

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Teaching is a Two-Way Street

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Goals of this workshop:

1. List and rate 5 different strategies for getting students interactively participating during class time
2. List and rate 4 different ways to get feedback from your students
3. Classify assignments and activities from your own teaching as either formative or summative assessment

### Active Learning Strategies sampler

	examples	notes/details	your rating (1-5)
<b>work-sheets</b>	when introducing a new topic, match terms and definitions; after learning an equation, do sample problems; classify or categorize items; list examples from your own life	takes up a lot of class time, but also saves some time by offloading some of the information transfer from lecture to worksheet	
<b>minute papers</b>	muddiest point from class, main points from class, what do you hope to learn about X, explain Y in your own words, give an example of Z, etc.	Benefits:	
<b>brain-storming</b>	solo or groups, write or aloud	asking them to write ideas first gives time for slower processors to think	
<b>drawing names</b>	draw randomly from hat, cold-calling (choosing a person present to answer)	students could opt in/out; can give participation credit or not; try getting multiple responses	
<b>voting</b>	cards, clickers, hands, arms, online polling	can give credit or not	

Nuances of implementation matter. Practice helps. Get feedback from students, colleagues.

### Timing:

- Students work at different rates; Optimize productivity with “the good of the many” approach
- Timing tips for voting Qs: you read the question *silently* too, “does anyone need more time?”, “10 more seconds”, circulate the room, eavesdrop, overall noise level, use an accomplice embed (colleague, TA, LA)
- For worksheets: circulate room, look at their work, “raise your hand if you’re on page X”, aim for 50% of class completed, & tell them so

### Wait time:

- Wait an awkwardly long time
- Don’t answer your own questions
- Be more stubborn than they are; hang in there!
- Take heart: It gets easier with practice, and as they learn that you’ll wait
- Shows that you really want to hear from them
- Inclusive practice: allows more than just fastest processors
- Pro Tip: you can wait for several hands to go up before calling on anyone
- Don’t always call on first hand (or class becomes reliant on first hand)
- Accept several answers before commenting; your comments, e.g. “yes” or “right”, often inhibit further answers; even saying “good” sets awkward precedent; if you must say something, use something neutral like “Thank you. What else?” to invite more answers

### Voting:

- Should be simultaneous & anonymous, to remove social pressure
- Can be for credit, or not for credit
- Can be high, low, or no-tech. Your preference. Learning benefit is the same
- Start it on the first day to set the tone, and do it regularly
- One “Think-Pair-Share” approach = vote solo first, then talk with neighbor, then vote again, then discuss reasoning
- If you’re going to have them re-vote, don’t show the answer distribution after 1<sup>st</sup> vote
- Don’t use clickers just for attendance
- Know what you’re going to do when (not if) they forget their card / clicker

### Reducing anxiety for shy or introverted students:

- everyone talks with partner before answering
- group answer
- everyone can opt in/out
- invite them to talk with you privately to discuss alternative options, such as...
- email selected students ahead of time
- submit written answer on paper
- non-speaking role

## How to Gather Feedback from Students

	examples	notes/details	your rating (1-5)
<b>voting questions</b>	make a prediction, how much have you heard about this topic before, can you do this example?	lets you probe in real time what students know before you teach a topic, and what they are understanding and what they can do during/after teaching a topic	
<b>minute papers</b>	muddiest point from class, two most important take-home points from class today	can be for credit or not; for large classes, you can just read a sample	
<b>mid-semester surveys</b>	What helps you learn? What would help you learn better? To what degree have you been... challenged intellectually by this class? ...felt supported in your learning?	identify what needs fixing while there is still time to fix it	
<b>focus groups</b>	meet at coffee shop for lunch, have pizza delivered to campus	invite whole class; ask for RSVPs to get head count & give a modicum of accountability	
<b>chat informally</b>	Before class, e.g. Thanks for your thoughtful questions. Office hours, e.g. How can I help you today? Both, e.g. How's the semester going for you? What's your major?	arrive early to class to allow plenty of time; can chat in corridor or classroom; destigmatize office hours; make a note of their name and use it again later (even just to say hi)	

Tips for feedback surveys:

- Keep surveys short
- An open-ended question allows you to learn about problems you didn't anticipate
- Collect feedback early enough in the semester that it's possible for you to implement changes to the class ...
- ... but wait until after a major assignment or test has been returned with a grade
- Don't collect feedback on the due date of a major assignment or test
- Do share survey feedback with students: Tell them what you're going to change, what you're not (or can't), and why
- Caveat: Don't ask unless you really want to know; collecting feedback and ignoring the results may be worse than not doing it at all

Resources for feedback survey questions:

- Students’ Assessment of their Learning Gains: <http://www.salgsite.org/>
- Agile: [rtalbert.org/agile-student-feedback-through-the-five-question-summary/](http://rtalbert.org/agile-student-feedback-through-the-five-question-summary/)

Tips for conveying approachability and interest:

- Long wait time (both in class, and in office hours)
- Warm facial expression & friendly greeting when students approach you
- Ask their name, if you don’t already know (perhaps make a note of it; try to use it again later)
- Office hours on syllabus: give specific times *and* (not or) include “other times by appointment”
- Warm and respectful language on syllabus (avoid all caps, bold, !!!!!, etc.)
- When students come to office hours: stop what you’re doing, invite them in, give your attention
- Open posture; turn toward
- De-stigmatize office hours: make it inviting to strong students too, e.g. “For calculus fans who want to see how this is derived, come to my office hours”, and non-shaming to those struggling, e.g. “For more practice on this...”, rather than “If you need help come to office hours.”

Summative Assessment

graded  
 higher stakes  
 culmination of learning  
 “summary” of learning

Formative Assessment

not necessarily graded  
 lower stakes  
 provides feedback to teacher and student for ongoing learning  
 “informs” learning

Ideas for reducing stakes of summative assessments, and providing more feedback:

Give more exams, drop lowest exam score, allow exam corrections for partial credit, allow 2 attempts at homeworks, accept drafts of final papers or projects, make it more frequent

Ideas for increasing stakes of formative assessment, thus injecting more accountability:

Draw names from hat, cold-call on students, grade participation, collect/comment ungraded work

List examples of assessment from your teaching that you already do, or would like to try.

<u>Type of assignment or activity</u>	<u>Formative aspects, if any?</u>	<u>Summative aspects, if any?</u>
1.		
2.		
3.		
4.		

Help students take more ownership of learning. References for metacognition and mindset:

Teach Students How To Learn, McGuire, 2015

Mindset, Dweck, 2007

Creating Self-regulated learners, Nilson and Zimmerman, 2013