framework than others, but all are represented
- Not necessarily planning on speaking to all of these with every single idea I present here today, but keeping all of them in mind as I speak through some of my various ideas for PSYC 1001

C. Moonshot Ideas

- Not all of these are entirely technological in focus, some live more in the realm of interesting pedagogy.
- Many sources of inspiration—lengthy reference list later on.

D. Moonshot Idea #1: Targeted Lecture Capture

- Lecture capture is a technique that is easily overused to ill effect, but students often believe it is an investment in their success on the part of both instructor and institution.
- Rather than record entire lectures and place them online, I would suggest choosing one or more of the following:
 - a) lecture segments on key topics, especially those that have historically given students trouble*
 - b) questions asked by students in class—and the instructor's answers*
 - c) exam review sessions*
 - d) demonstrations of essential experiments or core competencies*
- On one level, this is an expansion of LMS content, but with an eye towards personalizing the student learning experience.

- Selective video content would ensure that students had the opportunity to repeatedly revisit both the *facts* and the *skills* they need to master in order to be successful in the course.
- A robust delivery system which included the opportunity to annotate video, as well as to chat with other viewers (either synchronously or asynchronously) could readily ensure student success.
- Failing that, the opportunity to read transcripts and search the video for key concepts would be helpful and could be more easily managed through existing products (such as Kaltura, or Panopto)
- For this to truly be successful, however, faculty would have to re-think the use of the F2F classroom session, “flipping” individual class meetings, or combining pedagogical modalities during the class session.

E. Moonshot Idea #2: Experiential Case Study Method

- Students often become subjects for psychological experiments as part of their General Psychology experience; they also watch or take part in simulations or demonstrations.
- What happens if we take inspiration from another discipline—in this case, history—and put them in the driver’s seat, via extended investigative role-play?
- Takes inspiration from RTTP, a history curriculum now in use at over 300 institutions nationwide.
- “Reacting to the Past (RTTP) consists of elaborate games, set in the past, in which students are assigned roles informed by classic texts in the history of ideas. Class sessions are run entirely by students; instructors advise and guide students and grade their oral and written work. It seeks to draw students into the past, promote engagement with big ideas, and improve intellectual and academic skills.”
- “...Reacting roles, unlike those in a play, do not have a fixed script and outcome. While students will be obliged to adhere to the philosophical and intellectual beliefs of the historical figures they have been assigned to play, they must devise their own means of expressing those ideas persuasively, in papers, speeches or other public presentations; and students must also pursue a course of action they think will help them win the game. ... many games have a serious side: few players laugh their way through a football game. Sometimes Reacting games similarly acquire heart-pounding tension in the final sessions. Any game is enjoyable if one plays it well, but this nearly always requires hard work.”
- Here’s why I like this idea:
 - a) *At Barnard, Reacting is a first- or second-year curriculum, teaching core skills*
 - b) *Already in use at the Colorado Springs branch campus in History*

- c) *Could be adapted for psychological history, or observation of patients (similar to a medical student's training)*
- d) *Significant opportunity for faculty to collaborate on a single game that could be played across all units or in small groups, with variable outcomes that all could learn more from*

F. Moonshot Idea #3: Homegrown Mobile Application

- Send around iPad with sample apps on it
- There are lots of psychology apps out there already for both iOS and Android (cross-platform functionality would be essential). There's also an app for the LMS, the D2L Binder
- Still, there is no one app that is inclusive of LMS elements (such as a mobile syllabus, or an e-textbook) and all of the offerings already in the app store, such as homework helpers or experiment simulators
- In this idea, I'd suggest soliciting and partnering with faculty, with students who are interested in becoming or already are app developers, and with students who have already successfully completed PSYC 1001 (for additional input on the content)
- Explore other apps and decide collectively which elements are essential—or if any are missing that we could create. Then employ the students to create a robust multiplatform app, use of which could be “assigned” as part of the learning experience.
- Native-to-mobile is the key; we're not translating from a web browser, we're considering and optimizing for the smartphone experience. The app might also include other ideas I'm presenting here today, such as segments of video lectures, or mobile messaging with a digital student cohort.

G. Moonshot Idea #4: Cross-Section Digital Student Cohorts

- In this model, students would be either formally or informally co-enrolled into a digital small group as part of their General Psychology experience. (We might use a robust team-building tool such as CATME, which includes teamwork training for students, to get this organized in a way that is low-stress and manageable.)
- The group might connect and collaborate using a variety of tools, including (but not limited to) virtual meetings, private discussion boards, or mobile applications for real-time messaging and workflow management.
- Once fully integrated into PSYC 1001 they might be a means of conducting small group assignments, but the first goals would be homework help, a social stream, and a means of personalizing the large course experience.
- A key feature of these groups would be their cross-section orientation; students from all current sections of the course would be grouped together in cohorts of 8-10

- Light guidance from TAs would allow for a facilitated discussion component, if desired.
- Incentivize student participation by including cohort participation in the assessment process, using robust peer evaluation models from CATME or other sources, or assigning a credit hour to the cohort as if it were a recitation or lab.
- Additional source of inspiration: Zach Whalen on the use of Slack for community-building and course management, see my references.

H. Moonshot Idea #5: Common Competency Assessments

- Dipping our toes into CBE-land, but not really: this would *not* be a means of “testing out” of the course, more of an ongoing self-check
- In this model, faculty would be incentivized to collaborate on a series of online assignments that ensured mastery of key topics covered in the course, via a paid weeklong summer intensive.
- During the intensive, faculty would decide upon a small set of assessments that students would be encouraged to use throughout the course to check their understanding of PSYC 1001 core concepts. (Ideally both formative and summative?)
- Ideally, these assessments would be self-grading, such as quizzes, and provide automated feedback to the student—no additional faculty or TA time after initial setup. Could be text-based or visual.
- Might be tied to lecture segments or other digital content.
- These assessments could be taken repeatedly by the student as needed, and would have no bearing on their formal grade.
- Source of inspiration: At UO, one of our Economics faculty has recently switched from simply putting his lectures up on YouTube (which he’s done for years) to pairing those videos with review questions in the LMS. Adding those questions to his course’s digital footprint has resulted in a significant improvement in test scores this year.
- Because they would be built by faculty, they’d reflect faculty interests and concerns—they meet the needs of both teachers and learners.

I. Moonshot Idea #6: HyFlex Course Delivery

- Hybrid-Flexible, common definition: “students can choose to attend class either in an assigned face-to-face environment or in an online environment, synchronously or asynchronously. Online technology is primarily used to provide students with flexibilities in their choice of educational experience, and to communicate with the faculty member inside and outside of office hours.”
- Four Core Values of HyFlex
 - a) **Learner Control:** *student decides which mode to participate in*

- b) **Equivalent Learning:** *all modes lead to effective learning of the same outcomes*
- c) **Reusability:** *Reuse/adapt instructional materials and activities*
- d) **Accessibility:** *Students have full access to all modes*

- In this model, it's important to ensure that students stay connected, through digital activities such as weekly reflection posts, small group activities, peer feedback on assignments, and active discussion forum participation. Some faculty find they often need to revamp their use of the LMS, making it more modular or unit-oriented.
- At institutions such as San Francisco State, Ohio State, and others, it has improved retention and participation in large courses—see current issue of *EDUCAUSE Review*. Ohio State notes that it has also reduced the amount of time professors spend on course rules and logistics.

III. Prototype: Cross-Section Student Cohorts W/ Slack & CATME :10

A. The Beginning of a Revamped Learning Ecosystem/NGDLE

- Integration: A tool or small suite of tools would be collaboratively decided upon in order to enable this learner experience. Interoperability and the ability to easily connect people/files with a variety of devices would be essential. To this end, Slack's native ability for chat channels and file-sharing would be appealing.
- Collaboration: A combination of synchronous and asynchronous modalities would enhance this experience, as would common activities or learning projects (but that's phase 2).
- Personalization: Enough said.
- Accessibility: This is a big-picture idea—not just ensuring that your items are accessible to people with disabilities, although that is important, but ensuring that UDL principles are employed, probably in LMS/course site design, to help students as they connect and collaborate.
- Analytics: data from the right tool could help students plan their own pathways through the course or in general.

B. Structuring and Incentivizing Participation

- Faculty: Encourage them to let go of the reins—they don't need to check in, but they can if they wish to. Demonstrate CATME and its team development resources. Need to get buy-in on cross-section model.
- TAs: Encourage participation in chat streams/small group discussion, but again, a light touch
- Students: May need training on how to effectively participate, but it will help if faculty and TAs model expectations.

- Suggest participation become part of a course grade to start, eventually build out into a more robust 1-credit cohort (will need to probably go through formal course approval process).

C. Fall 2016 Pilot Plan and Schedule

- Spring 2016: demo Slack to faculty collectively or individually; ask 1 section to participate in a Fall 2016 pilot, 2 sections for a Spring 2017 soft launch
- Summer 2016: Train TAs and interested faculty in CATME teamwork model
- Fall 2016 pilot section is introduced to Slack within first three weeks of semester and assigned to small groups
- Students in Fall 2016 pilot are using tool within a single section
- Students are given some simple collaboration challenges to complete with Slack's help, such as set up a time for your group to meet to study for the midterm, have a chat about a core topic, share a video they think is relevant to the course, etcetera
- Students are also asked to use an additional technology of their choosing to plan a small group activity—could be video chat via Skype, for example, or evite for an end-of-term celebration—and report back on how that was or was not compatible with Slack
- Develop cross-section cohorts in Spring 2017, perhaps with just two sections to start

D. Evaluation and Assessment

- Student survey following Fall 2016 & Spring 2017
- Comparative study of pilot section versus traditional section in Fall 2016: did outcomes improve?
- TA focus groups following Fall 2016 & Spring 2017

IV. Thank you!