Classroom Response Systems Guide

Frequently Asked Questions

What is a Classroom Response System?

A Classroom Response System (CRS) or Student Response System (SRS) is a tool with which instructors can collect student input throughout a class session. This input can come in the form of polls or questions with correct answers.

While instructors can use a CRS to grade students on participation or score them in regular knowledge checks, the best use of a CRS is to keep students engaged in course material, check for understanding, and make onthe-fly adjustments to live instruction.

What are Clickers?

Clickers are physical device which use a signal (usually radio, though some do use infra-red like a universal remote control) to send answers to a receiver that works with software to collect response data.

What does "B.Y.O.D." mean?

"B.Y.O.D." stands for "Bring Your Own Device." The classroom response field is moving away from clickers and towards systems in which students use a mobile device tied to an account to respond in class. In most cases, these devices can be anything from an iPod Touch to an Android smartphone to any laptop or other webcapable device.

What are TurningPoint Cloud and ResponseWare?





TurningPoint Cloud is the software we use at UW-Green Bay to host BYOD sessions.

ResponseWare is the BYOD application students use to participate in a Turning Cloud session.

How do I request Turning Technologies "ResponseWare" for my course?

Beginning with requests for the Spring 2017 semester, Response-Ware licenses should be requested



through the Phoenix Bookstore along with textbooks. The bookstore has received bulk semester pricing for a set number of licenses, so please get your requests in as early as possible. ResponseWare licenses are available

for purchase directly from Turning Technologies (the vendor for this platform) but are not available at special one-semester pricing.

Once you have requested Turning as your CRS, follow the <u>integration instructions</u> on UWGB's UKnowlt Knowledge Base.

Can I still request physical clickers?

We can no longer support physical clickers for use with TurningPoint. Departments may wish to purchase a "classroom set" of physical devices from Turning Technologies for use in certain circumstances (such as labs where certain materials prohibit BYOD).

In rare cases when individual students do not have a laptop, smartphone, iPad, iPod touch, or other webenabled device suitable for ResponseWare, their instructor will need to work with them on an accommodation. A very limited number of physical clickers will be made available through the Phoenix Bookstore may be made available for rental in such circumstances.

That said, Plickers are another, decidedly inexpensive, alternative to physical clickers for one-off sessions, guest lectures, and other special cases such as labs.

Can I use a Classroom Response System for a non-course special event?

Yes, but we can only support TurningPoint or ResponseWare for courses. Non-course special events may want to use Plickers, Kahoot, or another tool instead. Please take a look at "What alternatives are there to ResponseWare?" below.

What alternatives are there to ResponseWare?

In addition to ResponseWare, the kind folks in the Center for the Advancement of Teaching and Learning (CATL) are willing to work with faculty to find out if there is another classroom response solution that fits their needs. In many cases **Plickers** or **Kahoot** are good alternatives. If instructors find other solutions on their own, they should just be aware that we only have the resources to support this "limited menu" of choices.

What is Kahoot?



Kahoot is a free, web-based, BYOD-style polling and quizzing platform designed with simplicity in mind. Instructors build multiple-

choice quizzes (four answers per question) and present them live in a web browser. Students join a session through their own web browser by entering a sixcharacter session code and a screen name. If students use their student username as their screen name, it is possible to create a file ready to import into a Learning Management System (LMS) such as D2L, Canvas, etc.

What are Plickers?

Plickers are specially designed Quick Response (QR) Coded signs (limit 63), which students orient in a given direction to submit an answer (A, B, C, or D). The





instructor uses an iPad, iPhone, or Android device and an app to scan the codes in the room and match them with their student respondents. Plickers are "a powerfully simple tool that lets teachers collect real-time formative assessment

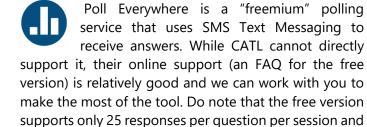
data without the need for student devices" (https://plickers.com/).

What do I do if I have more than 63 students but want to use Plickers?

Instructors can print Plickers on white or light-colored pages. Instructors can build a little competition into their courses and split the students into color-coded "teams" (blue, yellow, pink, green, etc.) increasing the potential number of students by 63 for each color. With four colors, an instructor can have up to 252 students. The instructor will then need to scan the room four times (once for each team).

What is Poll Everywhere?

does not have the option to generate reports or grades.



I've heard about TopHat. Should I use that as my CRS?

We do not recommend that instructors use TopHat as we cannot offer support for it on campus. We recommend that if instructors prefer to use a CRS with a student-purchased license, that they utilize Turning Technologies. Licenses for Turning Technologies ResponseWare are available from the bookstore. It's highly recommended that instructors not venture to other student-license-based vendors so that students are not required to purchase licenses for multiple vendor products in a given semester.

Which Classroom Response System should I use?

Read on! If you're finding it hard to decide on a CRS based on this FAQ, please don't hesitate email CATL at catl@uwgb.edu to set up a time to meet with us. We are happy to assess the needs of your course and determine the right CRS for your course!

Classroom Response Best Practices

Be clear about the CRS off the bat.

Manage expectations about the CRS. Be clear just what you're doing with it. Do you use it to gauge understanding? Are they being graded? What happens if the CRS fails in the middle of a lecture? Put a memo in your syllabus about what you'll be using and why. Not sure what to say? The Center for the Advancement of Teaching and Learning (CATL) will be glad to help you craft just the right message!

Don't use it to take attendance.

If you're concerned about attendance, send around a sign-in sheet or take roll. Research consistently shows that students resent using a CRS for attendance. While, this is truer when the CRS is used *only* for attendance, it's still not best practice.

In lieu of an "Are you here?" question, consider using a warm-up or reading check question at the beginning of class instead (you can always then re-poll students at the end of class with the same question or one which expands on the first).

Integrate; don't "add on"

Use your CRS to engage students by weaving questions throughout lectures or to supplement or drive discussions and group activities. It's best not to use the CRS as a means to get students to simply repeat the information they were just given but rather to reflect on or re-apply that information.

How often to use a CRS

Use your CRS occasionally to check understanding or regularly to increase engagement. In either case, use the CRS often enough to make it "worth it" to students but not so often that it becomes burdensome or detracts from course content.

It's best to begin with low-stakes versions early in the semester to soften the learning curve. Consider "getting to know you" questions like "What is your major?" or "I took this course because..." which will both help you gauge the overall make-up of your course and provide them an opportunity to learn and use the tool without penalty for error.

Make it clear during the first few sessions that technical difficulties will happen and that this is the time to seek support if needed.

Create low-stakes competition

Use the CRS to divide your course into teams and create friendly competition as appropriate. Some CRSs also allow you to determine who answered correctly the fastest or most often. Consider offering a daily bonus point for accuracy.



Make your teams fun (Hufflepuff, Ravenclaw, Slytherin, and Gryffindor) or subject specific (Transition Metals, Noble Gasses, Alkali Metals, Lanthanides, etc.)

How much weight to give to CRS responses

The jury is still out on an exact number since how you weight your responses will depend on the rest of your CRS policy. If you conduct a poll every day, it may be a good idea to give students one or two "freebie" days in case they need to miss class for good reason. In general, CRS grading should be flexible and should not total more than 10% of the final grade for the course. Some instructors find it useful to break CRS points into two categories: Participation for those who are engaged with

the CRS but inaccurate in their responses; and Performance for *correct* answers.

It's best practice to exclude CRS participation or performance points the first week or so of the semester as students get used to the tool.

Periods of focus

Students don't like to be clobbered over the head with a CRS, but they'll also be averse to having to use one if they don't use it often enough to be worth it (especially if they have to pay for it!) Consider the frequency with which you put up questions. In general, try peppering your lectures with a CRS question (a good frequency may be one or two questions every eight to ten minutes) to re-capture student attention. As you do this for a few sessions, you'll get a feel for how this frequency will need to be adjusted.

Re-poll, re-assess, adjust

Using the feedback you get from a CRS is encouraged! Don't be afraid to ask the same question several times or in different ways throughout a semester, a unit, or even a session. Re-polling to track changes of opinion or check for understanding or re-assessing to keep tabs on learning can help to steer your instruction to the students' benefit.

Be flexible and be prepared

No technology (however simple) will work 100% of the time. Have a back-up plan for when your CRS of choice fails either on a class-wide scale or when a particular student can't participate fully due to a malfunction. (Don't forget: hand raising is a CRS too!)

Take a look at the research...

Fies and Marshall put out a rather nice <u>review of CRS</u> <u>literature</u> in 2006. They and others regularly conclude that "CRSs promote learning when coupled with appropriate pedagogical methodologies." We hope that this document is a step in that direction.

If you're left with questions or concerns, this is only a starting point. Please do not hesitate to reach out to us at catl@uwgb.edu

Jazzed up Classroom Response activities

Teams

Use a CRS to group students into teams. This is a great way to group students either by commonalities and shared interests or (using checking for understanding questions) to go back at a later date and group stronger students with those who may need further guidance.

Voting

Not everything is about right and wrong. Has it come time to decide something as a class? Conduct an anonymous poll in class.

Choose Your (Our) Own Adventure

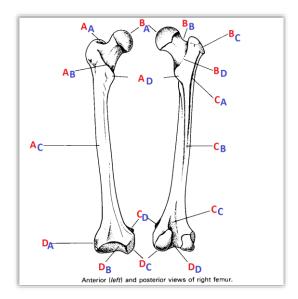
A Choose Your Own Adventure is a series of paths which branch out from one another based on choices. This is usually accomplished by a series of questions which fork in one direction or another based on one person's choices—there are even novels like this in which the reader must advance or trace back to various pages based on their answers to questions at the end of each section. In a Choose Our Own Adventure, the class votes on which path to take. A lively discussion may be needed to break ties. Consider using this also in student-directed sessions. Students can research a topic and develop a Choose Our Own Adventure to present to the class.

Live Debate Feedback

Some CRS systems allow for continuous re-answering of poll questions up until the polling closes. Hold a debate in class (with up to four participants for ABCD poling options) and have students continually update (or regularly check in) with who they feel is coming out ahead.

So you want them to identify—but you've only got four choices...

When you'd like to have students identify something on a map, chart, or diagram, but your CRS is limited to four choices (ABCD), one solution is to use multiple responses to answer a single question. For example: If you'd like to ask "Where is the Popliteal surface?" using the image below, you can ask "Red letter?" and then "Purple letter?" If they've answered C for both, they're correct.



Note: It's always good to have colors also identifiable in another way for the color vision impaired. Here red and purple can also be identified as higher and lower.

Further Resources (Links)

Fies and Marshall's Classroom Response Systems: A Review of the Literature (2006) →

Kahoot's "How It Works" page ∞

Kahoot's FAQ page ∞

Plickers "Getting Started" video ∞

Plickers support page ∞

Turning Technologies "User Guide" pages €