There seems to be consensus about the need to offer increasing personalisation to our students, but little agreement over what this means and how it is enacted. Google the term ‘personalised learning’ and you get back more than 670,000 results in less than two-tenths of a second! So when Melbourne’s Ivanhoe Grammar School’s Director of Innovation in Technology Ben Carmichael attended a conference presentation by Echo360 that incorporated flipped learning options, he recognised its potential as a path to augmenting the school’s personalised learning approach in a way that would build on existing infrastructure.

Echo360 CEO Fred Singer started the company in 2007 as a collaboration that drew on his own work as CEO of a video technology business, and developments being led by the University of Western Australia in enterprise recording solutions. Singer was motivated by watching his own son struggling with a learning disability, that helped him see the benefits of publishing instructional material on the web that students could revisit at their own pace.

The technology has so far been used extensively in tertiary environments and by a few secondary schools in the US, but Ivanhoe Grammar School will be the first Early Learning to Year 12 institution to join forces with Echo360. The school’s eLearning Coordinator Steve Brophy explains Echo360’s appeal was that it offered one solution with different elements including lecture capture, staff coaching capabilities and analytics that could be integrated with current systems.

Although Brophy describes the school’s staff as generally tech savvy, access to Echo360 products is being phased in gradually to cater for the varying levels of comfort with technology. Initially, it has been set up in four different spaces on the school’s Ridgeway Campus with a focus on the lecture capture tools. Brophy plans to work with teachers who have expressed an interest to road-test the technology, with a view to using these staff members to champion the possibilities offered by Echo360 with other teachers. “We hope to build groundswell and momentum from people who work with and overcome challenges… [We will have] smoothed out the glitches before all teachers take it on,” Brophy adds.

The gentle approach to implementation also recognises the often overwhelming pace of change that teachers face. With a whole new reporting system just having been adopted at the school, Brophy says he is, “conscious of
not inundating staff with new technology," but instead chooses things that will work in the school's current environment, and work well to enhance learning. It has also allowed confidence in the reliability and value of the system to build in a way that might not have been as successful if all staff were required to be involved from the beginning.

The changes in teaching practice have not, therefore, been dramatic, but will evolve over time as teachers become more familiar with the technology. As Fred Singer suggests, "Rather than completely disrupt the education model, Echo360 works with instructors and teachers cooperatively to help them deliver a better educational experience by leveraging modern technology to improve academic outcomes of students and increase the reach of institutions."

Singer experience has underscored the importance of giving teachers time and space to explore Echo360's solutions at their own pace. "In the beginning, some teachers are nervous about being recorded or having an additional technology to use," he observes. "But once they realise the benefits for both the students and themselves, they change quickly. By creating a digital recording, class time can be used for more interactive and engaging discussions – or active learning. It becomes a huge time saver as well. Instructors no longer have to answer questions clearly covered in class, but they can refer students and parents to the recording."

One of the main intentions of implementing Echo360 tools at Ivanhoe Grammar is to explore the concept of flipped learning. For those unfamiliar with the idea, flipped learning occurs when, "some or most of direct instruction is delivered outside the group learning space using video or other modes of delivery. Class time, then, is available for students to engage in hands-on learning, collaborate with their peers, and evaluate their progress and for teachers to provide one-on-one assistance, guidance and inspiration. The shift is from a teacher-centered classroom to a student-centered learning environment" (Flipped Learning Network, 2013).

According to Brophy, enabling students to watch lessons before they arrive at class allows them to come in prepared, with a sense of where they want to take their learning. "Students have an increased understanding of what's coming up and greater depth of learning," he says. This solid grounding means that teachers can start to develop higher order teaching skills and analysis.

Although technology is often criticised for eroding connectedness, Brophy believes that the flipped learning model actually increases student-teacher and peer-to-peer communication. While many students have instinctively begun to use social media as a channel through which they can discuss and support each other with schoolwork, Echo360's solutions are enabling them to interact in a more structured way. This has been particularly beneficial to students who in the past may have been reluctant to admit that they didn't understand something, as the technology allows students to post questions to the teacher privately.

A video by Dr Perry Samson, a professor at the University of Michigan and Head of Teaching Innovation at Echo360 who invented the LectureTools component of Echo360's offerings, reveals a sobering anecdote on the company website (Echo360, 2013). He describes that for years, he left time at the end of his lectures for questions, and since few were ever asked, he assumed his teaching was highly effective. Now that LectureTools is being used in his class, two-thirds of students are posing questions during
the lessons, a result that Samson says speaks volumes about the number of confused students suffering in silence in the past.

Flipped learning also gives students some measure of control over the pace of their learning. Students can watch and re-watch portions of the lesson that they are struggling with, or move on to the next learning stage if they are already comfortable with the material. As Brophy suggested, there is also more scope to build in student voice, as when students arrive already having been exposed to some background knowledge about a topic, they are in a better position to let the teacher know where they might be having trouble or what they would like to learn more about.

One of the key elements of personalised learning is ongoing assessment, and the technology offered by Echo360 gives teachers access to data that can help evaluate student progress and inform teaching. CEO Fred Singer explains the scope of the analytics available as part of Echo360’s packages: “Teachers can identify individual use, recognise student engagement, sample video completion rates, see total video view counts, moderate discussion topics, understand notation habits and monitor heat maps that illustrate concentrated usage. They can also see in-class participation rates – who asked questions or responded to polls. These can be used to identify patterns in student usage and even create profiles of a successful student. When a student isn’t meeting these expectations, the school can intervene before test time.”

Steve Brophy is confident that the teachers at Ivanhoe Grammar School will learn to use these tools to help focus lessons according to student needs. For example, teachers will be able to conduct polls after a teaching sequence to gauge interest and understanding as a type of regular formative assessment. They can then use the information to build what he describes as, ‘rich resources with anytime, anywhere access. The learning path doesn’t falter,” he says.

Further reading