Active Learning

Tips and techniques to engage our students

New Faculty Seminar, Fall, 2018
Active Learning: What and Why?

- What do you teach?
- How do you teach?
- Why?
- What is active learning?
- Why does it matter?
- What does active learning look like?
Active Learning, Part 1:
It begins in the brain

- What if I told you that ALL learning is active learning?
- What does that mean?
- How do we stimulate, observe, and measure it?
- So, there is a place for lecturing??
- See Todd Zakrajsek’s “All Learning is an Active Process: Rethinking the Active/ Passive Learning Debate”
The brain and behavior: take-aways from Todd’s work

- “Making the distinction between active and passive misdirects the focus away from learning...”
- The bottom line is that learning requires change. It does not happen without it.
- For this to occur -for the neurons to fire- let’s assume a something happens that stimulates the neurons and that some change occurs -we respond to something/change.
- Mapped out as a three-step process, this means that:
  - Attention (to something) is required
  - There must be an opportunity to process that (see “pause” on last page), and
  - When applied to something or reflected upon, it gains meaning.
- Will information be retained and learned from? It will if it is
  - Valuable
  - Understandable
  - Reflected on
- How do we generate evidence of this?
  - Anyone want to get in on research on F2F and OL applications of this??
Active Learning, part 2:
Active engagement

- Sophocles: “One must learn by doing the thing, for though you think you know it - you have no certainty until you try”
  - Implications and applications?
- Chickering and Gamson: “Learning is not a spectator sport” - but see T.Z.’s movie example!
- Terry Doyle: “The one who does the work does the learning”
  - The more senses we engage, the more -- and better -- we learn
- Active learning therefore requires a shift from a disengaged to an engaged role in the learning process - mentally and/or physically
  - Students must be engaged in some type of learning (not just doing) activity
- See Bonwell’s “Active Learning: Creating Excitement in the Classroom”
  - Oh yeah - learning can be exciting, even fun, but it must still be hard work for it to stick.
    - See/borrow a copy of Make it Stick. Anyone want to experiment/research this??
- See Michigan Continuum and options and the opposite side that describes each
Active Learning, part 3: Options & strategies/tips & techniques

This spectrum arranges active learning techniques by complexity and classroom time commitment.
Prepared by Chris O’Neal and Tashia Fieder-Grover, Center for Research on Learning and Teaching, University of Michigan