Teaching Toolbox Series: Using "Plickers" to Increase Engagement and Learning

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With Many Thanks to Plicker predecessors: Christina Beatty, Erik Johnson, & Kristy Jeans
What are our goals today?

What are Plickers?

Why are Plickers helpful?

How can you use Plickers?

Let’s get plicking to warm up!
What’s Your Experience?

What do you know about Plickers?
A. I’ve used them!
B. I’ve heard of them!
C. I know practically nothing!
D. I decline to answer! : )

Please write down a question about plickers that you want answered!
What are Plickers?

Polling system that uses QR codes and a phone app
✓ Nothing for people to buy
✓ Cards are very cheap to print
✓ No computer software to install
✓ No need to type questions
✓ Can display responses graphically
✓ Responses are saved for downloading
✓ Anonymous to responders & facilitator
✓ Use for many types of questions

Plickers are just one polling method!
What are our goals today?

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What’s Your Opinion?

Can you tell if people are paying attention, engaging, and/or learning in your class, training, or meeting?

A. Always
B. Sometimes
C. Rarely
D. Never
Why Are Plickers Helpful?

- Attendance increases success (Lukkarinen et al., 2016)
- Uncommonly attentive behaviors increase rapport (Webb & Barrett, 2014)
- Active processing improves learning (Dunlosky et al., 2014)
Why Are Plickers Helpful?

Plickers can improve learning!

- Immediate feedback (Hattie & Yates, 2013; Hattie, 2013)
- Distributed practice (Clark & Bjork, 2013)
- Repeated testing improves memory (Adesope et al., 2017; Roediger & Karpicke, 2006)

- Repeated testing
- Distributed practice
- Immediate feedback
- Attendance
- Develop rapport
- Active processing (explain, apply)
Exploring MBE tools that improve learning

Most effective learning techniques:
- Elaborative interrogation
- Self-explanation
- Distributed practice
- Practice testing

Table 4.1 of Dunlosky et al., 2013

Dunlosky et al., 2013
Comprehension Check!

Plickers are likely to help improve learning because they
A. encourage distributed practice
B. allow application of concepts
C. create opportunities for repeated testing
D. all of the above
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What are our goals today?

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How Can You Use Plickers?

- Get started on Plickers website on a computer
  - Download and print cards
  - Make a folder for a class, training, or meeting
  - Upload a roster if you wish

- Also download Plickers app to your phone
  - Think of what questions you want to ask

https://www.plickers.com/
How Can You Use Plickers?

Click on Cards

- Choose cards to download and print
- I suggest getting them laminated
- Ask PrintShop not to trim them much (because thumbs obscure the QR codes)
How Can You Use Plickers?

- On the computer, click on Classes
  - Name a new class, meeting, or training session
How Can You Use Plickers?

- On the computer, click on the new “class” name
  - Click on roster and add names of attendees
  - Can be copied from a Word or Excel file
  - This assigns each person a numbered card to use
  - Or leave this black to keep attendees’ responses anonymous
How Can You Use Plickers?

- On phone, open Plickers app
  - Click on the “class name”
  - Click on Create to give an “on the fly” question
  - Enter a keyword to remember the name of the question
  - Click on the letter of the right response (if there is one)
  - Click create
  - Click Scan and scan the phone around the room
How Can You Use Plickers?

- On the computer, click on LiveView to show peoples’ responses
  - The left tab shows individual responses by number (and name!) so be careful!
  - Click tab on the right to see the histogram of responses

Live View Ready!

Select a question in your Plickers iOS/Android app to project to your class.

1. Open the Plickers iOS/Android app and select your class.
2. From the app, select the question you want from your Queue.
3. Live View will automatically update with your question!
How Can You Use Plickers?

On the computer, click on Reports to see data from a session

- Click Scoresheet to download the scores for a session
- Can choose Excel or CSV formats
How Can You Use Plickers?

- Alter the file if needed and then enter into Cobra if you take attendance or do participation for a course.
- Should be about 10% of students’ grades.
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- Alter the file if needed and then enter into Cobra if you take attendance or do participation for a course
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How Can You Use Plickers?

Classes

Meetings

Trainings

How might you use Plickers?
How Can You Use Plickers?

You can use them to get to know students, build rapport, learn their experiences, create a democratic class, etc.

0.1 Who are we?

What is your educational goal? Are you...

A. Just taking some fun classes!
B. Getting a certificate
C. Working towards an Associate’s degree
D. Planning on transferring for a Bachelor’s degree

What’s your opinion?

Will you pledge to NOT drop without seeing me first?
A. Yes
B. No

Warm Up – Ch 14 – Psych Disorders

Have you, a family member, or friend ever had a psychological disorder?
A. yes
B. no
C. not sure

Psychological disorders are so common that half of all people will experience a psychological disorder in their lifetime.

Pre-Spring Break Psycho Lunch!

And a belated birthday celebration for Kylie, Nick, and anyone else?!?

What shall we have for lunch?
A. Pizza
B. Subs
C. Straight up sugary, fattening carbs!
D. Something else?

Wear your fave spirit gear for bonus points!
How Can You Use Plickers?

You can use them for warm-up activities, in class demonstrations, class activities, debates, case studies, etc.

Introduction to Ch 7-Memory

How many digits in the number \( n \) (\( \pi \)) did Akira Haraguchi memorize in 2006?

- A. 67,890
- B. 100,000
- C. 83,141
- D. 217,851

Click here to read about Akira Haraguchi’s efforts to memorize \( n \) (\( \pi \)), a number with an unknown limit of uncountable digits—

3.1415926535897932384626
43383279502884197169399
37510

Class Activity

How to Interpret Your Results for Eysenck’s test

What do the results from Eysenck’s biological trait theory test indicate that you are highest on?

A. extraversion
B. neuroticism (emotional instability)
C. psychoticism (rebelliousness)

Now, what about lowest on?

A. extraversion
B. neuroticism (emotional instability)
C. psychoticism (rebelliousness)

Are the results consistent with your view of your personality?

Is Eysenck’s theory a good way to understand personality or not?

Fact or Not?

Now that you have engaged in critical thinking, is this statement:

A. Fact
B. Not

Click here to see the graphic:

http://slideplayer.com/slide/7888621/25/images/29/Specialist+taste+buds+map+to+certain+regions+of+a+tongue.jpg

Activity on How We Acquire Memories!

How many objects did you get correct for the Remember 1 task (where you just wrote down the names of objects you remembered)?

- A. 0-3
- B. 4-7
- C. 8-11
- D. 12+

Now, how many objects did you get correct for the Remember 2 task (where you saw the objects again and wrote the numbers of the ones you remembered)?

- A. 0-3
- B. 4-7
- C. 8-11
- D. 12+

Why did you remember more?

Case Study #1 Answers

Which of the following disorders is Sam most likely to be diagnosed with?

A. Panic disorder
B. Generalized anxiety disorder
C. Specific phobia
D. Obsessive compulsive disorder

Sam’s parents believe that he shows symptoms of a psychological disorder. Can you figure out the symptoms and the disorder?
How Can You Use Plickers?

You can use them for comprehension checks, syllabus quiz, just in time teaching, feedback, think-pair-share, etc.

Did You Get It?
What information is processed in the circled region?
A. Language
B. Object recognition
C. Vision
D. Attention

Did you get it?
A candidate for governor of New York State once mailed trash-scented campaign flyers to discourage people from backing Democrats. He was most likely trying to use __________ to influence voting.
A. operant conditioning
B. habituation
C. classical conditioning
D. sensitization

Ps. The answer is on the syllabus!

Psy 101 - Week 7 Announcements
1. Please...
   - Get your Plicker card
   - Turn in the Ch 11 Activity sheet
   - Get the Ch 5 Activity Sheet!
   - Get your updated syllabus schedule!
2. Test 1 Feedback!
   - Test 1 MCQs = 81% - Great job!
   - 1 person missed Test 1 MCQs :(
   - 8 people missed the short answers! :(
   - Short Answers will be graded soon!
   - Do Test 1 reflection sheet for bonus points!!!
3. Do Advising Meeting in next week to get all points!!!
4. Homework:
   - Ch 5 InQ due by 11:59 pm TODAY!
   - Ch 5 Class Activity sheet due Thurs!
   - Ch 5 Quiz due Sat, 11:59 pm!
   - This opens Ch 6! : )

How was Test 1?
A. Super fantastic!
B. It was pretty good.
C. It was just ok.
D. The pits!! :(
Did we meet our goals today?

- What are Plickers?
- Why are Plickers helpful?
- How can you use Plickers?

Please fill in the green evaluation sheet about the presentation!
Please feel free to give comments.

A. Would you like more workshops about how to engage people and improve learning?

B. 

C. 
Thank you for the chance to work with you!

Please let me know any thoughts or questions you have!

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Or visit us in CETL!

Please look for this presentation on SPARK in the section:
Center for Excellence in Teaching and Learning


Full text: https://scholarworks.iu.edu/journals/index.php/josotl/article/view/4259/19210