

Clicker Technology – too techno for me!

Clickers are hailed as a novel way to engage students within your classroom. But, are you a busy lecturer with enough to do; does this strike you as just more time consuming work and – there's technology involved – does that turn you right off??

As a new, part time lecture just finding my feet, I thought I would try them out and the purpose of this article is to tell you how I got on.

So what is the technology then?

The actual clickers are just a little key pad which allows the students to select a number or letter. The clickers come with a USB key which you plug into your computer and this is the gadget that recognizes the keys pressed by the students.

DIT uses Turningpoint clickers and as a lecturer, you will need to download a software plugin for PowerPoint from the turning point website. This is relatively straight forward.

<http://www.turningtechnologies.com/responsesystems/support/downloads/>

The software appears in PowerPoint as an extra toolbar along the top. Instead of inserting a PowerPoint slide in the middle of your presentation, you just insert a Turning point slide (they look the same). You create a question and multiple choice answers and the rest is up to the student. If you can use PowerPoint, you should be able to use Turningpoint.

The screenshot shows a Microsoft PowerPoint 2008 window titled 'Revision quiz with clickers [Compatibility Mode] - Microsoft PowerPoint'. The interface includes a menu bar (File, Home, Insert, Design, Animations, Slide Show, Review, View) and a toolbar with various icons, including a 'Response Devices' dropdown menu. The main slide area displays a poll question: 'You enter your question here'. Below the question, there are four multiple-choice options, each represented by a horizontal bar and a percentage of 25%:

- 1. These are
- 2. Your
- 3. Multiple choice
- 4. Answers

The right-hand side of the window features a 'TurningPoint 2008' task pane with the following sections:

- Session Options:** Includes a 'Participant List' dropdown set to '(Anonymous)' and 'Default Point Values' for 'Correct' (1) and 'Incorrect' (0).
- Answer Values:** A table with four rows corresponding to the poll options, each with a 'No Value' dropdown menu.

The bottom of the window shows the Windows taskbar with the system clock at 9:36 AM on 12/16/2011.

When the slide appears, the students select an answer and when you close the polling, a chart appears showing the students' answers.

You can choose which type of chart you want to display the answers. The benefits are obvious, it shows you immediately how much the students have understood, so immediate feedback can be easily actioned.

So, I've tried it once, would I bother again? Yes, but with some major changes ! I set up a lecture at the end of the semester as a 'Who wants to be a millionaire' revision lecture and created about 70 questions with a class of 25. I explained that the clickers were similar to those used on 'Who wants to be a millionaire' – let's ask the audience .

Here's how it went:

Registration tool

The software gives you the opportunity to assign a particular clicker to each student. I wanted to give a winner's prize for the best student so I trialed this. The registration tool is very easy to use. It is a matter of creating a spreadsheet of class names and then running the wizard when everyone has a clicker in their hand. This shows the Real Time Registration Tool wizard.



The software identifies the clicker associated with each student. Does it matter if there are students absent? No – it still works. I also had a student come in late, after the registration was completed and he was also able to join in, albeit the software did not have a name against his clicker.

Who wants to be a millionaire

I explained the use of clickers referring to this show and the 'ask the audience' part.. I had the theme music running at the start of the class and during a few questions, the countdown music too. This got a few smiles. The prizes for the best three students were also well received. There was healthy competition within the class.

70 slides over 2 hours

No, no, no !

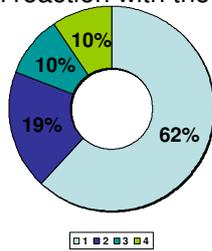
My major error was that I had far too many questions and monotony really set in. Thankfully I had a few exercises in between where students were asked to label a diagram and write down some descriptive answers on the handouts I had given them. Next time however, I would substantially reduce the number of slides and insert more activities. Also bear in mind that you can only ask multiple choice questions, so in my instance, the questions I asked on the handouts required written answers.

Display chart types

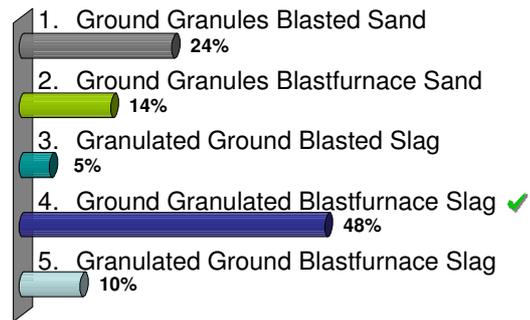
I trailed a number of chart types, but found the 'Horizontal Slide' or 'Offset Slide' to be the best. The piecharts and vertical charts were separate to the answers so it was difficult to visually see what the response was. With the chart directly below the answer, it was much clearer.

'What is the aggregate in concrete used for?'

1. To use up space ✓
2. To make the concrete more workable
3. To create the chemical reaction with the water to form the glue
4. Because it's cheap. ✓



'GGBS stands for?'



This chart makes it difficult to see which answer was which. This offset chart visually represents the answers much better.

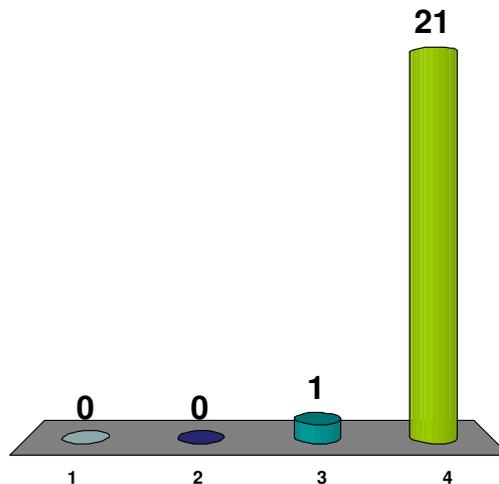
% or number toggle tool.

The standard response data appears to be in percentage, but I found it very useful to switch between % and number so I could actually see how many students had answered each question rather than %. This toggle button appears on the screen toolbar so it's easy to use.



What are the units of ABP?

1. N/mm²
2. N/mm
3. kN/mm
4. kN/m² ✓



This chart shows the number of students rather than percentage.

Timing

My final error was on timing of the questions. I found students very slow to respond and because I had 25 students, it seemed to take a long time for some students to read and answer the question compared to others. The onscreen tool bar tells you how many students have responded.



There is also a difficulty that students press the key before you open the question so they think they had responded when actually the system had not recognized them. You are then left waiting for the final responses.

During the class I took, I stated that I would just take the first 20 answers, which was a little unfair to the slower students but at least sped up the process. You can however add a countdown to your slides which shows you onscreen how many seconds you have to respond. This is definitely something I would use in the future.

Finally, my top five tips on clickers:

1. Try them once.
2. Registration Tool easy to use. Gives the students an incentive to see their name onscreen on the winners list.
3. Don't overdo the number of slides, break it up with exercises in-between.
4. Use horizontal slide or offset slide types
5. Add a countdown timer to the slides.

Clicker Technology – too techno for me ? – Trust the Technology and Try it as a Treat 😊