Canterbury 'quakes and virtual schooling grows to cover the fault

Niki Davis

University of Canterbury College of Education

Christchurch, New Zealand

Email: niki.davis@canterbury.ac.nz

Many Canterbury schools and colleges closed their doors for some weeks as a result of the September 7.2 earthquake that centred on Darfield and much of the news focused on what was damaged. The little-known success story that I want to tell you here is that most, if not all, eCampuses remained open and continued to serve learners and their teachers with virtual classrooms, eLibraries and meeting places. In fact the resources donated resulted in the formation of the largest eLibrary in the world hosted from the University of Canterbury thanks to the generosity of vendors!

Many of my colleagues in the college of education found our students supporting one another in our online forums. Teachers made special provision when home or work disruptions caused by the 'quake took students' focus away from their studies. The eCampus made it much easier to personalise that support too. The University of Canterbury jumped onto Facebook to keep students and staff informed; four staff provided amazing support plus a superb map that is now used to teach about earthquakes.

The photo in Figure 1 shows University of Canterbury eLearning developer Paul Nicholls with his time-lapse representation of the earthquake and its aftershocks. According to the 2010 Horizon Report (Johnson et al, 2010) such visual data analysis is on the far-term horizon, set at four to five years away for widespread adoption, and this is an example where it is clearly already in use in some quarters. My colleague Nicki Dabner is researching the use of Facebook through which University of Canterbury student Sam Johnson and his peers mobilised over 3500 students from the area for earthquake clean-up. Nicki's case study of Sam aims to inform us of ways to use tools

such as Facebook to mobilise peer support of learning, complemented by a Facebook application led by Janelle Blythe and her University of Canterbury communications team to keep in touch with staff and students and support their safety at a critical time.
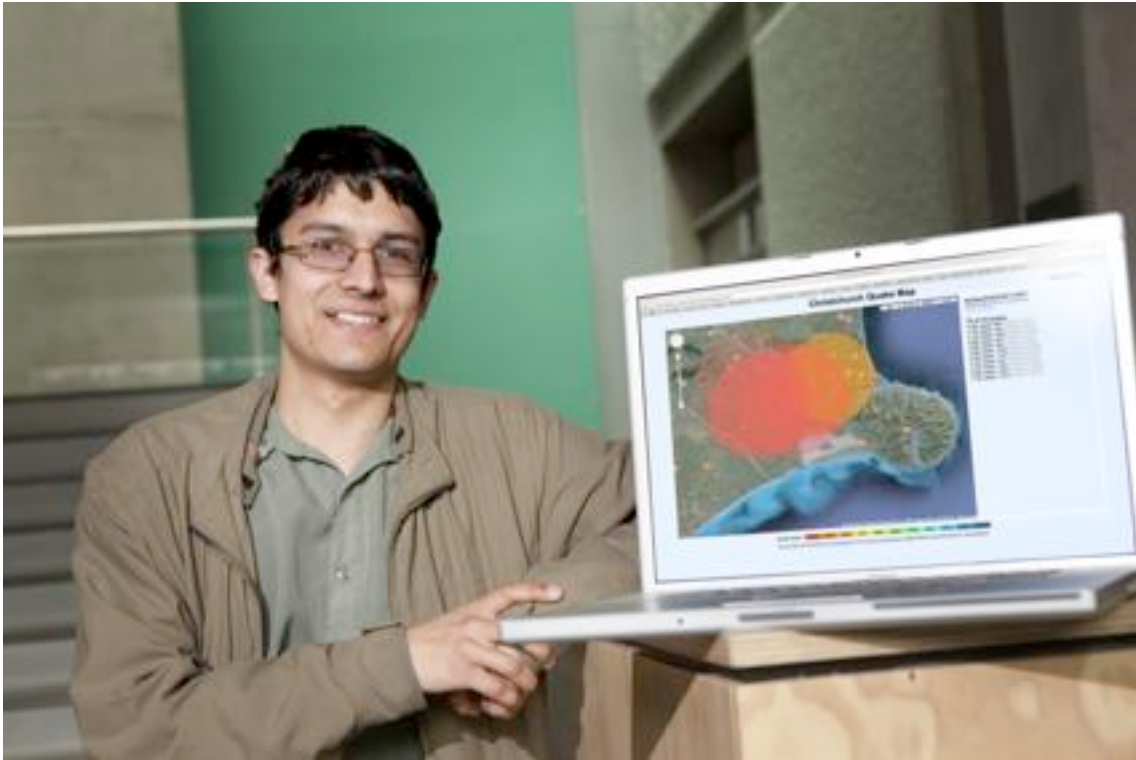

Figure 1. University of Canterbury eLearning developer Paul Nicholls with his time-lapse representation of the Canterbury earthquake and its aftershocks

Canterbury schools went virtual too! The Virtual Learning Network schools' eCampus used by CantaTech and AorakiNet e-learning cluster schools called Educo (it is a version of Moodle) remained fully operational. In my Educo course our online learning community for the South Central Divide Blended Learning Project continued to operate for all those with online access, and many teachers adapted blended learning to their changed circumstances. In Oxford, not far from the epicentre in Darfield, Mary Chisnall took advantage of the free virtual field trip donated by LEARNZ for Conservation Week, and led her primary students virtual schooling at home with parent support. (Readers please note that a recent article in Computers in New Zealand Schools focused on LEARNZ.) In our online learning community forum in Educo (Moodle) for the

South Central Divide Blended Learning Project (http://wikieducator.org/SCD) Mary's postings told us what she was up to. Here are a couple to give you a flavour of what she rapidly shook into position:

> *The earthquake has meant my [pilot] project related to our Christchurch camp is now not a reality so I have changed my thinking totally. I now have a real context for Blended Learning because the students have the rest of the week off school. Yesterday I worked through creating a course with a purpose of enhancement. Next week is Conservation Week and LEARNZ have offered all students an open pass for the month to explore the site. I have written a course based on Wandering Whales in Tory Channel for all my year 6 class. (LEARNZ provide a level 1&2 easy reading option and Level 3&4 level option which will work well for my class.) This fits very well with prior learning, is topical and provides an opportunity to experience a range of possibilities to develop a focus inquiry question as well as partake in some higher thinking debating within the class via a forum. (17/9/10)*
> *(http://rata.learnz.org.nz/summary.php?vft=wanderingwhales102)*

A week later back at school Mary gave us an update near the end of her module:

> *Today students were working on forum postings, blogs, emailing and completing their presentations. We were fortunate enough to have a lot of access to the laptops and the computer suites during this week. The students have embraced the opportunity to learn this way. Their honesty on the rubric suggests they have found the course very worthwhile. They liked working at their own pace, creating their own questions and having lots of the information in front of them to build prior knowledge.*
>
> *I think the course was well structured and was a positive experience for the whole class. We have thought of some 'So what?' opportunities so some emails are being sent to Japan and some posters are being created. I look forward to the presentations of power point, poster and movies tomorrow. (23/9/10)*

Mary was not the only one who was scrambling to regain their feet after the 'quake. In October as Christchurch got back on her feet the first conference in the Convention Centre and City Hall was Ulearn'10 and it was great! Core Education's super team, led by CEO Ali Hughes, included host teachers in 'quaked schools such as Christ's College, and pulled out all the stops for around 1800 teachers and other educators. Virtual Schooling was strongly represented including Virtual Learning Network (VLN) presentations with Eddie Reich of the New Zealand Ministry of Education.

For the first time Ulearn'10 had a research strand that I directed with support from my University of Canterbury colleagues, Nicki Dabner, Sonja Bailey, and Jilaine Johnson to name a few. It is our hope that some of the long abstracts of research presented at Ulearn and published in its proceedings that can be accessed from http://www.core-ed.org/ulearn/ulearn10-research-stream-programme will be developed into full papers where relevant for CINZS. Cowan and Astall's application of wikis with our U University of Canterbury student teachers was presented as a poster at Ulearn without a proceedings paper, with a paper subsequently developed and included in the current issue of CINZS. Of particular relevance for this column is Rachel Roberts' presentation 'Teaching Under the Microscope –Trends in Online Learning'. Rachael is an ePrincipal in the North Island who is supporting the development of Virtual Schooling for both primary and secondary students. Our preface to the Ulearn Proceedings described the range of papers as follows:

> *These proceedings contain many aspects of educational research and a particular strength is online learning in teacher education, e.g. Brooks, Gikandi, Mackey, Roberts, and Tull. Other aspects of e-learning include networked learning and film. In addition to the school sector the proceedings raise the profile of adults with special needs including those with literacy, e.g. Davis, Johnston, Nicholas and Walker. These are relevant to schools because such adults are important partners in children's learning. The breadth of these proceedings also includes learning communities and arts education, e.g. Dabner, Fickel, Haines, and White.*

The role of schools in supporting their communities' uptake of ultra-fast broadband was highlighted at Ulearn again this year by the government. Ulearn sponsors Enable and Xirrus ensured that we had robust network services, often supported by school-aged technicians. It was noted that the number of mobile devices brought to Ulearn by individuals had increased demand threefold! This is only one indication that internal school networks will be severely challenged by increasing mobile technologies and community support will be necessary to enable them continuing to work. I fear that such multi-way support systems will not be easy to develop. However, in Christchurch one such multi-way support system is the Greater Christchurch Schools Network, which continues to grow in strength. Recent activities have been to assist schools with damaged servers (see http://www.gcsn.school.nz/community/news/assistance-schools-damaged-servers and a Moodle 2.0 meeting led by volunteer Derek Chirnside. Jackie Land, ICT coordinator in Papanui School has also provided Moodle workshops for teachers and we look forward to the planned professional development materials soon with recently agreed Creative Commons licence that permits further development for specific contexts. The 2010 Horizon Report: Australia-New Zealand Edition released as I write indicates such open source content as a major trend with New Zealand's WikiEducator and government action as leading examples in this region (see http://www.nmc.org/publications/2010-horizon-anz-report).

There has been stirring growth in the scholarship of virtual schooling in New Zealand since my first virtual schooling column earlier this year. Most notable perhaps is the Ministry-funded research by Rachel Bolstad and Magdalene Lin on the students' experience of distance courses offered though the e-learning clusters. In addition to the report on the Ministry of Education website, the research is also published in the journal SET and indicates that students find the quality acceptable. It also indicates a range of strategies to improve the experience. I would also like to draw your attention to a USA meta-analysis funded in the USA and led by Barbara Means, with evidence from research in both the tertiary and school sectors that has spread the message that online learning is as good as more traditional face-to-face, and that a blend of these modes of learning can produce some of the best results.

2011 should be a bumper year for further development in New Zealand with the publication of the updated Virtual Learning Network Handbook led by Derek Wenmoth of Core Education. Derek and I recently made a proposal to capture a range of illustrations of eLearning cluster schools' practices and virtual schooling. These are designed to seed illustrations in the interactive version of the online Virtual Learning Network handbook. We hope to be supported in that development by two visitors from the USA in 2011. Michael Barbour plans to return to New Zealand and some of you will be familiar with his blog Virtual School Meanderings (http://virtualschooling.wordpress.com). A recent post gives news of the annual Virtual School Symposium (http://www.virtualschoolsymposium.org/) in North America, where virtual schooling continues to grow exponentially. Michael is also prolific in journal articles and one due out in the scholarly journal Distance Education shortly is titled 'Researching K-12 online learning: What do we know and what should we examine?'

I am also discovering more about the history of virtual schooling in Australasia as I assist the DEANZ journal to get past issues online in its new home at http://journals.akoaotearoa.ac.nz/index.php/JOFDL. The first issue of the journal in 1995, then called The Journal of Distance Education, contains two relevant articles that will help to ground me as a recent immigrant to New Zealand. Amaru, Rae, and Shadbolt (1995) described The Correspondence School's (now Te Kura, TCS) emerging model for isolated Māori secondary students and the first trial project that established secondary learning centres at Matahiwi and Ruatāhuna. Stevens (1995) described his new vision for teaching and learning in New Zealand and warned that unless there was consideration of ICT in educational planning and policy education "may soon face a new challenge in the form of increased provision of education in this country from overseas educational networks." (p 37) It has not happened yet, but the exponential growth of virtual schooling in the USA may be an indication of challenges that are really on the horizon now. You will also find some useful articles in the December issue of the DEANZ Magazine – the Distance Education Association of New Zealand – of

which I am president (http://www.deanz.org.nz/home/index.php/deanz-magazine). See you there shortly too with luck!

I am delighted to announce that the University of Canterbury's 'Canterbury Fellow' for 2011 will be Dr Scott McLeod, author of the blog Dangerously Irrelevant (http://dangerouslyirrelevant.org/) , which aims to provoke and support school leaders to engage with ICT leadership. Scott will be working with me in the e-learning lab in the University of Canterbury and I plan to persuade Scott to give a public lecture, A Core breakfast, and a webinar so that all the readers of Computers in New Zealand Schools can lobby their school leaders to pay attention in the shared leadership of ICT and virtual schooling, or risk becoming 'dangerously irrelevant' – in the words of Scott and his collaborating school leaders' blog!

We've been shaken here in Canterbury and learned about a rift that could have driven us apart, but instead the challenges of the last few months have stirred increased growth and community effort that has been delightful to be part of. The strength and flexibility of our eCampuses have enabled us to bridge the rift and virtual schooling has demonstrated benefits to become more deeply embedded in the twenty-first century education. New Zealand continues to illustrate that a small country can provide an extraordinary lead that increases stability in our fast-changing world.

References

Amaru, L., Rae, M., & Shadbolt, P. (1995). Tangata Whenua in distance education: An emerging model for isolated Māori secondary students in the Correspondence School. *The Journal of Distance Learning*, *1*(1), 12–23. Becoming accessible from http://journals.akoaotearoa.ac.nz/index.php/JOFDL

Bolstad, R. & Lin, M. (2009). *Students' experiences of learning in virtual classrooms*. Wellington, New Zealand: NZCER. Retrieved from http://www.nzcer.org.nz/default.php?products_id=2619

Barbour, M. K. (2010, in press). Researching K-12 online learning: What do we know and what should we examine? *Distance Education, 7*(2), 7–12.

Johnson, L., Smith, R., Levine, A., & Haywood, K. (2010). *The 2010 Horizon Report: Australia–New Zealand Edition.* Austin, TX: The New Media Consortium. Retrieved from http://www.nmc.org/pdf/2010-Horizon-Report-ANZ.pdf

Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones., K. (2009) *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. Washington, DC: U.S. Department of Education. Retrieved from http://www.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

Stevens, K. (1995). Geographic isolation and technological change: A new vision of teaching and learning in rural schools in New Zealand. *The Journal of Distance Learning*, *1*(1), 32–38. Becoming accessible from http://journals.akoaotearoa.ac.nz/index.php/JOFDL