
Quake Brain: One Tutors Experience

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Background

September 4th, 2010 at 4.35am, an earthquake, of 7.1 magnitude on the Richter scale, occurred on the previously unknown Greendale fault in Canterbury, New Zealand. It was centered within 10km of Darfield. Damage was widespread, many buildings were damaged yet amazingly, no loss of life has been recorded for this event.

Between September 4th, 2010 and February 22nd, 2011, Canterbury had experienced 1,139 aftershocks.(Canterbury Quake Live data 2011) At 12.51pm on February 22nd 2011 a 6.3 magnitude earthquake hit Canterbury. It was centered under the Port Hills, south of Christchurch. This one was more devastating than the September event and 181 people have lost their lives. The city's infrastructure, which we take for granted, was severely disrupted.

After a major disaster, the stages are Rescue, Recovery, and Rehabilitation. Canterbury was still in recovery when the second earthquake hit. Getting back to routine is proposed by trauma counsellors as an important step for recovery. As the academic year is immovable, there is a very strong driver to get back to routine and make up for lost time. But what does it take to get back into routine for tertiary tutors? This

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poster explores the key challenges and issues, as experienced by one computing tutor.

Quake Brain

In a personal tragedy where only one member or a small number of the team are affected, the collective functionality of the team is still able to cope with the workload. In a disaster, a collective dysfunctionality in the team can occur, reducing the capacity to cope with workloads.

In this situation, we, as a team were faced with "Quake Brain". This is a colloquialism for ASD (Acute Stress Disorder) and PTSD(Post-Traumatic Stress Disorder). ASD occurs within four weeks of the traumatic event and can last up to four weeks. The disorder may fix itself or become more severe. If it worsens after this time, it becomes known as PTSD. Symptoms include dissociative symptoms such as detachment, derealisation; re-experiencing of the trauma, significant anxiety, irritability, poor concentration, difficulty sleeping, and restlessness. As it progresses nightmares, obsessive thoughts and heightened startle responses. (Townsend, M., 2007, p.146)

It is unknown how staff suffered, and whether they are still suffering, from this and to what degree.

Communication

In both events communication systems were important. The September earthquake did not cripple the infrastructure at CPIT. The power was still connected and the servers suffered no damage. Email became the easiest way to communicate with colleagues and management for the one week shutdown we incurred. Members of the staff in School of Computing were able to access their email from any location. This was a

considerably important asset as a number of staff had no power, phone or sewage in their homes. In some instances a few had lost their homes as well. The staff without these amenities had to travel to other locations to access email and charge mobile phones.

By comparison the earthquake in February was a catastrophic event. The specific damage to Christchurch's CBD resulted in loss of power, but more debilitating was the civil defense cordon which was thrown up around CBD, including CPIT. These circumstances resulted in a major communication breakdown. CPIT lost power, and in turn the servers going down. The cordon around CPIT meant that infrastructure staff were unable to access the site to make systems available for recovery. Staff had suffered the same fate, or worse, in their personal situations as in September.

The first challenge was to build a phone list to share with other staff; Facebook was the initial means used for those with power and telecommunications, although not all had access to computers. This way of reaching out, though public, began to ascertain the welfare of our colleagues. Private emails and landlines were then used to continue updates.

The next step, getting back to teaching, compressing courses and supporting students present a unique set of challenges for tutors.

Summary of one tutors Perspective

With staff likely to have reduced individual functionality, what was the way forward? Communication was the key, but it seemed to take a long time to achieve a satisfactory system. A sense of normality is difficult to achieve, without the routine, structure and deadlines of a normal working week. Focussing on delivery of courses in a different location, and student welfare was a high priority. "We need to restore education for students affected by the earthquake as soon as

we can..." (Tolley, 2011, para. 2). After Hurricane Katrina, the US Emergency Management action guide for preparedness identifies only staff involved in restitution of facilities as needing support (U.S. Department of Education, 2009). What about tutors? There was little readily available literature to support tutors with the stresses involved as they manage returning to the classroom after a disaster.

Conclusion

When the disaster includes over 279 significant earthquakes to date (>4 magnitude) (Canterbury Quake Live, 2011), with more predicted for a year or more, business as usual is not possible.

All institutions have disaster preparedness plans, but they are built on a number of assumptions, which may not be true in a disaster. Adaptive management is required. From a personal perspective, the hardest thing about after the event was the not knowing what was being organised.

It is important to identify the mechanisms which can support tutors. Policy and practices which impede the process to recovery also need to be identified.

References

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