Brainstorming: Increasing Engagement/Participation in Face-to-face Courses

Considerations prior to implementation:

Current engagement/participation –

- Issues (present but unequal; non-existent or lack-luster; impact on learning objectives)
- Successes (methods that worked well; one-offs and routine)

Classroom environment –

- Physical space (table, desks, lecture hall; projector/screen; modular/mobile)
- Number of students, faculty/TAs
- Electronic devices (welcome or not – and if so, are there outlets/charging ports)

Online environment –

- Current use/integration of online (CoursePlus) platform beyond "presence" (assignment submission; discussion forums; etc.)

Faculty/TAs –

- Workload: Is a temporary increase in time & effort considerable? (Initial effort should decrease as methods become routine)
- Comfort in changing routine
- Comfort in modifying assessments and/or modifying metrics

Students –

- Comfort in changing routine

Methods:

Student-Active Breaks

Students interact with material and often each other for brief, moderated periods before continuing as "whole group". This happens in class and involves little to no preparation by faculty.

- **Think-pair-share** (2 min + class discussion) Students pair off & compare lecture notes or questions, filling in what they may have missed and/or answering each other's questions. Remaining questions are posed to faculty/whole class for answer/discussion.
- **Pair/group-discuss** (3 - 10 min + class discussion) Students are given an open ended question & as pairs/groups synthesize understanding & jot outline of answer, which will help guide discussion when class comes back together. Whole group discussion can continue online in discussion forum.
- **Gallery Walk** (5 – 10 min + discussion) Students write responses/reflections on individual sticky notes in regards to specific topics, and place notes in designated spots on walls around room (gallery-style). Alternatively, responses can be written on poster-sized sticky notes at the designated gallery spot. Allow students to read each other's notes to prompt further discussion/reflection, comparing and contrasting viewpoints in whole-class and individual discussion as guided by faculty. Notes can be collected by faculty to use as formative assessment when appropriate.

- **Muddiest Point** (1 – 2 min + discussion) Ask students to jot down quick response to question: "What was the muddiest point in the [lecture, homework, reading, etc.]?" i.e., what was most confusing or unclear? Students share their questions & respond/clarify as whole class discussion, in pairs, or small groups. Muddiest points can be written on index cards & collected by faculty or muddiest points can go online in a discussion forum to continue learning.
- **Pro & Con Grid** (2 – 5 min + discussion) - students jot down quick pro/con list on topic or issue as individuals & then their individual points are synthesized coming together as a class, including a frequency count. Discussion and faculty insight can be gained by looking at: How balanced are the sides of the grid? Is there a point that was missed? Is there an "unpopular" point that needs to be explained further?

Student Polling/Survey

This, too, is a lecture "student-active" break and can follow think-pair-share or one of the other small group discussion breaks. Students are attentive and committed to answering. Faculty receives quick formative assessment. Results can lead to further discussion.

- **Raising hands**
  - ✓ no set-up
  - ⓘ not anonymous
- **Lettered/Colored flash cards** (e.g., red = A, blue = B, green = C, white = D)
  - ✓ goes beyond yes/no; one time set-up
  - ⓘ not anonymous
- **Clickers**
  - ✓ anonymous
  - ⓘ requires advanced request beyond faculty (for clicker devices); depends on technology working as expected
- **Poll Everywhere** – www.polleverywhere.com
  - ✓ anonymous; allows for short answer responses
  - ⓘ requires any device with internet access; requires faculty to set-up poll
- **Adobe Connect Meeting Room's Poll Pod**
  - ✓ No login necessary;
  - ⓘ Not anonymous; faculty must host meeting; URL must be shared; requires device with internet access and Connect plugin/download

Backchannel

"Background conversations", monitored or not, pertinent to lecture or presentation; believed to transform the event from personal to communal. Traditionally requires device with internet access.

- *Peer learning - Students ask & answer each other's questions, defining concepts & voids in background knowledge pertinent to the topic.*
- *Greater interaction between students and facilitator. Students can pose follow-up questions to the faculty member (or TA) to be addressed as a part of the class or at a later time.*
- *Can create asynchronous artifact that can be springboard toward further inquiry/reflection; guide future facilitation.*

- **CoursePlus Text Chat Tool**

- ✓ Convenient; no extra login; everyone has access; faculty effort is optional; private to class
- ① Temporary; must remain open/active; no automatic archive; ideally faculty should be first on/last off & copy text at end to create archive; requires Flash
- **Adobe Connect Meeting Room**
  - ✓ No login necessary; chat transcript can be emailed to host; private to class
  - ① Faculty must host meeting; URL must be shared; requires plugin/download
- **Twitter, Today's Meet, Chatzy, etc.**
  - ✓ Popular 3rd party tools; some create archive
  - ① Some require login; some are public; learning curve

Peer Learning & Assessment

Students learning with and from each other, although faculty may guide this learning. Peer assessment usually use rubrics, checklists, or series of questions developed by faculty but requires the students to engage with each other's comprehension, etc.

Student-generated Assessment Questions - students prepare & provide correct answer for 2 or 3 quiz/assessment questions (could be used as entrance/exit tickets in next meeting or online discussion thread)

Beyond Classroom: Discussion Forum

- ✓ Built into CoursePlus site; can be part of participation grade with clear instruction and rubrics (meaningful contribution, grammar, respond to others, etc.); can continue classroom conversation/discussion (muddiest point, etc.); can be open-ended; faculty participation is optional
- ① Faculty must encourage students to view/subscribe to posts; faculty should moderate

Beyond Classroom: Wiki

Multiple students can access and edit a single webpage (document).

- ✓ Built into CoursePlus; whole or small group platform
- ① Students can accidentally overwrite each other's contributions

Beyond Classroom: Online Meetings

- **Drop-in/Open Office Hour on Adobe Connect**
  - ✓ No login necessary; chat transcript can be emailed to host; private to class; one-time setup of room that can be used over the course of the term; student participation is optional; can share presenter capabilities with students
  - ✓ Requires faculty time outside of class
- **Small Group Study Sessions**
  - ✓ Can use room set up in Adobe Connect, Google Hangouts, Skype or other platform; increases opportunity for collaboration; no increase of faculty workload
  - ① Faculty does not monitor; hard to assess without peer assessment