Let’s Ask the Audience – with Clickers!
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Let’s play with our clickers
- First, a prayer to the local deities: deliver us from tech-demo Hell
- These are radio devices, so you don’t need to point them
- Your vote is registered when it flashes green
- You can change your vote be pressing a different number before the voting closes.

From what I know now, clickers are NOT appropriate for my classes
1. Strongly Agree 71%
2. Agree 29%
3. Disagree 0%
4. Strongly Disagree 0%

Which best describes you?
1. Male 71%
2. Female 29%

How does the system work?
- Best option: school standardizes on a clicker system
- We are using the TurningPoint system
- Students buy clicker in bookstore (or on Amazon) – under $50 but can be used in other classes
- Faculty member has radio device
- Clicker software creates modified version of PowerPoint.

Follow up information
Alternatives

- Flash Cards (available from Monash University)
- Cell phones, web based text message system
- polleverywhere.com
  - Free accounts, up to 30 people

Why should anyone use clickers?
Some general answers for any subject.

1. Reset attention
2. Get honest answers (probably for the first time).

Length of attention span for average freshman during lecture

1. 50 minutes
2. 30 minutes
3. 20 minutes
4. 10 minutes
5. Less than 2 minutes

How to reset attention

- General problem: students lapse into lizard brain mode
- St. Augustine (400 C.E.): when attention in class flags, make a remark "spiced with seemly good humor."
- Classroom Assessment Techniques (CATS)
- Clickers as attention resetters.

Compared to most other disciplines, philosophy is relatively free of sexism

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree
Compared to most other disciplines, philosophy is relatively free of sexism.

Students in my class are seldom afraid to say what they think:
1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree

Do we ever get honest answers in class?
- Faculty story
- Before expressing an opinion many students:
  - Wonder what the teacher will think of them
  - Worry about what other students will think of them
  - Look around to see which students are raising their hands
- Clickers:
  - Anonymous, no peer pressure

Uses of clickers in philosophy classes:
1. Having a stake in an issue
2. Discussion starter
3. Pre-and post questions
4. Peer instruction.

Helping students have a stake in an issue:
- Paradox: the texts we assign were developed as answers to pressing questions
- Those questions are not necessarily pressing to our students
- Result: we give them the answer, help them find the question.
- Clickers: can get students to invest in the question.

Taking a stake on issues in *Euthyphro*:
- Before discussing Euthyphro, I ask:
  - Morality is closely connected to religion
  - Agree–disagree
  - People who question religion undermine society
  - Agree – disagree
- Students take a stake in the issue one way or the other:
  - Focus attention in issue
  - Creates investment in issue
Discussion Starter: Most common reason students don’t want to volunteer their opinion

- 57% 2. Afraid of saying wrong or unpopular answer
- 29% 3. Don’t really care about issue
- 14% 1. Need more time to formulate their thoughts

Discussion starter example

- Assignment (in preparation for reading Marx)
- Read NYT article: “Life at the topic in America isn’t just better, it’s longer.”
- Students also had to write short reaction paper about article

Discussion starter question: results in my class
Which comes closer to your view

- 57% 1. Health article was politically biased in favor of a liberal view
- 29% 2. Health article was reasonably balanced
- 14% 3. Health article was politically biased in favor of a conservative view
- 0% 4. Health article was balanced

Pre-Post. Many students seem to believe that rational discussion doesn’t change opinions

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree

Descartes: Meditation I

- Pre-discussion – ask students about certainty.
- Discuss examples
- A cheap trick
- Post discussion – ask same questions again, compare results.
Peer Instruction Demo

- Pay attention, don’t call out answer, respond within time limit even if not sure
- Table server in coffee shop is logic student. At table are four logicians seated for breakfast.
- Table server says: “Is everyone having coffee?”
  - First logician says: “I’m not sure”
  - Second logician says: “I’m not sure”
  - Third logician says: “I’m not sure”
  - Fourth logician says: “No”

How many additional questions needed to determine correct number of coffees?

- 4% No more questions needed
- 43% 2 One more question
- 0% 3 Two or more
- 14% Not sure

Discuss with people around you

- First three logicians say, "Not sure."
- Fourth logician says, "No."
- How many more questions needed?

How many additional questions needed to determine correct number of coffees?

- 71% 1 No more questions needed
- 14% 2 One more question
- 0% 3 Two or more
- 14% Not sure

Peer Instruction

- Used frequently in the sciences
- Excellent article and website
  - Butchart et. al. “Using Peer Instruction to Teach Philosophy, Logic, and Critical Thinking” Teaching Philosophy 32:1 (2009) or
  - www.arts.monash.edu.au search for “peer instruction”
  - Includes data showing effectiveness
  - URL for professional looking flashcards.

Theory of Peer Instruction

- If most students are confused, instructor can repeat material and clarify.
- If most students get answer, students who don’t get it need to come for extra help.
- If there is disagreement, with some students getting correct answer and others not, small group discussion and revote.
- Process seems to benefit student learning.
Example from Butchart et. al

- Jones believes that his wife is having an affair on the grounds that he saw his wife with a strange man. Wife is having affair, but not with a man she was seen with by man. On which theory of knowledge does Jones know his wife is having affair?
  1. Justified true belief
  2. Causal theory of knowledge
  3. Nozick’s theory
  4. None of the above

Other Uses

- Quizzes
- Attendance
- Housekeeping.

Housekeeping: Want me to demo how to actually make a question slide?

1. Yes, before answering other questions
2. No thanks
3. Later, but only if there is time.

From what I know, clickers are NOT appropriate for my classes

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2. Agree
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Sc has great weather?

1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree
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