



Bruce Dixon

# The state of creativity

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It is an anachronistic quirk that in almost every advertisement or piece of stock footage that one sees featuring schools and classrooms, there is a blackboard in the background, despite the fact that there is barely a classroom in the country that hasn't replaced its blackboards with standard whiteboards, or more likely, interactive, electronic whiteboards. The changes to the tools inside the classroom are a direct reflection of the technological revolution occurring outside school walls. What many are now questioning, however, is whether our education system has kept pace with the evolving needs of 21st century employers, consumers, and most importantly, learners.

Somewhat ironically in our climate of high stakes testing, creativity is emerging as one of the most valued commodities in the workforce. A 2012 paper by the Department of Education,

Employment and Workplace Relations in Australia proposed a framework of core employability skill clusters based on research with peak bodies representing employment services, government agencies and tertiary institutions. Creativity featured strongly in criteria such as "manage personal learning", "identify, solve and anticipate problems" and "design, develop and implement ideas", all skills that were identified as being important in today's labour market.

In recognition of the rise in importance of creativity, digital marketing and media solutions company Adobe commissioned a study investigating creativity in education, the results of which were released at the recent Adobe Education Leadership Forum in Phuket, Thailand. Based on a survey of 1014 participants in 13 countries in the Asia-Pacific region, *The*

*state of creativity in education: a special report* outlines the attitudes and beliefs of educators in terms of integrating creativity in the curriculum. In the foreword, the report acknowledges, "Creativity is not easily summed up or defined but it is often associated with a set of qualities and propensities: risk-taking, acceptance of ambiguity, originality." Survey respondents indicated that while they spend around 45 per cent of their time developing students' creativity skills, they would like to be spending around 58 per cent of their time on it. The results for the Australian and New Zealand participants showed an even greater gap between the ideal and the actual amount of time dedicated to fostering innovation.

The report also uncovered an underlying belief in the importance of creativity not only to the immediate educational needs of students,

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but also to the long term prosperity of the national economy and the country as a whole. Sixty per cent of respondents strongly agreed that “fostering creativity in education today will fuel the economies of the future”, however on a 10-point scale, participants gave the efficiency of the education system to develop a new generation of innovators a 5. The average response from Australian and New Zealand educators was even lower at 4.7. This reflects the challenge schools face to modernise education, and represents a shift away from the 19th and 20th century education models that produced employees with skills for the industrial era, towards a new pedagogical and organisational order that will equip young people to thrive in an increasingly technologised world.

While schools in Australia, to varying degrees, have embraced technology, it is often used as a substitute for paper-based tasks, rather than as a tool that could potentially open the way to greater creativity in classrooms. Bruce Dixon, co-founder of the Anytime, Anywhere Learning Foundation, Founding Director of ideasLAB, Australia, and a speaker at the Adobe Education Forum, suggests that we are layering technology over the top of existing pedagogy, rather than allowing its use to be driven by the world that our students live in. The view is shared by another conference speaker, Dr Allen Partridge, an Adobe eLearning Evangelist who believes we are in a “transitional technology” stage – using new technology in old ways. We might have replaced a pen and paper with a word processing program, for instance, but we are not fully appreciating the wider opportunities that

technology presents us.

Technology is not the only medium through which creativity in the classroom can be nurtured, but it is certainly one that has found favour with educators. An impressive 85 per cent of respondents to the survey believe that technology and digital tools play an important role in fostering creativity. However, just over a third indicated that they felt ready to “adapt their teaching methodology to leverage digital tools”, which leaves the majority of educators feeling unprepared to effectively capitalise on technology for their students.

Michael Stoddart, Adobe’s Product Marketing Manager for the Asia-Pacific Region, believes that in Australia there is a sense that we are “ready for some kind of breakthrough.” With the advent of the National Broadband Network and implementation of the federal government’s one-to-one laptop program we are in a position to make fundamental changes that take advantage of our access to technology. Stoddart is optimistic about the ability of teachers to understand and meaningfully integrate digital resources, explaining that while some people enjoy being at the cutting-edge of the latest technology fad, teachers tend to be “into technology for the purpose it serves; for example, for student engagement.” It’s a refreshing view in light of the fact that teachers, especially those nearing retirement, are often characterised as technophobic, but one that has a direct link to one of the oft-heard mantras in educational circles – that students need to see the relevance of their learning. It makes sense that where teachers can see the value of incorporating technology into

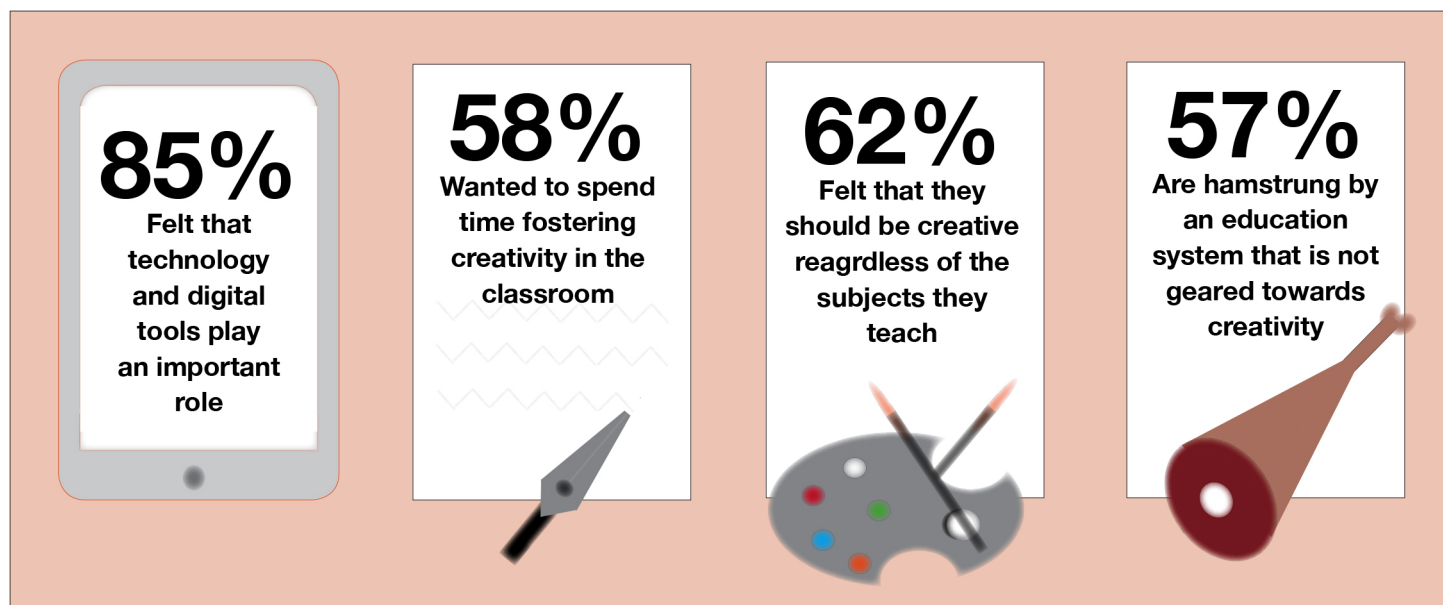
their lessons, they are far more likely to pursue its effective use.

The caveat to this is the persistent unreliability of technology. For many educators, this is a barrier to the creative use of digital resources in the classroom, as precious teaching time is often lost to fixing technical issues. Stoddart concedes that this is an issue, and attributes the growing interest in tablets to the perception that they have a much smaller failure rate.

Adobe’s survey gave participants the chance to identify other barriers to creativity. The top factor in Australia and New Zealand was “an education system that is too reliant on testing and assessment,” with 39 per cent of respondents suggesting that this inhibits their ability to teach creatively. The two most cited responses from the greater APAC area were that teachers feel “hamstrung by an education system that is not geared towards creativity” and that there is a “lack of resources”. While it is pleasing to note that these are not prominent considerations in Australia, the fact that our test-driven culture is more of a concern than in other countries shows that we have some way to go in negotiating a curriculum that balances academic achievement as measured through narrow assessment criteria with developing practices that nurture creativity.

One strategy that Stoddart recommends is the ‘flipped classroom’ model. American Karl Fisch developed the flipped classroom approach to maximise students’ hands-on learning time through a high school maths course. “Instead of the more typical math class where the lecture is presented in class and then students do practice for homework, this class will have the students watch the lecture for homework and then use class time for practice and inquiry,” Fisch’s school website explains (Fisch, 2013).

Adobe’s Senior Director of Products and General Manager of Web and e-Learning in India, Tridib Roy Chowdhury is also a proponent of flipped classroom methodology.







Dr Allen Partridge

“We are looking to take an active role in flipped classrooms,” he says. “We have anecdotal success stories, but we now need data to move to the next point.” Chowdhury stresses that teachers are not made obsolete by e-learning practices; instead the use of strategies such as flipped classrooms frees teachers up to spend more time on one-on-one intervention. Flipped learning also typically gives students greater control over their learning,

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as they can easily skip over things that they already know, and replay or revisit content if they did not understand the first time.

The concept of self-directed learning, as evidenced in flipped classrooms, features in Bruce Dixon's list of fundamental shifts in modern learning. Dixon also suggests that collaboration or social learning is a priority for today's students. Young people have become adept at obtaining feedback from multiple sources and incorporating it in their work, and revising or building on the work of others to produce something new. “Everything is a remix,” Dixon asserts. These changes in the way that students approach their work may be confronting for educators, but they also present an opportunity to make a corresponding shift in pedagogy that exploits students' interests in technology and social networking to more closely reflect the world outside school. As Dixon puts it, “We are locking young people's potential up inside our 20th century notion of curriculum.”

Sir Ken Robinson, internationally renowned expert in creativity and innovation in education (who was not at the Adobe Education Leadership Forum, but might as well have been, given the number of times he was quoted), said at a talk in 2006, “My contention is that creativity now is as important in education as literacy, and we should treat it with the same status” (Robinson, 2006). It is perhaps one of our greatest challenges as educators to find a way to allow our students to reach beyond the bounds of traditional notions of curriculum without neglecting the basic literacy and numeracy skills that are also a right of every child. **ET**

#### Further reading

Adobe (2013) *The state of creativity in education: a special report* Available at: <http://www.adobe.com/au/special/creativity-report/index.html>

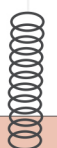
Department of Education, Employment and Workplace Relations (2012) *Employability Skills Framework Stage 1 – Final Report* Ithaca Group Available at: <http://deewr.gov.au/employability-skills>. Accessed 31 March 2013-03-31

Fisch, K “Flipped” Algebra 1 Arapahoe High School website. Available at: <http://arapahoe.littletonpublicschools.net/Default.aspx?tabid=10728>. Accessed 31 March 2013

Robinson, K (2006) Ken Robinson says schools kill creativity TED Available at: [http://www.ted.com/talks/ken\\_robinson\\_says\\_schools\\_kill\\_creativity.html](http://www.ted.com/talks/ken_robinson_says_schools_kill_creativity.html). Accessed 31 March 2013

# 34%

Indicated that they were prepared to adapt their teaching methodology to leverage digital tools



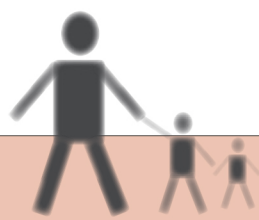
# 43%

Felt the current education system was either outdated or restrictive or both



# 21%

Strongly felt that parents are primarily responsible for creativity



# 41%

Believe tools and training for educators are the most critical need to promote creativity

