

Videos on-demand — enhancing the pedagogical tool kit for special needs educators

Claire Evans

he purpose of this brief trial was to explore the use of video-based instruction with iPads, and to obtain student feedback on the motivational aspects of using such videos as supportive tools in the remedial setting. A video streaming solution, developed by Oceanic Broadband, a niche network integrator company, was chosen for the trial.

Four students from a Year Four supported maths program were selected to use the technology. Over five lessons, the students connected their iPads to a local MERU WiFi secure private wireless network to view instructional mathematics videos created by *Back to Basics Education*. These videos, deliberately quirky in nature and running

for approximately five minutes each, were an appropriate selection for this trial.

The students were motivated by the use of the iPads and headphones, which offered them privacy and control of their own device. They were engaged by the fact that they could set the pace of their own learning, as the videos allowed them to stop, pause and rewind while self-monitoring understanding of the content. At the end of each lesson, students were asked to reflect on their experiences through journal entries. Comments included:

"The iPad told me to always start with the ones, not the tens. The iPads help the boys to understand."

"I think we should do more learning on the

iPad in school... I think there should be videos to learn about History."

"The videos were fun and easy but can you do spelling as well?"

"I liked it because it helped me with my multiplication."

The explosion of multimedia technology has enabled educators to enhance their repertoire of pedagogical tools with video-based instruction. Asynchronous eLearning is a medium uniquely suited to the 21st century learner, providing an engaging, flexible, self-directed and self-paced accompaniment to face-to-face teaching. This learner-centred, on-demand delivery of instruction is highly applicable for students with additional learning needs.

Students with auditory processing disorders or receptive language difficulties can struggle to acquire conceptual knowledge, as they require information to be broken down and repeated many times to develop understanding. Within the classroom setting, it can be challenging to provide the adequate level of repetition for some learners to grasp concepts.

Additionally, some students are reluctant to ask for the teacher to repeat an explanation several times in front of their peers. Access to a repository of instructional videos can alleviate the anxiety experienced by students who face these challenges. The medium is inclusive in its ability to allow students to clarify concepts as many times as they need, at school or in the privacy of their own home. They can control the pace of teaching by stopping, pausing and rewinding the instruction as required.

Additional web-based eLearning libraries include *Khan Academy, Maths Online, Maths Buddy, Brainpop and Teacher Tube.* A number of these sites are interactive, linking games and quizzes to the instructional videos, allowing students to practise and monitor their acquisition of skills.

The importance of access to this self-directed mode of instruction applies to all students who may occasionally experience confusion in the classroom but are reluctant to ask for help. It is an additional way in which students can take responsibility for addressing their own incipient conceptual difficulties before they become compounded.

Video on-demand applications are now possible for rural and remote learners with additional needs, who have limited access to varied instructional settings. Oceanic Broadband's video streaming solution features built-in monitoring and reporting software that can log the time and duration of student video viewings. This may be of significant assistance to those responsible for the education of students in remote areas.

As well as supporting students with additional learning needs, teachers themselves can access high-quality eLearning libraries to watch experts in instruction at work, personalising and directing their own professional development.

Videos on-demand, coupled with increasingly sophisticated enabling platforms, may have a significant impact on teaching and learning in a rapidly changing educational environment.



Claire Evans is Learning Support Coordinator at Brighton Grammar Junior School, Melbourne



Why not get your own copy of Education Today delivered to your home address?







Subscribe for just \$44 per annum