

Engaging students in the classroom using audience response systems (clickers)

A step-by-step guide for first time instructors

Introduction:

- Automated response systems allow instructors to take anonymous opinion surveys, get immediate feedback on class comprehension or administer short quizzes.
- The simplest, and most frequently used format is multiple choice based questions. Clickers also allow for short, text based, responses.
- Turning Point Technology (Clickers) is the recommended vendor, and the system that has been adopted by the University of Utah. This means:
 - technical support is available on campus (Contact: Eric Pasion, Systems Administrator at TLT, at 801-585-0207 /eric.pasion@utah.edu)
 - Clickers can be purchased through the campus store
 - The system is integrated with Canvas for easy upload of student scores to the Canvas gradebook.
- Turning Point device options:
 - Clickers: A secure, handheld device that is not reliant on internet access. Clickers limit issues with dropped connections and reduce opportunities for cheating (text messaging, surfing web, etc...).
 - Smartphone: Students download an APP and use their smartphone to respond to questions. This system works well in smaller classes, where it is easier to monitor cheating.

Creative ideas for implementing clickers in your classroom

Clicker questions can be used for various purposes – below are just a few ideas for use:

- 1) Quiz on the reading assigned in preparation for class
- 2) Test recall of lecture point
- 3) Do a calculation or choose next step in a complex calculation
- 4) Survey students to determine background or opinions
- 5) Elicit/reveal pre-existing thinking or correct misconceptions
- 6) Test conceptual understanding
- 7) Apply ideas in new context
- 8) Predict results of lecture demo, experiment, or simulation

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Here are some quick setup guides to help you get started

A. Video tutorials with step by step instructions:

<https://www.turningtechnologies.com/support/turningpoint-cloud/tutorials/educators>

Some of the important steps explained in the video tutorials are also detailed below, *in the step by step written instructions.*

B. Step by step written instructions:

Step 1: Creating a Turning Account

A Turning Account is used to tie together all software accounts and response devices. A Turning Account is required for use with Turning Technologies products.

1. Go to <https://account.turningtechnologies.com/>
2. Enter your school or organization email address and click Create.
3. Check your email and click the link to verify your Turning Account.
4. Enter all required fields as noted by the asterisks.
5. Enter and confirm your password in the fields provided.
6. Select the box labeled "By checking this, you agree to comply with the End-User License Agreement and Terms of Use". Click Finish.
7. Instructors do not need an access code to register. Only students do.

Step 2: Download TurningPoint Cloud

Turning point cloud is the software program that allows you to use polling devices, collect, view and manage data using one application.

1. Go to <https://account.turningtechnologies.com> and sign in to your Turning Account.
2. Select Downloads from the left menu.
3. Below TurningPoint Cloud, select the Mac No Install version.
4. Save the file to a specified location.
5. Double-click the DMG file.
6. Drag and drop the TurningPoint Cloud icon to the Applications folder. (It is recommended to create an alias and add it to the Dock.) Double-click TurningPoint Cloud icon to open.

Step 3: Polling options.

There are 3 polling options in Turning Point:

1. Powerpoint Polling: Embedding your questions/polling in a PowerPoint presentation
**This option offers less flexibility.*
2. Anywhere Polling: Preferred. Polling buttons float on top of any presentation. Questions are keyed, and grades are automatically tabulated by Turning Point. **This option is great for beginners and offers a great deal of flexibility for changing presentations or asking questions on the fly.*
3. Self Paced Polling: Where students can take tests using their devices.

Video tutorials for using any of these polling options can be found here:

<https://www.turningtechnologies.com/support/turningpoint-cloud/tutorials/educators>

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Step 4: Setting up Canvas integration

Integration allows for quick upload of student scores into canvas following class. Those not using canvas do not need to set up the integration. Simply export scores as a csv file by clicking export in the results manager.

1. Log in to Canvas.
2. Click the appropriate course.
3. Click Modules.
4. Select Add a New Module.
5. Enter Clicker Registration Tool in the Name field.
6. Leave 'lock module until a given date' unchecked.
7. Leave 'students must move through requirements in this module in sequential order' unchecked.
8. Click Add Module.
9. In clicker registration module, select Add item to module (The + button).
10. Select add External Tool.
11. Select Turning point clicker registration from the list.
13. Select Don't Indent from the Indentation drop-down menu.
14. Select Add Item.

You are done! Students will click on this tool through canvas to register. They have to do it through the canvas course.

Step 5: Where students buy clickers and/or a license

- Students can purchase their Turning Point account license and clickers from the University of Utah bookstore. Use Karen Zundel's book order form to indicate you will be requiring students to purchase Clickers. This will ensure the bookstore has enough devices available.
- Smartphones or a web-enabled device (IPOD, IPAD, laptop)
Depending on your course structure, Smartphones or other web-enabled devices may offer a viable alternative to requiring clickers. *Note: Instructors can also give students a choice of which device they want to use: clickers, smartphone or a webenabled device.

Step 6: The student registration process

- Step-by-step guide to help students register and use clickers.
<https://www.turningtechnologies.com/info/pdf/Canvas.pdf>
 - Registering any type of device (clickers, smartphones, web-enabled devices)
 - Registration must be done through your Canvas course page
 - Students will use the "clicker registration tool" (see Step 4)
 - Smartphones: Students will need to download the FREE "Responseware" APP for their ios/android devices
 - web-enabled devices, like a laptop, can access responseware through this website:
<https://responseware.turningtechnologies.com/responseware/>

Step 7: Importing (& updating) the Canvas student roster on your Turning Point account

Frequent updating of the course roster is important during the early weeks of the semester when students are still registering their devices.

1. Open TurningPoint Cloud and sign in to your Turning Account.

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2. Click the Manage tab on the TurningPoint Cloud Dashboard.
3. Click the Participant List drop-down menu and select New. The Create Participant List window is displayed.
4. Enter the course number and semester for name and Select Download from Integration and click Create List. The Connect to Integration window is displayed.
5. Select Canvas from the Integration drop-down menu and enter the Server Address in the box provided. Your server address is <https://uofutah.turningtechnologies.com>
6. Click Connect. The Canvas Login window opens. Enter your Canvas Username and Password and click "Log In". The Import Participant List window is displayed.
7. Select the course(s) in which the participant list(s) is to be imported and click Import.
8. The participant list now appears in the left panel. You have all your participants added.
9. You may need to update the list through turning account if students register late.

Ordering Clickers for practice or use

- **Demonstration & Trial Use:** Faculty can arrange to demonstrate or try clickers for a maximum of five weekdays. Contact Teaching & Learning Technologies in the Marriott Library Faculty Center, Suite 1705, at 801-581-6112-option 1. Contact person: Eric Pasion 801-585-0207 /eric.pasion@utah.edu
- **Instructor Starter kits:**
 - Instructor kit includes: receiver (plugs into a laptop USB port), handheld device (clicker), and quick start manual. *Kits are ordered through the Campus Bookstore.*
 - To order a starter kit or for inquiries about Turning Point equipment Please contact: Dave Nelson: dnelson@campusstore.utah.edu or Shane Girton: sgirton@campusstore.utah.edu or call 581-6326.
 - One week after placing the order, your kit may be picked up from Teaching & Learning Technologies, please confirm pick-up location while placing the order.
 - *To ensure availability, and sufficient time to familiarize yourself with clicker technology, please order your instructor kit and TurningPoint Clickers from the Campus Store by these recommended due dates for each semester.*

Fall Semester: April 15	Spring Semester: October 15	Summer Semester: March 1
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Need help? Reach out for training & support

- Most Turning Technologies support can be accessed directly from the Turning Technologies website <https://www.turningtechnologies.com/support>
- **Individual one-on one training:** One-on-one training sessions are available with the University of Utah Turning Point representative. He is on campus multiple times a month. Steven Orton, Account Manager, Turning Technologies. email: sorton@turningtechnologies.com Jacob Paxton, Client Success Leader, Turning Technologies: email: jpaxton@turningtechnologies.com
- **Webinars:** <https://www.turningtechnologies.com/support/turningpoint-cloud/online-classes>
- **Tech support:** <https://turningtechnologies1.zendesk.com/hc/en-us> OR call 1-866-746-3015
- **Local assistance:** Local help can be obtained through Teaching & Learning Technologies Support Options, the Eccles Health Sciences Library, or the Campus Store.
 - TLT systems administrator Eric Pasion. Ph: 801-585-0207; Email: eric.pasion@utah.edu
 - TLT Help Desk Phone Support 801-581-6112-option 2
 - TLT Email Support: classhelp@utah.edu