Video Conferencing - Extending the Learning Opportunities for our Students

Video Conferencing (VC) has been in use for many years in educational settings, particularly in rural schools, it is now increasingly being seen as an option to provide relevant and authentic learning opportunities for students.

The advent of Ultra Fast Broadband in schools, improvements in technology such as High Definition video, robust school infrastructures, and developing ideas around connected schools networks, have helped shape a fresh interest in the adoption of VC in more New Zealand schools. This article explores different ways VC is being used effectively in schools and discusses the benefits of VC to students, teachers and school communities.

What is Video Conferencing?



'Videoconferencing uses telecommunications of audio and video to bring people at different sites together for a meeting. This can be as simple as a conversation between two people in private offices (point-to-point) or involve several sites (multi-point) with more than one person in large rooms at different sites. Besides the audio and visual transmission of meeting activities, videoconferencing can be used to share documents, computer-displayed information, and whiteboards.' (Wikipedia) Desktop video conferencing (through a computer) can enable participants to hook into VC from any location outside of school.

The 4 P's of Effective VC in Schools

Programmes

The provision of scheduled VC classes provides access to more subject choices across all levels of the curriculum. When student choices are limited by what is available to them at individual schools or because of timetable clashes (particularly in secondary schools), schools can collaborate to 'fill the gaps' by offering an online class that runs between several locations. These collaborations can be established within a regional cluster, a loop network or nationally across the <u>Virtual Learning Network (VLN)</u>. With a <u>nearly unlimited choice of subjects</u>, students can now have more personalised learning pathways that better meet their needs. Secondary schools can collaborate with tertiary institutions to extend their more able learners and to offer vocational courses. eTeachers are able to make their VC classes more interactive with the sharing of multimedia, the use of document cameras, and the use web 2.0 tools such as shared google docs, online mind mapping and chat facilities. VC classes are also supported by the use of other online learning environments (e.g. Moodle) where students can access learning resources and activities and communicate with their classmates and teachers at any time from anywhere.



Here students from OtagoNet talk to students from Taranaki through VC about what it is like to be an online learner and help them prepare them for the year of VC study ahead.

As well as the delivery of more traditional subject classes, special interest groups can also run programmes between schools through VC. Examples of this are the Scholarship Mentoring Initiative (SMI), organised by OtagoNet through the VLN and recently also through the Greater Christchurch Schools Network (GCSN). Itinerant Music classes have been successfully run through VC linking schools on the West Coast with tutors in Christchurch. Gifted and Talented (GATE) VC programmes have been developed by several clusters linking students from different schools to collaborate on topics of interest. Other successful online programmes under development are ESOL classes and VLN Primary online classes currently offering languages and science. Although these initiatives don't utilise VC technology but use web conferencing tools instead, they could just as easily be accommodated into the VC environment.

Video conferencing can also be offered out to the wider community from schools, giving them access to professional networks and adult education. Examples of this have been rural farmers connecting with Crown Ag Research, and adult learners participating in online classes.

Projects

Video Conferencing can extend the reach of the classroom, enhancing curriculum and providing rich and authentic learning experiences, by enabling students to engage in virtual field trips, talk to experts and collaborate with other schools. This real-world contact can heighten interest, improve motivation, and increase understanding and retention.

Virtual field trips are not usually just one off events but are part of a wider unit of study such as the <u>LEARNZ</u> Antarctica VC where students from Matapu School talk to scientists at Scott Base.



<u>Te Papa's</u> video conferences provide students with access to materials from their collections and subject experts. Below students learn more about the Colossal Squid and watch a dissection.



VC provides unique opportunities to collaborate with schools throughout the country, or around the world. Students can use VC to communicate globally to experience diverse cultures and ways of life, and can also provide an excellent opportunity for foreign language

practice. VC facilitates distributed cooperative learning, where groups at distant sites take on a learning task and teach remote peers as Christchurch students have recently when connecting to a Canadian school to share their personal experiences of Canterbury's earthquakes (below). Schools interested in exploring global VC connections can join projects through CAPspace (Collaborations Around the Planet).





The New Zealand Book Council in its <u>WordSpace</u> <u>programme</u> enables students to access writers for inspiration, practical ideas and encouragement in their writing. These VCs are particularly suitable for students studying English, Drama, Creative Writing and Media Studies. Here writers at the South Learning Centre in Christchurch talk to students from across NZ in a session entitled 'Encouraging an Individual Approach to Writing'.

Professional Learning

There is a wealth of professional learning opportunities for teachers and school communities to tap into through video conferencing. These can be organised sessions with experts, or more informally organised sessions with teachers collaborating and sharing between schools for example in curriculum teams. Small groups of teachers can meet through VC to discuss and moderate work or in coaching/mentoring relationships. The visual nature of VC helps maintain the social dynamics of online communities of practice through increasing 'social presence'.



Here Dr Julia Atkins, in a VC organised by the Baylink cluster, beams in with teachers around the country to discuss key competencies in the learning areas. Sessions such as these can be digitally recorded and made available online as streaming video. This allows participants to return and review the session and also provides access for a wider group of teachers who may not have been able to attend the original VC session.

Ken Pullar from OtagoNet shares his school's experiences of teaching and learning online and discusses personalised learning and student support with teachers from other schools.



Professional learning VC opportunities are often provided through clusters for their own schools. Sometimes they are offered out nationally to the wider educational community through the VLN community and schools can join on a first come first served basis. Some external providers also offer VC sessions through VC from time to time. Arts Online, provide regular VCs and online forum support for teachers in the Visual Arts. SPARC have held VC sessions with teachers about developing sports coaching practice. 'Providers' such as StudyIT and MyPortfolio have held VC sessions on how to use their websites with students. Educational support agencies such as RTLBs, speech therapists, SPELD teachers can utilise video conferencing to enhance communications with students and teachers through enabling more regular contact than is currently possible through physical meetings. Interviews, meetings and other administrative tasks can be done through VC, reducing the need to travel and saving time and money.

Participation

Participation in video conferencing activities can bring a wide range of benefits to students, teachers and school communities.

Not only can students' access a wider range of learning experiences, but also participation in VC helps them develop key competencies of managing self, relating to others, and participating and communicating.

Students are more engaged and motivated as they connect in meaningful ways to authentic learning opportunities that give more depth and reality to their understandings. They have a greater insight into their own identity as learners; and can gain a global perspective of themselves and their place in the world.

Student voice can be fostered as groups can collaborate across schools, organising their own meetings for groups such as SADD (Students Against Drunk Driving) or Amnesty International

There is a higher level of support with VC than more traditional forms of distance education, as visual presence can reduce isolation and distance for online distributed learners.

VC supports collaboration between schools as they work together to enable learning opportunities for students. Collaboration is key to successful and effective use of video conferencing. Experienced teachers are retained within schools, as they are able to teach in their areas of expertise. They can gain increased capability and confidence in elearning skills and pedagogies.

Participation in collaborative networks of schools through VC and other online learning tools is future focussed. With demands for more personalised, flexible and accessible learning opportunities, and the need to prepare our students for a world where virtual collaboration is an important skill, online learning including VC has an important role to fulfil.

'Don't limit a child to your own learning, for he/she was born in a different time"



Rachel Roberts, Virtual Learning Network Community