Spotlight on T&L at Channing: What might Feedback look like in our classrooms? (4) USING TECHNOLOGY

Issue 11 2019/20

This Spotlight is the final one of a series of 4 Spotlights that looks at specific feedback strategies that you might want to consider making habits. Here we take a look at how staff at Channing are using technology to give meaningful and motivating feedback in a manageable way.

What is the under-pinning evidence?[1]

Nothing polarises a staffroom discussion more than technology. The moment interactive whiteboards, GoogleClassroom or iPads are brought into the fray, we are revealed as either gimmicky evangelists of the new, or chalk-stained Luddites. While there is limited research to suggest that greater use of technology will unequivocally result in improved educational outcomes, there does appear to be a correlation between the effective use of technology and improved outcomes (Higgins et al., 2013).

Retrieval Practice

Tests are used to determine how well a student has learnt the required material (summative assessment) and to inform future teaching and learning (formative assessment). Often, tests tend to be formal and are often high-stakes end-of-unit or end-of-module tests and end-of-year exams. However, frequent low-stakes tests are effective at helping with learning because frequent retrieval practice, through the use of flashcards, for example, helps students commit something to memory more permanently (Roediger, McDaniel and Brown, 2014). Given this, teachers would be wise to consider incorporating frequent, relatively informal retrieval practice through low-stakes testing and quizzing to help learning (something we are going to look at next term) – and the implications of this for the use of technology to support learning are significant.

Feedback as collaboration

Explaining to students where they are, where they need to be and how to get there is key to effective feedback (Wiliam and Leahy, 2015). To ensure the impact of feedback is positive, it should be accurate and clear, with specific guidance on how to improve. Though feedback can take many forms, marking is one of the most common – but as we have discussed the workload associated with traditional marking is problematic. Technology can be used to ameliorate the marking load while improving the timeliness and efficacy of feedback. Small but powerful tweaks to our policies and practice would allow us to deliver feedback to a whole class rather than to individual students. This is much less time-consuming and arguably as effective as individual 'what-went-wells' and 'even-better-ifs' for every student.

Teachers would still need to look through their students' work, but instead of feeding back individually, they would look for and make a note of common misconceptions. Then, using screen or voice recording technology, the teacher could record herself highlighting what students have been good at, what they need to be better at and how to be better at it. This feedback could be delivered during a lesson without needing to use any technology, but if you do use digital technology to record it – and this would take as long as marking and writing feedback for one exercise book – you can then make it available so that students can access your advice at any point throughout the course.

Using Firefly and GoogleClassroom students can share their work with teachers. When both teachers and students can edit the work, the valuable drafting and redrafting process that would otherwise take a few lessons to achieve can be accomplished much more rapidly. Giving feedback becomes a kind of collaborative modelling.

So when it comes to adopting technology, the old adage applies: it ain't what you do, it's the way that you do it. Technology use can indeed be a bit gimmicky, but only if you make it so, because nothing engages a class better than expertise in teaching, and nothing is more likely to contribute to students' distraction than the lack of it.

Technology and Channing

Video feedback

A number of departments have been using video/audio feedback for a while. A number of benefits of using video to give feedback have been identified by Michael Henderson[2]

* Greater detail can be given than written feedback
* It can be faster and more efficient than written feedback
* It can have clearer meaning (audio visual cues such as tone perceived as conveying meaning easier)
* Feedback is perceived as more individualised
* Students feel a stronger connection with their teachers, or a stronger social presence

GoogleForms:

You can create, send, and automatically grade quizzes with Google Forms - creating a quiz is very intuitive (you can copy and paste existing questions in) and doesn't take very long to set up. After a quiz, students can be given instant (pre-prepared) feedback against responses, or you can release feedback to students at a time of your choosing.

Following a quiz, you can access a report that summarises the class performance as well. The form can be used by all teachers in a Department, and used again in subsequent years. You could also ask students to create their own forms. This saves time and allows you to assess their understanding through the questions they ask.

[1] HOW TO DO IT: USING DIGITAL TECHNOLOGY TO SUPPORT EFFECTIVE ASSESSMENT AND FEEDBACK: IMPACT MAGAZINE

[2] Technology Enhanced Feedback on Assessment (2014)

Socrative: Socrative is a formative assessment tool that helps teachers and students to assess understanding and progress in real time in class through the use of quizzes, questions and reflection questions.
Pros[3]
* Fast assessment of learning of all students in the class
* No student sign-up
* Provides downloadable data
* It's free and easy to use
Cons
* The Space Race feature is limited in creating fun for the class.
* For a quick question, teachers need to give the questions orally or on the board.

Visualisers
There are two types of visualisers being used in school at the moment: Hue and IPEVO Visualizers
Visualisers are hugely powerful if you are looking to provide feedback, model and scaffold. Jack Tavassoly-Marsh, Vice Principal and T&L Lead[4] suggests that you can use them for live writing, live feedback, whole class feedback, celebrating and showcasing excellence, focusing on literacy, and for graphs and diagrams. His blog link is at the bottom of the page and is very accessible. It would seem that for many teachers the visualiser has had a huge impact on their teaching. It is a highly powerful teaching tool that provides the opportunity for immediate and effective feedback to pupils via peer and teacher evaluation of their work displayed on the visualiser. Texts can be shared and analysed more readily. The need for photocopying is greatly reduced and there is no longer a need to scan items ready for sharing.

Case Study Chemistry: They have really engaged with technology and are using it in some really powerful ways: At the start of the year Claire Spink delivered INSET on how to create a personalised Google Doc to allow you to share student data with the students themselves.
Claire also recommends the 'retrieval roulette' using GoogleSheets[5]. She says the feedback, however, is given verbally but the pupils can get this quickly. She also uses Firefly to give written feedback post-homework
"I find the fact that we can share marks and comments with pupils quickly - and still access them ourselves - to be really helpful. This can seem time-consuming at first glance, but you can often copy and paste key sentences and then tweak them, and it also means that reports almost write themselves later in the year! The tests on Firefly are also good - you can make self-marking MCQ/one word answer tests and then give rapid feedback that autosaves into your mark book"

Students giving themselves feedback
There are a range of apps and websites where students can self-test and get feedback themselves. These include
Seneca https://www.senecalearning.com/
Quizizz https://quizizz.com/
Kohoot https://kahoot.com/
Do you use something else - let me know and I will include it in a future Spotlight

Using technology for self-evaluation and feedback dialogue
Martin has been using technology to engage in a two way dialogue with students about their work. He says 'I have been working on feedback via Google classroom. It's been helpful because pupils with problems come to A7 in breaks to get help fixing bugs in their code for the mobile apps they are making. Sarah and her Department have been using Socrative to get students to feedback about their work - a 'check-in' and self-evaluation.

BIG WORDS: Many staff use the app 'Big Words' in their lessons, as part of retrieval and feedback.

IT Knowledge Library:
https://sites.google.com/channing.co.uk/itknowledgelibrary/home?authuser=0
Don't forget our IT Knowledge Library - there are lots of great 'how to' videos that are really easy to understand

Year 11 mocks and Year 13 mocks are ideal opportunities to trial improved feedback maybe as part of your DLR

[3] https://thedigitalteacher.com/reviews/socrative#overview
[4]https://fhesteachingandlearninghub.wordpress.com/2019/06/04/using-a-visualiser-to-provide-feedback-model-and-scaffold/
[5] https://edu.rsc.org/feature/retrieving-knowledge-already-learned/3010081.article