# When schools closed: teacher experiences using ICTs

## Introduction

In 2003, a sick physician from mainland China brought to Hong Kong a deadly virus that was to spread fear throughout the territory and the rest of the world. By May 2003, the Severe Acute Respiratory Syndrome or SARS had infected 1755 people in Hong Kong and claimed 304 lives. It spread rapidly via international air travel from China to many cities across the world, resulting in over 8000 cases of infections and 774 deaths.

Schools in Hong Kong were closed suddenly to prevent the spread of SARS. Teachers had to re-think their teaching strategies and provide their students with new and different opportunities to work through curriculum requirements. This paper focuses on how some teachers coped with the schools' closedown and their use of ICTs to support student learning.

## The participants

Sixty teachers were asked in a survey to describe what happened in their schools over the period of school closures and what use, if any, ICT played in the continuation of student learning during this time. Eight teachers were then purposively selected for interviews to gain insights into the participants' experiences of ICT use during the school closure and to discuss possible longer term impacts SARS has had on their schools.

The participating teachers interviewed held widely differing attitudes towards new technologies and their role and impact. Their views ranged from enthusiastic 'technophiles' through cynics to 'technophobes' and many stances in between (Bruce, 1997; Fox & Herrmann, 2000). In general, there was some unease and a sense of insecurity caused by a lack of familiarity with technologies and their purpose in education and the impact of change itself, creating doubts and suspicions about new technologies.

## Interview outcomes

The sudden closure of the schools during SARS, left most teachers unprepared. 'Due to timetable commitments on the final day before closedown, form teachers did not see all their students. … some parents had already kept their kids at home, fearing SARS infection at school … .' said one teacher. Few schools offered clear directives to teachers and few teachers felt they had the necessary skills or experience to successfully switch from everyday face-to-face teaching to alternative environments (distance education strategies, the Internet, phone, ordinary post, etc.). Several teachers noted that they felt 'stunned' by the sudden change of events. "We just weren't prepared for this emergency … and we had not had appropriate training to use the Internet …' Though all teachers in Hong Kong had attended training courses on using ICTs, most felt unable to use this digital environment as the dominant medium to work with. 'We'd had some experience of using ICTs in class, but this situation was totally new and threw us into a totally different way of thinking about teaching and learning'.

For some teachers interviewed, new technologies offered new opportunities to 'warehouse' content, a strategy not often used prior to SARS. From comments made in the interviews, it was apparent that there was a tendency to try to do too much during this period and to use the new digital technologies to deliver large amounts of additional study materials, resources and information for students.

It is clear from the interviews that handling new ways of communicating between staff and students during SARS was not straightforward. All teachers interviewed, whether they saw the new ICTs as an opportunity or a threat, agreed that the SARS closedown had highlighted the fact that there was much that still needed to be learnt about using the technologies appropriately.

Out of the eight teachers interviewed, most felt that there were advantages in working with the new technologies, though the kinds of opportunities available differed greatly between longer term experienced users of ICTs and novice users, and from subject to subject. The SARS induced close down was certainly an opportunity for those willing to experiment with using ICTs to do so intensively, but the fact that the schools closed down so quickly meant that proper preparation time for ordered use of ICT was limited.

## Discussion and conclusions

The SARS crisis provided a catalyst for intensive ICT use. Teachers were inducted faster than they liked or thought possible into ways of using ICTs. This period highlighted both the problems and the potential of different ICTs as channels for teaching and learning. Teachers who used the technology during SARS were forced to think differently about ICTs. Discoveries made during SARS have continued to shape and inform subsequent ICT use. This period of ICT use brought to teachers' attention that these technologies are not pedagogically neutral nor necessarily passive (Idhe, 1990; Levy, 1997), nor are they necessarily appropriate for substituting one form of delivery for another (Bromley, 1998).

Most of the teachers interviewed wished to build on their experiences with using ICT's during SARS and identified the provision of a school based, on-the-spot level of technical support as key to their continued motivation to do so in an already packed working schedule. This type of technical support is essential to teachers in terms of setting up and maintaining collaboration via the Internet for example, and making sense of and remembering procedures at a time when they genuinely need to apply them. They need to learn technical strategies for using ICTs to maximize students' participation and making better use of class time. Clear guidelines need to be set and made explicit and routines established for viewing and responding to emails so that expectations are realistic and can be met without overloading teachers.

In addition students need also to be inducted into the use of ICT's in order to optimize the potential of their learning experiences in this mode and their efficiency in using it. Consistent with current curriculum directions the use of ICT's provides an imperative for guiding students towards developing more independent learning strategies in terms of how to set their own goals in relation to those defined by their teachers, how to search for and select information appropriate to achieving those goals, how to work collaboratively using ICT's with peers and teachers and how to evaluate their own progress and edit outcomes. This impacts also on the current, very exam orientated system of assessing students which compels teachers and students to cover a lot of content, often at the expense of leaning how to learn. In line with current curriculum directions the use of ICTs provides a context for moving away from the examination system towards a more holistic, ongoing form of assessment of work done online or otherwise as well as in portfolios etc. thus putting emphasis on the process as well as the product of school work and in turn freeing teachers and students from the imperative of covering the content of the exam syllabus to focusing on more developmental, student friendly ways of working in the classroom and online. This would allow teachers and students more time for the 'radical ways of teaching and learning', described by one teacher in this study, " that this technology seems to support well".

The interviews with these teachers revealed conflicting views and beliefs, and varied experiences and concerns about the new technologies in educational settings. There is no single level of knowledge or ability in using new technologies, and there can be no single voice from those teachers interviewed. What did became clear as a result of ICT use by teachers and students during SARS was a more intense and reflective examination of the opportunities the technology offered, and its impact on education in Hong Kong.

## References

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