

Technology is NOT a substitute for teaching (Part 1)

Infusing education with technology is a wonderful idea. Classrooms with access to the internet and mobile devices have marvelous opportunities to make learning relevant to 21st Century students. Technology offers new ways to enable and encourage self-learning, engage students with content and build capability in vital workplace skills. However, as with every other educational strategy or tool, technology is only effective when embedded in a well thought out lesson plan and specifically applied to support learning outcomes.

Key points

Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is the most important.

Bill Gates

Unfortunately, the current rush to incorporate technology into our schools and classrooms (BYOD anyone?) has in some cases served to undermine fundamentally sound teaching and learning strategies. The overwhelming notion seems to be that, if we incorporate a computer, mobile phone or iPad somewhere in the learning process, then we can call it a '21st Century' lesson because it is more geared to meet the needs of this generation of learners.

It's a seductive idea – and it's wrong.

Let's be clear: To prepare our students to succeed in the future, we must make sure they are comfortable not only with current technology, but also learning to use new technology as it emerges. All well and good as far as it goes.

However, how human beings learn hasn't changed. When including technology in the curriculum, educators must understand its place in the learning process. Here's a simple example: Handing a child an iPad with interactive books on it will NOT teach them to read better. The child might be more excited to hold an iPad than a book. If they don't know the meaning of a word, they might be more likely to use the 'look up' function than to open a dictionary. However, an iPad will not teach the child to read. It simply offers educators another tool to implement in the long, varied and complex process of teaching reading skills.

I recently had an up close and personal experience of the misuse of technology for educational purposes. My 15-year-old daughter was given an assignment in her Aboriginal Studies class. Each student was asked to research a specific topic and create a learning tool to help their peers understand and remember the topic for an essay-based test. In this case, the assignment mandated that the tool must be a form of digital content: either a 5-minute video or a 5-minute automated presentation.

So, she went and did the necessary research, gathered the information students needed to remember on the topic and made written notes, which she turned into a 5-minute script. This took about two hours. Next came the technology part – make a movie! Except, like many of the students in the class, my step-daughter had never used Windows Movie Maker before. So, to complete her assignment, she had to go online and teach herself to use the program. Then she had to record her script in tiny chunks, find or create visuals (graphics and diagrams) to support each 5-second grab, and then edit the whole thing together. As it turned out, editing sound and images together is hard and time consuming. Making the 5-minute movie took her ten times longer than it took to research her topic and write the script. Whilst the additional learning is beneficial, this approach creates a two-fold problem, we will unpack in part 2.

Technology offers new ways to enable and encourage self-learning and engage students but is NOT a substitute for quality teaching.

To prepare our students for the future we must make sure they are comfortable with current technology as well as learning to use emerging technologies.

Technology offers educators more options to engage learning but teaching is a complex skill.

Providing a child with an iPad will not teach the child to read.



Dr Rich Allen

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