SIMPLE WAYS TO USE THE SCIENCE OF LEARNING – WORKSHOP AT HILT CONFERENCE 2018 GROUP NOTES AND TAKEAWAYS



Principle: AIM [https://tinyurl.com/HILT2018-Aim] Clearly and specifically define your learning objectives.

- In order to get faculty to identify airport moments/enduring understandings, bring in past students to share what they really retained from your course
- Have people other than faculty help identify enduring understandings (curriculum managers, educational experts, etc.) as faculty will likely think it's all critical!
- Post learning objectives in the physical classroom environment to continuously revisit/check them and bring them forward, to hold you and students accountable
- Ask students how far along they think they are in achieving each learning objective (every 2 weeks for example)



Principle: DETECT [https://tinyurl.com/HILT2018-Detect]

Find appropriate ways to gauge what your students know and don't know.

- Small group presentations: peer pressure; accountability for contributing to the group
- Classroom as laboratory
- Self pre-assessment questionnaire: what they know, connect with what they need to know, beliefs and values
- Building trust: okay to ask questions, ask students how are we going to build a community?
- Each student brings their own set of expertise to the course; they can contribute this to the group and learn new concepts/skills from peers and the course sessions
- Challenge: how can students self-evaluate their own speeches? Have rubric, then learn more and apply rubric on the next presentation
- Activate meta-cognition: Student self-evaluation: students are critical of themselves; may come from cultural expectation that excellence is easy; make transparent that of the great effort needed for excellence. Include peer evaluations as well
- Class is three hours: how to use the time. First two hours of class vs last hour of class (how to structure the third hour of class)
- What if faculty do not want to use in class polling? Other ways to collect feedback.



Principle: ACTIVATE [https://tinyurl.com/HILT2018-Activate]

Provide well-timed, varied, contextual opportunities for students to elaborate and practice what they've learned.

- Find opportunities for activities, expectations, and norms to be self-driven by learners.
- Have learners frame content or create the questions to be answered rather than supplying; or, if you supply content or questions, find ways for learners to reflect or find a personal connection to the material.
- Set collaborative activities and norms for learners to learn from each other rather than from the instructor.
- Have learners determine specific goals or questions related to the course that they can use to frame their interactions and their understanding of the content.
- Consultancies useful for bridging hierarchies and helping people open up to solve problems. Problem was getting people to talk with diverse groups and built in hierarchical structures, i.e., doctors and nurses.
- One person (me) should have stepped back and gone to Aim to rethink this problem



Principle: CONNECT [https://tinyurl.com/HILT2018-Connect]

Get to know your students, and create ways for them to get to know you, each other, and your discipline.

- To address challenge of establishing rapport and connection, particularly with online courses:
 - Collecting regular info on students: How are they feeling about the course, are they anxious about the exam, etc.
 - Making the learning individual: Teach.ly could be a good solution for that.
 - Bringing/sharing a bit of your personal self to your students, ideally through anecdotes. Understanding that you are motivated to help them succeed.
- To address connecting with students in particularly difficult or challenging courses:
 - Taking the time in the first class or two to connect the course to the bigger picture: Go with me on this journey, even though it's really hard.
 - Midway through, ask for feedback: Tell me how this is going. It won't affect your grade.
 - At the end of the semester, ask for advice/words of wisdom for next class of students.
- To foster participation and engagement:
 - Establishing a learning contract up front: Preparation is essential, as is participation. Assuring students that the classroom experience will be more meaningful if they participate.
 - Try to create an environment in which students feel comfortable speaking up and contributing their thoughts.



Principle: ASSESS [https://tinyurl.com/HILT2018-Assess] Determine what went well and could use improvement.

Nothing written in Google doc by group