Is technology our servant?

Dennis Sleigh

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I like watching 'cold case' crime stories on television, and I stand in awe at the way these modern crime fighters are able to solve homicides that baffled their predecessors 10 or 20 years earlier. I particularly enjoy those episodes where the original crimes were actually investigated by some of the people who are now on the cold case team – seeing them uncover additional clues that were previously not obtainable. The searchers might be the same people but the processes they use make the difference – and this is a tribute to modern technology.

I think I have always appreciated the values, qualities and skills of our police officers, and if their task is easier today because of technological advances, this is surely to our benefit. There are other professions where the same story applies. Today's doctors, engineers, bridge builders and nurses, to name just a few, still bring with them the old values of their profession, but today these are augmented by better technology and perhaps more discerning practices. Not every occupation, however, can say this. I used to think that teaching was a profession that could claim to benefit from technology, but now I sometimes wonder.

Perhaps we could spend a few minutes looking at the positive and negative sides of technology in our schools, and then we can better decide if technology is a blessing or a blight.

When we think about technology in our classrooms, we can list basic items such as improved lighting or the presence of phones to allow more subtle communication between office and classroom – do you remember those dreadful announcements over the PA "Will Tom Clark please come to the office?" We might consider the type of desks and chairs available, or the improved climate control, and of course, we would not forget the high-ticket items, such as electronic whiteboards, laptops and i-pads, video players and recorders … the list goes on. How could anyone doubt the efficacy of such marvels?

How indeed? And yet does every teacher subscribe to the theory that technology enhances our schools? I think not. Many teachers would appreciate the fact that today's students today can access immense material with the click of a button, they can communicate with peers and teachers in an instant, the can get encouraging feedback while working on a project, and they

can record their findings in ways that few people imagined 50 years ago. However, each of these features leaves the way open to abuse and many teachers have already found that the supposed benefits have very dark sides as well.

There is nothing new, of course, about being worried by the potential threats of technology. I remember in my early years as a teacher subscribing to a very progressive publication, *Modern Teaching*, published by the Modern Teaching Methods Association, a Victorian group founded by Victorian educator, Ross Williams. A favourite mantra of his was "Any teacher who can be replaced by a machine deserves to be." Ross was responding to an outbreak of fear among educators in the sixties that the advent of technology could signal the end of teachers. I note with wry amusement the current fear that robots will replace countless employees in the coming decade. (There is nothing erroneous about the claim, but as usual it overlooks the 'substitution theory' which tells us that when one job disappears, others quickly arise to take its place.)

It would be quite easy to list a dozen genuine threats posed by the continued developments in

technology, but I am more concerned about the countless flaws already well known to users of such advances. I want to consider just a few of these here, in the hope that we might be able to take a stand to counter their impact.

Let's start with the simple white board – itself a technological innovation that replaced the blackboards of old and their relatively short-lived successor, the green board. If you were preparing work on a white board, the room for error was relatively small; about the worst thing you could do was to use a permanent pen instead of a white board marker, and if you did, you had to put up with the fumes of methylated spirits while you corrected your error. Contrast this with the classroom computers. Here, after you have spent hours preparing your lessons, you can very easily – and very often – lose the lot because of some careless error such as forgetting to back up before you stop for a break. I think you will agree that such silly errors are all the more embarrassing because "everyone knows you must always back up!" The lesson here might be to ensure that you access your automatic back-up, a simple strategy but one so easily forgotten, especially when using a computer that is not your own.

Of course, using a computer is standard fare for most of us today and we are less likely to make a total mess of that, but just when you think you have everything under control, your Education Authority decides that it is time to upgrade to the next version of the software you have finally mastered. The powers-that-be assure you (on the advice of the I.T. specialists in Head Office, about whom I will say more shortly) that the changes are minimal but the benefits are immense. As you have absolutely no control over their decision, it doesn't really matter what they say – the changes are going to be implemented by the end of the term. Those in authority never seem to realise you have already committed endless hours of your so-called free time (that small period on weekends when you are not dealing with more pressing issues) and now you are going to have to repeat the effort. What can we learn here? Perhaps the only useful lesson is to set up our own education system – but that is rather costly.

Now all of this must sound like whingeing, at least to those people who are comfortable with technology. They have probably never read about the inherent stress one experiences when forced to master yet another "advance". Fortunately, you are not alone when it comes to learning how to capitalise on the latest gadgetry. There are system-level I.T. specialists, your colleagues at school and your students, all only too happy to help you. Let's look at each of these.

The I.T. specialists are usually 'of a type'. This does not mean that all of them fit into this category, but I have to say, with the greatest affection for them as people, that a significant number do. The typology I am referring to is quite simple: when you ask for help, you can

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almost feel the question in their mind "Don't you know anything? I have told you about this at least three times." They then put on their condescending expression and stand behind you and lean over your shoulder while pressing keys at an alarming rate. Meanwhile they rattle on about the comparative advantages of various platforms, where your chosen make and model is obviously the lowest of the low. Having now established their greater knowledge and wisdom, they repeat the magic trick with the multiple buttons, until finally they ask you to move over and let them sit at the desk where they again type furiously for three minutes before announcing that the problem is solved. Sound familiar? The end result is that we have now able to finish the work that was interrupted by this crisis, but we have learned nothing that we can use in the future. Just as we might all know some very intellectual medical doctors who lack bedside manner, I suggest that at least some I.T. specialists are similarly challenged when it comes to deskside manner.

However, this still leaves your staff colleagues… if they can find time to help you because you recently gave them extra playground duties or failed to support their application for a promotion. If this is the case, forget the idea of peer tutoring and find a sensible student. You can normally find one or two of these in Year Four. Not only will most of them know how to solve your most complex problems but they will do so in a manner that avoids complex jargon, condescending smiles and demands to take control of the keyboard. They will also leave you with a sense of pride that modern students – your students – are destined for great progress in the world of the future. The obvious lesson is that when seeking help, you should ask those best equipped to meet your needs – your junior pupils.

Having referred to pupils and peers, it is only fair that we should also mention parents. In a perfect world, parents will support every initiative that teachers take to improve educational outcomes for their children, but sadly, this world is not perfect. While many parents embrace the idea that their children will grow up to be smarter than their mum and dad, there are some who seem worried by this natural evolution. They don't like the idea that their off-spring might know more about any topic than they themselves know. As a result, they tend to be rather critical about any progress made in education because it means their children are getting something denied to earlier generations. It is this group of parents, I suspect, who are suspicious of all technology and who resent the fact that young people today spend so much time looking at flickering screens. (I suspect that their forebears

might have resented the transition that came with the printing press.) They discourage their children from mastering modern technology and remind them that *they* managed to succeed in life without such paraphernalia.

You probably don't have much influence over the group, because they are usually too busy to attend parent-teacher meetings or any other occasions when parents and teachers can converse, but you should be mindful of the fall-out experienced by the children in such homes, and compensate for it by offering such children the extra support they will need if they are to take their rightful place in a modern world.

Perhaps the greatest drawback with using technology in schools is that just when you think that everything is under control and that you are about to present a wonderful experience for your students, you discover that the machinery has a mind of its own. It might be that there is an unscheduled interruption to the power supply or it might be that the DVD you were about to show had been wrongly boxed and instead of the planned presentation about the arrival of the First Fleet, you are showing your class a movie about the life of the box jellyfish. I think we all have our favourite story about "the day technology betrayed me" and certainly the memories will eventually evoke a few chuckles when you are telling your grandchildren about the disaster, but the truth remains that at the time of the actual crisis you had a challenging class, hyped up to see something that really interested them, and instead they were treated to an amateur performance of Tchaikovsky's *Dance of the Sugar Plum Fairy*. I can guarantee that your error did not lead to a worthwhile educational effort for most of the class.

Technology, whatever form it takes, offers great value to teachers and pupils alike, and I hope we continue to embrace it in the future, but we cannot deny that it is like fire: a wonderful servant but a dangerous master. To gain the optimum benefit from its use, we must make sure that we prepare carefully for its use, present it professionally and learn how to deal with its idiosyncrasies. We don't have to hold Master's degrees in technology (though that would be very handy for at least some teachers on staff) but we do need to keep an open mind that will help us get the real value for these gifts of the modern age.

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