

#### **Introduction to Clickers**

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### What are Clickers?

Clickers are devices used in the classroom that allow teachers to engage students, help teachers gain maximum feedback potential, and voice students' opinions (anonymously or publicly). There are many uses that have been proven to benefit both teachers and students with clickers.

### What Clickers can be used for

- Pre-assessment
- Measure student attitudes
- Check if students have done the reading
- Get students to confront common misconceptions
- Increase student retention of what you teach
- Test students' understanding
- Facilitate testing of conceptual understanding
- Facilitate discussion and peer instruction
- Creating a "small class feel" in large classes

#### Tips on Teaching with Clickers

#### 1. Familiarize yourself with clicker software and use before implementing it in your course (Han, 2014;

Shapiro, 2009; Nielsen, Hansen, & Stav, 2013; Katz, Hallam, Duvall, & Polsky, 2017) Students get annoyed when technology doesn't function right, and/or when an instructor has to fumble around with it. While some issues can't be foreseen, instructors can make sure that they know how to use clickers from both an instructor and student perspective for their specific intended use.

#### 2. Ensure that clicker material is well thought out and ready to go

(Han, 2014; Nielsen, Hansen, & Stav, 2013)

Students can tell when teaching material is quickly put together. Take your time to fully develop your lecture/presentation that will require clicker use, and be consistent once introducing clickers into your learning environment.

#### 3. Introduce and frame clicker use in the classroom purposefully

(Trees & Johnson, 2007; McDonough & Foote, 2015; Nielsen, Hansen, & Stav, 2013; Han, 2014)

Students will be more inclined to perceive clickers' positive influence on their learning if instructors emphasize this throughout the course.

#### 4. Use clickers to encourage collaborative thinking and learning

(McDonough & Foote, 2015)

Students enjoy the conversation and consensus process of collaborative clicker use. Create opportunities for students to discuss with peers before responding to a question.

#### 5. Present conceptual questions that require thinking to respond

(Nielsen, Hansen, & Stav, 2013)

Students are bored by factual questions with "Yes," and "No" answers. Integrate more complex questions that require students to think or discuss before responding.

#### 6. Provide balanced time for immediate feedback and discussion on clicker questions

(Hoekstra, 2008; Lantz & Stawiski, 2014; Nielsen, Hansen, & Stav, 2013; Johnson, & Lillis, 2010; Katz, Hallam, Duvall, & Polsky, 2017)

Students appreciate when they are able to see their clicker responses and have enough time to discuss and process correct and incorrect answers. However, be mindful to not provide too much time for answer and discussion as students tend to become bored and/or unfocused on course material when waiting to move on.

#### 7. Create various response options to clicker questions

(Nielsen, Hansen, & Stav, 2013)

Students worry that their true opinions are not best represented with limited clicker response options such as "Yes," and "No." Provide options such as "I'm not sure," or "Maybe" for those students who are not certain about an answer.

#### 8. Use both individual and group clicker activities

(Daniel & Tivener, 2016; Hoekstra, 2008; Jones, Antonenko, & Greenwood, 2012)

Students enjoy the benefits of both individual and group clicker use. Provide opportunities for students to use their own clicker as well as to join a group of students with one group clicker.

#### 9. Use clickers for more than attendance points

(Katz, Hallam, Duvall, & Polsky, 2017; Shapiro, 2009)

Students respond negatively to clickers when they are used solely for attendance purposes. Ensure that students feel that their money for clickers has been well spent by making the technology consistently integral to learning activities.

#### **10.** Value traditional teaching practices

(Bartsch & Murphy, 2011)

Students can still benefit from traditional learning practices, and some may even prefer them. While pedagogical and social developments may pressure you to integrate new technology in your course, allow for traditional practices such as hand raising, hand writing, and paper handouts to still function.

### What Clickers should NOT be used for

- Just taking attendance once per class period
- Less than 4 times per class period
- For quizzes or exams
- Without reaction (meaning if the majority does not get it, do not continue. Instead, react with discussion, a demo, or something else. Then, ask the question again or add a question on the fly to make sure they get it.)

### **Resources for more Training and Information**

- Check out ISU workshops via CTLT
- Web-Ex training sessions, demo videos, etc. via Turning Technologies

### What you need to get started

- The software is free! (contact your IT support person to make sure you get the correct version)
- Contact Learning Spaces to make sure clickers is set up for your classroom (link can be found here: <u>https://ctlt.illinoisstate.edu/technology/clickers</u>)
- If you add clickers to your textbook request form for a class (see website for ISBN number)
- A working knowledge of PowerPoint
- If you attend a clicker workshop, CTLT will provide an "instructor's kit."

### Practice with the Clicker

This is what the clicker looks like:

- Click the **Channel** button
- Click the two number code for that classroom
- Click the **Channel** button again

Note: If done correctly, the light should turn green on the device and the correct number displayed in the LCD. If not, press the buttons more deliberately.



## Hands on Creation of a Presentation

- You should always launch the TurningPoint application, click on PowerPoint Polling, let it open PowerPoint, and then open your presentation
- If you double-click on the file it will typically just open in PowerPoint without the TurningPoint plug-in tab

### **Creating your clicker-enabled PowerPoint**

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#### Click on PowerPoint Polling

After you've created a new PowerPoint, make sure you're on the Turning Point tab and Click on PREFERENCES at the top



### Settings - You need to do this **BEFORE** making Presentations

#### **ONLY ONCE PER LOCATION – Office, classroom, etc.**

Typically leave SOFTWARE preferences alone

On the left click on **CONNECTIONS** 

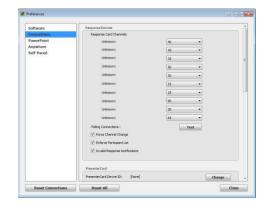
- Check the box for FORCE CHANNEL CHANGE
- Leave the box for ENFORCE COURSE unchecked [note: with this checked, any unregistered clickers will not be part of the session data. Keep this UNCHECKED if you'd like to at least see that an unregistered clicker was in the classroom.]
- (Leave Invalid response notification checked)

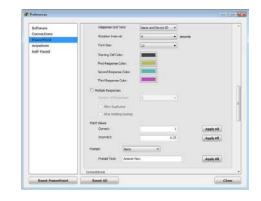
On the left click on **POWERPOINT** 

- Scroll down to POINT VALUES
- Put in the values you want for Correct and Incorrect answers
  - Many instructors do 1 for correct
  - Many instructors do .5 for incorrect just for participating (or for opinion type questions)
- Click Apply All after changing the values
- Check and change your desired "Bullet Format" and click Apply All
- Choose your Countdown Timer (for most, selecting None will NOT put a pre-set timer on every clicker slide)
- Optionally you might also want to check the box to show response grid, but only for small classrooms



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### **The Presentation**

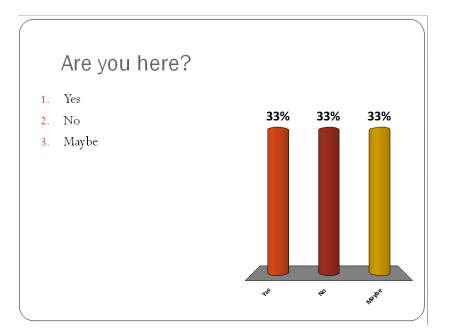
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#### **Creating Slide One: The Icebreaker Slide**

• On the TurningPoint (TP) toolbar click on NEW



- Select MULTIPLE CHOICE
- Type in the following question:



#### Creating Slide Two: The Correct Answer Slide

- On the TurningPoint (TP) toolbar click on NEW
- Select MULTIPLE CHOICE
- Type in the following question:

### We are also going to include a correct answer indicator to let students know the correct choice after

Polling has closed
On the TP menu, click on OBJECTS and select "Correct Answer Indicator" and select CHECKMARK

25%

.9<sup>16</sup>

• On the TP menu, click on OBJECTS and select. Correct Answer indicator, and select CHEC (or one of your choice)

# What year was ISU founded?

25%

25%

25%

1851

- Click off of the bulleted list and you will see your slide preferences
- Make answer C correct

Adding a Correct Answer Indicator

A. 1492

B. 1776

C. 1857

D. 1976

• All of the other options will now show up as incorrect

Auto Import Tools -New **Objects** Compete Slide Pane 📑 Manage 🐐 🚢 Participar Correct Answer Indicator 🕨 Rectangle Charts Þ Checkmark 1 Animated Charts ¥ Smiley Countdown Þ Star Grids Þ Arrow Prompt Þ **Blinking Rectangle** 2

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#### Changing the Chart Type

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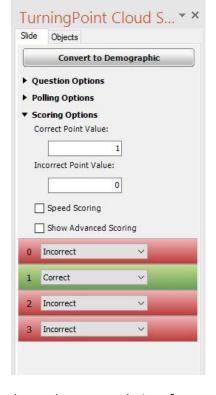
**Response** Counter

Stats

Sometimes your chart doesn't fit well as a vertical bar chart. Other times you may just want to have a different layout. Let's explore some different looks.

Custom

LIIULI



- On the TP menu, click on OBJECTS and select CHARTS
- You can select any different type of chart you want

#### Adding a Countdown Clock

It's sometimes useful to have a countdown timer in a slide (especially in large classrooms).

- Click on OBJECTS and select Countdown
- It is two pieces, so make sure to move both if you move it
- Change how long the countdown is for that object's options, not by hand typing it in on the slide.

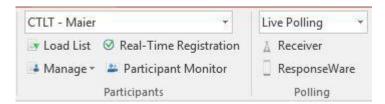
### **Running the Presentation**

# Make sure the **3** crucial steps are taken

- 1. Session is reset (save any data left from a previous class just in case)
  - Select Reset > Session



- 2. Participant list is selected
- 3. Input is set to LIVE POLLING (instead of simulated...for this training class you are going to be running in SIMULATED since you are not at the instructor station)

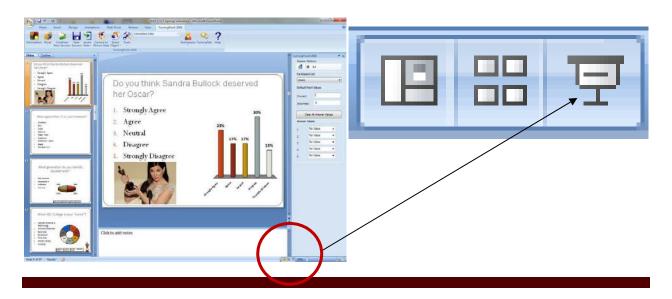


#### Run the presentation like you would a PowerPoint presentation

- 1. Go to your first slide
- 2. Launch the presentation

(I usually hit F5 or the Slide Show icon aka "the wine glass")

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### Viewing the Info Bar

In the upper right of your screen you will see the info bar (F9 will make it show or disappear)



- While polling is open there is a green Polling: open square on the right
- After you are done receiving responses, click on your slide to end polling
- You will see the green: polling open has changed to red: polling closed



- You will now also see your chart generated to show you the responses
- Click your slide to go to the next slide

#### **Response Grids**

• While polling is open, click on the response grid

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- This is useful if you are using a participant list and you have a small (less than 15 or so) class
- Click an answer on your clicker to my slide (instructor) for an example

#### **Re-polling**

- Let's assume that you want to re-ask the same question after some peer discussion or a demo
- After you close a slide, click on the repolling icon

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### After the Presentation

# **SAVE YOUR SESSION !**

If you do not save your session, it is **GONE**!!!

• This is your Session Data **NOT** your PowerPoint presentation

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- It will default to saving this to the local computer under your Documents in a TurningPoint folder.
- You will want to save the data to TurningPoint's default location
- The session file name will automatically include the date and time