Social networking provides new opportunities for learning

Information Communication technologies (ICT) including social networking and games provide new opportunities for education a review of research released by ACER earlier this month argues. But, according to Australian Education Review 56, the “off the shelf” mentality which currently underpins the provision of computers in Australian schools may be stifling rather than enhancing innovation.

The review Building Innovation: Learning with technologies by University of Canberra academic Kathryn Moyle explores national and international policy priorities for building students’ innovation capabilities through information and communication technologies (ICT).

Releasing the review ACER’s chief executive Professor Geoff Masters noted that the importance of ICT literacy is now widely recognised in education policies across the world.

"ICT literacy is increasingly being given the policy status previously allocated only to literacy and numeracy,“ he said. "We need to use the research to make the necessary changes to enhance the capabilities of students and teachers in this vital area of learning.”

The review’s author Kathryn Moyle said when used well technologies such as Web 2.0 social networking sites can help to develop literacy skills, critical thinking, teamwork and problem-solving skills.

“They can also provide students and teachers with opportunities to include social and explorative aspects in their learning,” Moyle said. “Despite fears to the contrary, children could well be reading and writing more than their peers 20 years ago, albeit through a variety of media.”

The review argues that ICT must be used in learning environments in which students can take risks and experiment. It is critical of the largely unquestioned use of proprietary and off-the-shelf software packages.

Moyle argues for greater use of open access software and calls for recurrent funds paid for software licences to be redirected away from commercial vendors to the professional development of educators.

“This would create more innovative and creative education environments than we have in our schools at the moment and put money and resources where it is urgently required – into the development of the human infrastructure of schools.”
Kathryn Moyle is Associate Professor of Education at the University of Canberra. She has published extensively in the fields of technologies and their implications for school reform, curriculum assessment, teaching and learning, and school leadership.

Australian Education Review number 56, Building Innovation: Learning with technologies, by Kathryn Moyle, is available for download from the ACER website. Print copies can be purchased from ACER Press.
Teachers key to curriculum success

In this opinion article, originally published in The Canberra Times, ACER’s chief executive, Professor Geoff Masters, points out that every classroom teacher must be equipped and supported to deliver the new national curriculum.

This month’s release of the proposed national curriculum for kindergarten to Year 10 in English, history, science and mathematics is a milestone for Australian education. After several false starts late last century, the nation at last has a clear curriculum roadmap of the minimum essential knowledge and skills that all students should learn in each year of school. And it’s not before time. Although Australia has a population less than some American states, we have lived with unnecessary differences and substantial duplication of school curricula across eight jurisdictions. The new curriculum released this month is a step towards ensuring that every Australian child receives a sound basic education, regardless of where they live.

The launch of the Australian curriculum also points to the next challenge of ensuring that every classroom teacher is equipped and supported to deliver the new curriculum. Clarity about what teachers should teach and students should learn is the first step. The implementation of the new curriculum will require teachers with expert knowledge about effective teaching practices and high levels of skill in interpreting the new curriculum for particular groups of students.

Our best teachers already know that teaching is more than delivering a one-size-fits-all curriculum to all students in a particular grade. They understand the enormous variability in students’ interests, motivations and rates and levels of school progress. In any given year of school in Australia, the highest achieving ten per cent of students in areas like mathematics and reading are about five to six years ahead of the lowest achieving ten per cent of students. Excellent teachers understand the importance of first identifying where individuals are up to in their learning, including diagnosing misunderstandings and gaps in learning. They then use this knowledge to identify starting points for teaching and provide differentiated learning opportunities appropriate to individuals’ levels of readiness and need. Our best teachers know that the greatest inefficiencies in teaching are the result of teaching some students what they already know and teaching others what they are not yet ready to learn.

Evidence from recent audits of teaching and learning practices in Australia reveal that teachers differ significantly in their ability to provide differentiated teaching of this kind. Some fall back on delivering the curriculum for the grade, teaching to the middle of the class, with the consequence that lower achieving students fall further behind as each year’s curriculum becomes increasingly inappropriate for them; others allow higher achieving students ‘free time’ when they complete class work early, rather than challenging and extending them with more advanced work. The worst possible outcome of a national curriculum would be an increase in the number of teachers who deliver the curriculum in an undifferentiated way to all children in the same year level.
The challenge of building teachers’ skills to implement the new Australian curriculum should be high on the agenda of the newly-established Australian Institute of Teaching and School Leadership. Tasks for the Institute include identifying and promoting evidence-based teaching strategies; developing teachers’ and leaders’ skills in diagnosing difficulties and monitoring learning over time; and building skills in the delivery of differentiated (or ‘personalised’) learning, including through more effective uses of technology. The new Australian curriculum will enhance the quality of teaching and learning in our schools to the extent that it is accompanied by systematic efforts to identify and promote highly effective teaching practices, to evaluate the quality of classroom teaching, and to recognise and reward teachers who achieve high standards of teaching excellence.

This article was first published in the opinion pages of the Canberra Times. (‘Teachers key to curriculum success,’ by Geoff Masters, Canberra Times, 3 March 2010, page 11).
A national curriculum requires national teaching standards

In this opinion article, originally published in the The Advertiser, Dr Lawrence Ingvarson, ACER Principal Research Fellow, argues that the real educational challenge in implementing Australia’s national curriculum is capacity building in every teacher and setting strong and clear standards to articulate what teachers need to know and be able to do to bring the curriculum vision to life.

The content of the national curriculum statements about English, history, mathematics and science released this month, while not particularly new, is inspiring. They also illustrate the complexity of what we expect our teachers to know and be able to do.

There has never been a problem writing inspiring reasons for teaching these subjects. Such statements abound, nationally and internationally. Yet research shows that curriculum statements, in themselves, rarely lead teachers to make significant changes in the quality of their teaching.

The real educational challenge in implementing Australia’s National Curriculum is capacity building in every teacher and setting strong and clear standards to articulate what teachers need to know and be able to do to bring the curriculum vision to life. Implementation of the national curriculum will be more successful if complementary roles are developed between the Australian Curriculum, Assessment and Reporting Authority and the new body responsible for teaching and teacher education standards, the Australian Institute for Teaching and School Leadership (AITSL). The success of each will depend in large part on the success of the other. It may surprise some that current subject matter standards for beginning primary teachers are generic and go no deeper than saying they “should know the content they will be expected to teach”.

What teachers should know after four years of training about, for example, how students learn to read or write, or what they should know about mathematics, science or history is not spelled out further in the current standards for beginning primary teachers and as a guide to teacher educators.

Consequently, there is great diversity across universities in the opportunities student teachers have to learn about the literacy, mathematics, science and history they will be expected to teach. We should be long past tolerating this situation.

We need better methods for assessing whether graduates meet these performance standards. This should be a central task for AITSL. A good start would be to develop assessments based on testing the ability of graduates to teach the subject-matter knowledge in the national curriculum. And these methods should provide the main basis for establishing a rigorous, consistent national system for accrediting, or disaccrediting, teacher education programs, like the Australian Medical Council.

Successful implementation of the national curriculum will also depend on developing a more effective professional learning system for practicing teachers. This will require standards that make clear what teachers should get better at with experience and a pay schedule that provides more powerful incentives to reach high standards.
These standards must not be vague and generic. It makes little sense to have distinct curricula for English, history, mathematics and science but common generic standards for those who teach these subjects. The new AITSL is responsible for developing a national system for providing a portable certification to teachers who reach high performance standards. AITSL should operate the certification system nationally to ensure the assessments of teacher performance are conducted in a consistent, fair and rigorous manner. It should not be left to each employing authority or state jurisdiction to develop its own methods for conducting the assessments. We tried this with the Advanced Skills idea nearly 20 years ago and it failed dismally. Most professions have a single national body for providing advanced certification. Why should teaching be different?

Certification should be provided in the range of specialist fields that make up the teaching profession, such as Early Childhood/ Junior Primary teaching, Upper Primary and secondary subject specialisms such as English, history, mathematics and science, not just one. If salary incentives for achieving certification are strong, teachers will look for the kind of professional learning that helps them meet the performance standards. This is the best way to build capacity to implement the vision contained in each part of the national curriculum.

National certification should also be made a necessary condition for promotion to school leadership positions. This would strengthen incentives for professional learning and leadership capacity in schools surrounding the National Curriculum.

Successful implementation of the national curriculum will depend not only on capacity but a sense of ownership among teachers for its vision. AITSL has an excellent opportunity to do this by building a national certification system based on the professional standards for highly accomplished teachers that have been developed already by the English, history, mathematics and science teacher associations.

An edited version of this article was published in the opinion pages of Adelaide’s Advertiser newspaper. (‘Teachers need to lift game,’ by Lawrence Ingvarson, The Advertiser, 9 March 2010, page 67).
ACER UPDATE

Digital Education Research Network launched by ACER

Researchers with an interest in digital learning are now able to debate issues and share ideas following the launch today of the Digital Education Research Network (DERN).

DERN has been established by ACER as a communications, discussion, networking and storage service for researchers in the area of digital learning. The vision for DERN is to develop a place to aggregate Australian research into the use of ICT in education and to stimulate discussion among researchers in this area.

The launch of DERN coincides with the release earlier this month of Australian Education Review 56, Building Innovation: Learning with technologies, by Kathryn Moyle, Associate Professor of Education at the University of Canberra.

Researchers are invited to access and comment on the review through DERN.

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Australian Council for Educational Research
Private Bag 55, Camberwell, Victoria Australia 3124
Tel: + 61 3 9277 5555
Fax: + 61 3 9277 5500
Web: www.acer.edu.au