Recently, my local major supermarket has been sending me emails that are targeted precisely to the brands and products that I usually favour. It’s a disconcerting practice to some degree, bordering on privacy invasion, but it is also in many ways effective; I know about specials that actually interest me, rather than having to wade through whole catalogues that are largely irrelevant.

This degree of customisation is made possible through the field of analytics, and it’s making its way slowly into the education sector. The potential of technology-enhanced reporting, tracking and analysis tools as an enabler of greater personalisation in learning was recognised early on by North American company Desire2Learn, which is currently

Desire2Learn Insights provide a comprehensive tracking of individual students’ progress. Quizzes or tests can be automatically graded by the software, freeing up teacher time. Grading rubrics can be placed online so that students can check their results for
expanding its Australian operations.

Fourteen years ago, Desire2Learn President and CEO John Baker was a third year engineering student who planned to become a doctor. Studying at the University of Waterloo, he was set an open-ended challenge to go out and find a problem, and design a solution. Baker, inspired by a family tree populated with educators, decided to combine a number of interests and look for an opportunity to “improve the education experience for doctors, teachers and the world around.”

The result was a learning platform that over the years has been developed and refined to integrate a number of key functions and programs to support effective teaching and learning. Tertiary institutions have embraced Desire2Learn’s offerings, but Baker explains that the products are also being used successfully in school environments. “All the technology is suitable for primary and secondary education. It might look different – for example, with bigger icons for primary schools – but it works at all levels from K to 12,” he says.

The Desire2Learn Learning Environment houses a number of different components that can be customised to the needs of end users. Baker declares that Desire2Learn are, “big believers in moving away from a one size fits all model to a personalised education experience.” To this end, schools are able to choose the components that they need and to build a look and feel consistent with their school image by branding programs with their own name and colours.

The Learning Repository, for example, is aimed primarily at teachers and promises to, “Collect, manage, and share learning resources effectively, re-use existing internal learning materials efficiently, and connect to external OERs [Open Education Resources] seamlessly” (Desire2Learn, 2013).

Wodonga Flexible Learning Centre (FLC) is one example of an institution with which Desire2Learn is working to explore the possibilities of this technology not only in-house, but also in collaboration with other Victorian schools to effectively access and share content. According to Baker, “Participating schools can tap into resources in a shared environment using a cloud-based solution, while maintaining their own institutional brand identity… through this kind of collaboration participating schools can leverage shared content repositories, enabling teachers to create the next-generation learning experience, while saving significant time and effort.”

There is also an ePortfolio element that allows students to amass multimodal evidence of their learning over time. Everything from documents through to multimedia presentations can be collected and organised within a student’s ePortfolio, which includes a Newsfeed through which peers or parents can leave comments. The portfolios can even be linked to social media networks such as Facebook and Twitter, allowing students to share their work with and gain feedback from a wider audience.

But it is the Desire2Learn Insights component that has Baker bubbling with enthusiasm. “Technology has had a transformational effect on companies and industries,” he says. “For example, Amazon is predicting what people want to buy. This has been missing from education… how do we leverage technology to make learning more engaging and relevant?”

Personalisation, Baker believes, is the key to the future of education, and analytics can assist teachers to build personalised pathways for students, making schooling “more of a lifelong experience with the links between levels blurred.” Most teachers are well aware that without focused pre-assessment, a certain percentage of students will already be both familiar and proficient with the content of a particular lesson; it takes time and effort to ensure that every student is being challenged at their point of need.

Desire2Learn Insights gives teachers and schools the capacity to measure and track student outcomes and to analyse the results. Baker suggests that the technology allows educators, “to teach and assess more authentically,” and to ensure good alignment with the Australian Curriculum. The fact that teachers can bring in their own content and set their own assessments can support schools to move from a more rigid delivery model to one that is adaptive. “Teachers can identify where students are and drive for better results,” Baker says. It also facilitates streamlined gathering of evidence, which can then be used to give a broader, more accurate view of students, rather than relying on single, more limited data sources such as NAPLAN testing.

Baker explains that analytics can be used for predictive modelling. In university environments, for example, by the second week of a course, the software can predict if a student is likely to fail a course, allowing lecturers to intervene earlier. Similar programs can be used in schools to identify the elements of a course or topic students are struggling with, giving teachers vital information to help support student learning.

Brisbane Grammar is one of several Australian success stories for Desire2Learn so far. Among the issues that the school identified particular tasks, and so that parents can see how their children are travelling academically. Teachers can monitor whether students have accessed allocated reading and work, and a sociogram report can even show how students have interacted with each other.
before implementation were difficulties with electronic submissions of assignments, a lack of consistency and cohesion in online presence between departments, and a wide variance in technical skills and knowledge. The school is a now long-term client, having piloted the Learning Environment in 2005 and usage remains strong with analytic data indicating that 90 per cent of students still log in at least once a week (Desire2Learn, 2013).

Insights also has a host of other options that can provide teachers with additional information and help improve communication between teachers, parents and students. For example, quizzes or tests can be automatically graded by the software, freeing up teacher time. Grading rubrics can be placed online so that students can check their results for particular tasks, and so that parents can see how their children are travelling academically. Teachers can monitor whether students have accessed allocated reading and work, and a sociogram report can even show how students have interacted with each other.

As schools move towards blended learning incorporating face-to-face teaching with computer-mediated technology, accessibility to content is an important consideration. As Baker puts it, education is becoming, “pervasive, perceptive and personal.” Desire2Learn therefore has ensured that the Learning Environment works on any mobile device, and also that content is available both online and offline. Baker notes that back when he started the company, most distance education students had to fax in their assignments. Although much has changed since, even in 2013 students in regional areas may not have reliable internet connections at home, and the ability to access information online has proven particularly valuable for Desire2Learn clients such as Wodonga FLC.

The accessibility is a bonus for parents too. Baker says that being able to view evidence of their child’s progress at any time, “gives parents the opportunity to engage and get ahead of what their children are up to. This often increases communication between teachers and parents, which reduces the stress of parent-teacher interviews.” Both parties can then be more focused on the best course of action to support the child. Brisbane Grammar opted to create a dedicated parent portal as part of their Desire2Learn platform, which allowed for greater information sharing and a stronger sense of partnership between parents and teachers.

Although Desire2Learn has been around for more than a decade, opening an office in Australia early in 2013 means that Australian schools now have access to more specialised support. Peter Kokkinos, Director of Sales, Asia-Pacific points out that the costs involved in shifting from print to digital can be offset through a reduction in photocopying and in the amount spent on communication with parents. Local knowledge also means that Desire2Learn is building an understanding of the unique needs of education institutions in Australia. In the case of Wodonga FLC for example, the implementation of AusVELS into the Learning Environment means that teachers will be able to easily map content to the state and national standards.

Further reading