Introduction to Clickers

Part 2: Implementation

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Outline

Part 1 (August 30, 2018)
  • Setting up the technology
  • Reasons for using clickers
  • Lecture notes → clicker questions

Part 2 (today)
  • How to ask a clicker question
  • How to respond to the students
  • Novel uses of clickers

Things I will share
  • These slides
  • Additional resources on clicker ‘best practices’
Some Resources

Handbook
Tips
Reaction Suggestions
(some of these are a bit outdated but contain still good stuff)
Let’s play

Read the back of the clicker and change the frequency to ‘AD’

**Clicker Q:** I want to use clickers for:

A) Checking if the students are following/understanding
B) Assessing their prior knowledge
C) Correcting Misconceptions
D) Encouraging group work
E) Stimulating whole class discussion
Let’s play

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**Clicker Q:** I want to use clickers for:

A) Checking if the students are following/understanding  
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D) Encouraging group work  
E) Stimulating whole class discussion  

Any other reasons?
Asking a Clicker Question

The Clicker “song and dance”

• Display or write the question (don’t read it aloud)
• “Take 1 minute to think about this on your own”
  • or ”feel free to discuss with your neighbour”
• *Instructor can walk around, listens to conversations, facilitates as desired*
• “Ok, click in, I’m going to close the poll”
• Respond
Clicker Q: How many ways can you think of to respond to the graph?

A) \( \leq 2 \)
B) 3
C) 4
D) 5
E) > 5
Responding to the Graph

A few response strategies

- Validate the correct answer. Brief justification. Move on.
- Validate correct answer. Ask students for an explanation.
- Show results. Narrow the options. “Find a different opinion and come to a consensus”
- “Can I hear an argument from B”
- “Can I hear an argument for why not C?”
- Exclude an answer: “Lots of B’s ... that’s not the answer”
- Give a hint and ask them to re-vote.
How to respond when… (A is correct)

Consider:

- Don’t show graph
- Validate, explain, move on
- Validate, ask students for explanation
How to respond when... (A is correct)

Consider:

- Show graph
- “Talk with you neighbours and come to consensus, vote again.”
- “Can I hear arguments from both sides?”
How to respond when... (A is correct)

Consider:
- Don’t show graph
- “Lots of A’s & B’s. Talk with you neighbours and come to consensus, vote again.”
- “Can anyone explain why one might pick B?”
How to respond when... (A is correct)

Consider:

- Show graph
- Talk with your neighbours and come to consensus, vote again.”
How to respond when... (A is correct)

Consider:

- Check to make sure you’re not wrong
- Show graph
- ”Can someone explain their reasoning for B?”
- ”B is actually wrong, try again.”
How to respond when... (A is correct)

Consider:

- Show graph
- “Is the statement of the question unclear?”
- “Can anyone exclude one of the options?”
- Give hint and try again.
- “Starting with A, what are the merits or issues with each choice?”
Some Other Ways to Use Clickers

Student poll
- Set Office Hours
- Informal Student Evaluations

Asses Confidence
- A) True (high confidence), B) True (low confidence)
- C) False (high confidence), D) False (low confidence)
- E) “I don’t know”

Gauge progress through a problem
- A) Working, B) Done, C) Stuck

Reflection
- The most important point about today was...
Feel free to come to me with questions or for support.

And thanks!
Reasons for Using Clickers

Some advantages:

• If they know it - move on
• Enhances group work (eg. pairs)
• Easier to start a conversation
  • Do you like ‘A’ or ‘B’?
• Enriches class discussion
  • Student questions/comments will be deeper
  • You’ll hear from more students
• Student commit to an answer
  • And will be more likely to change their opinion if they chose wrong
• General polling
  • Set office hours
  • % of class that is lost or confident/not confident
A few points to bring up:
- Talk to your students about why you’re using clickers
- Have a clear pedagogical goal in mind

Clicker Q: Should you give grades for getting the correct answer?

A) Yes
B) No