

21st-century skills: Realising the potential of the Australian Curriculum



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Robert Randall has recently completed two terms as Chief Executive Officer of the Australian Curriculum, Assessment and Reporting Authority (ACARA), first taking up that role in November 2012.

He commenced working at ACARA in 2009 and held the roles of Deputy CEO and General Manager, Curriculum. In the lead-up to the establishment of ACARA, Robert was General Manager of the Interim National Curriculum Board.

Robert began his career in Perth as a teacher of mathematics before holding a range of positions within and beyond schools in Western Australia. In 1996, Robert was appointed Director, Curriculum, with the New South Wales Board of Studies, and in 2001 took up the position of Director of Curriculum K–12 with the NSW Department of Education and Training.

Abstract

The Melbourne Declaration on Educational Goals for Young Australians (Melbourne Declaration) (MCEETYA, 2008) proposed that the Australian Curriculum (and state or territory and local curriculum) develop:

- a solid foundation in knowledge, understanding, skills and values on which further learning and adult life can be built
- deep knowledge, understanding, skills and values that will enable advanced learning and an ability to create new ideas and translate them into practical applications
- general capabilities that underpin flexible and analytical thinking, a capacity to work with others and an ability to move across subject disciplines to develop new expertise.

The Australian Curriculum, approved by education ministers for implementation, includes general capabilities that comprise knowledge, skills, behaviours and dispositions that students develop and use in their learning across the curriculum. The Australian Curriculum identifies where the general capabilities are addressed through the learning areas and where there are opportunities to add depth and richness to student learning.

This session will draw on implementation experience and various national and international reports on 21st-century capabilities to take stock of the opportunities and challenges in delivering the Australian Curriculum. Particular attention will be given to the what, why and how of ensuring that all young Australians are supported to learn these fundamentally important capabilities.

Setting national expectations

General capabilities are a key element in the Australian Curriculum and ‘encompass knowledge, skills, behaviours and dispositions that, together with curriculum content in each learning area and the cross-curriculum priorities, will assist students to live and work successfully in the twenty-first century’ (ACARA, 2019).

The Australian Curriculum, approved by education ministers for implementation in schools across the country, includes seven general capabilities:

- literacy
- numeracy
- information and communication technology capability
- critical and creative thinking
- personal and social capability
- ethical understanding
- intercultural understanding.

Inclusion of the general capabilities was a design feature of the national curriculum from the outset, with strong guidance from the Melbourne Declaration through its goal that ‘all young people in Australia should be supported to become successful learners, confident and creative individuals, and active and informed citizens’ (MCEETYA, 2008).

Development of the Australian Curriculum and the general capabilities in particular was guided by *The Shape of the Australian Curriculum* (ACARA, 2013a) *Curriculum Design Paper* (ACARA, 2013b) and *Curriculum Development Process* (ACARA, 2012) papers that provided developers and others with clear advice on the design and development of the curriculum, including references used to develop the general capability sequences.

In the first iteration (2009) of *The Shape of the Australian Curriculum* (see ACARA, 2013a), the Interim National Curriculum Board stated that it would ‘deal explicitly with general capabilities within the national curriculum to avoid any risk that they will receive inadequate or unsystematic attention because they are supposed to be addressed “across the curriculum”’.

Initially, there were 10 general capabilities (literacy, numeracy, information and communication technology, thinking skills, creativity, self-management, teamwork, intercultural understanding, ethical behaviour and social

competence) described at three levels (end of Years 2, 4, 6 and 10). With ongoing attention to the literature about these capabilities and feedback from teachers and other educators, the set of general capabilities was reorganised as seven, described at five levels (outlining expectations for the end of Years 2, 4, 6 and 10).

While there have been some modifications along the way and additional explanatory advice and support material produced, the general capabilities as described on the Australian Curriculum website today have been in place since 2010.

Diligent effort

In the intervening years there has been ongoing engagement with and discussion about the general capabilities by ACARA, by state and territory education authorities, and increasingly in the broader community. For example, in ACARA’s 2011 monitoring report (2012a), it was noted that there was ‘strong support for the general capabilities, as a set and for each capability’. Respondents affirmed the general capabilities’ alignment with the Melbourne Declaration, their place in a 21st-century curriculum, their value as aspirational expectations for students progressing through schooling, and their potential to link with and enrich the learning areas.

Feedback also focused on the organisation and presentation of the general capabilities with requests for attention to greater differentiation between learning areas and capabilities; addressing gaps in the continua; and reviewing consistency, pitch and progression.

In recent years, greater attention has been given to providing support and resources to assist teachers to understand the purpose and intended use of the general capabilities, developing more illustrations of practice and practical challenges of how to ‘teach’ the general capabilities.

Feedback about the general capabilities has also included concerns about reduced attention to teaching the disciplines, often setting up a false dichotomy about learning areas or general capabilities. ACARA (2019) maintains the view that was introduced in the first *Shape of the Australian Curriculum* paper, that the:

... general capabilities are addressed through the content of the learning areas. General capabilities are identified where they are developed or applied in the content descriptions. They are also identified where they offer opportunities to add depth and richness to student learning ...

While there are no comprehensive data on implementation of general capabilities (and it may be easy to underestimate the efforts being made by school leaders and teachers), in the time since they have been

approved, there has been deliberate activity to support the teaching and assessment of the general capabilities across states and territories in individual schools, school sectors and school systems. Examples include:

- Rooty Hill High School in New South Wales sought to 'create a capabilities-focused curriculum, assessment and transition program'.
- The Association of Independent Schools of South Australia (AISSA) delivers workshops to support schools wishing to embed the personal and social capability within learning areas as a way of increasing student engagement
- In Victoria, the Victorian Curriculum and Assessment Authority (VCAA) has modified the general capabilities to provide content descriptions and achievement standards for four general capabilities: Critical and Creative Thinking, Ethical Understanding Capability, Intercultural Understanding Capability, and Personal and Social Capability. It has the expectation that schools report student achievement against the set of achievement standards set out in the eight learning areas and four capabilities of the Victorian Curriculum F–10, consistent with the whole-school teaching and learning plan. The VCAA has also developed assessment resources to assist teachers assess attainment and progress in relation to critical and creative thinking.

Contributions to the assessment of student learning of general capabilities have also been made by organisations such as ACER, who has addressed the topic in its Research Conferences and through work of ACER's Centre for Assessment Reform and Innovation (CARI). For example, Fraillon (2015) observes that there was 'danger in using a cross-curricular approach to teaching and assessing general capabilities ... the general capabilities can become secondary to the subject disciplines in which they are embedded' and Scoular and Heard (2018) note that 'contemporary thinking about general capabilities is substantially different from five years ago, with a greater focus on finding the best ways to teach and assess skills like critical thinking, creativity and collaboration ... [however] not much in the way of guidance for teachers or schools.'

And in response to such needs, CARI has commenced the development of an assessment framework to measure and monitor 21st-century skills in the classroom. Universities also have research and teaching programs seeking to investigate and support the teaching and assessment of the general capabilities. It is worth highlighting the ongoing program in Melbourne University's Assessment Research Centre on the assessment of 21st-century skills, preceded and significantly informed the position taken by ACARA.

Raising expectations

While there has been support for the inclusion of the general capabilities, from the outset the attention given to them and expectations about student learning of them has increased significantly in recent years.

For example, in *The New Work Reality*, the Foundation for Young Australians (FYA) (2018) argues that 'Young people who are able to build transferable enterprise skills, such as problem-solving, communication and teamwork through formal education can accelerate their transition to full-time work by 17 months'. In another of their reports, *The New Basics* (FYA, 2017), they state that 'The high demand for enterprise skills underscores the importance of general capabilities being retained and elevated in the curriculum'.

Internationally, the OECD (2018) has led the way with its work on OECD 2030, arguing that:

Future-ready students will need both broad and specialised knowledge. Disciplinary knowledge will continue to be important, as the raw material from which new knowledge is developed, together with the capacity to think across the boundaries of disciplines and "connect the dots"... 'students will need to apply their knowledge in unknown and evolving circumstances. For this, they will need a broad range of skills, including cognitive and meta-cognitive skills (e.g. critical thinking, creative thinking, learning to learn and self-regulation); social and emotional skills (e.g. empathy, self-efficacy and collaboration); and practical and physical skills (e.g. using new information and communication technology devices).

And Australia is not alone. There are many countries now seeking to enhance their curriculum through attention to 21st-century skills. Lambert (2017) observes that most countries are trying to include in their curricula, in one form or another, problem-solving/critical thinking/creative thinking; communication (multi-literacies); social skills and teamwork; resilience; ICT skills/digital literacy; self- and social-awareness; respectful relationships; innovation and enterprise; intercultural understanding/global mindset; and self-efficacy.

Unquestionably, there has been significant effort and progress over the last nine years. However, is that progress adequate? Students who started in school in 2011, the year after the Australian Curriculum was approved, are now in Year 8. Is it the case that these young Australians are all well on their way to being 'successful learners, confident and creative individuals, and active and informed citizens' as a result of the national commitment to setting and meeting expectations for all young people, or is it that achieving this goal is still subject to chance – and should this be the case?

Torii and O'Connell (2017) argue that 'although progress is being made on embedding the capabilities young people will need into the curriculum, and there are some sites of world-leading practice in Australia, there is more to be done to ensure all young people are adequately equipped for the future.'

Adding to the imperative that more needs to be done, more quickly, Gonski (2018) observed that:

The world is not going to slow down and wait for Australia to catch up. We live in an increasingly complex and competitive global economy where success in the future will be defined by our ability to support the learning needs of individual children.

There is commitment, there is expectation, there is change to practice, there is advice and support for teaching and assessment, but is there the extent and quality of change that is desired, if not necessary, for Australia to meet the goal that was set for young Australians more than 10 years ago?

Need to do more, systematically, nationally and learning together

An analysis of implementation literature provides some insights about what is not happening and what could occur to realise the goal that has been set in relation to the general capabilities.

Overall, efforts in Australia to realise the potential of the general capabilities seem more like diffusion and dissemination, rather than what Lyon (2017), referring to Greenhaigh et al., defines as implementation, that is, the use of 'deliberate strategies in specific settings to adopt new interventions, integrate them effectively, and change practice patterns'. If we are serious about the teaching and learning of general capabilities (as well as discipline-based knowledge, understanding and skills), and want all students in all schools to be learning these capabilities, there is a distinct need for an implementation plan that goes way beyond setting expectations, which are laid out in the Australian Curriculum, through to systematic identification and engagement of all of the actors in the process.

Such an implementation plan should pay attention to the fidelity of implementation, with an explicit focus on all Australian students having the opportunity to develop and demonstrate achievement of the general capabilities. Scoping work undertaken for Social Ventures Australia's E4L program by Albers and Pattuwage (2017) concludes (unsurprisingly) that there 'are indications in the literature that high quality implementation contributes to improved educational services and thereby to better student outcomes'. More valuably, it draws attention to a staged approach

to implementation based on its examination of implementation frameworks while also highlighting the need for the 'development and funding of rigorous study designs aimed at testing different approaches to implementation of evidence-based practice in classrooms, schools and school systems'.

However, it may be that in some places in Australia this is already occurring, albeit within the walls of an organisation(s); and this highlights another need to be addressed – greater collaboration in the development, publication and dissemination of what works best in schools. This continues to be a challenge for Australia, with many citing constitutional responsibilities for education; however, some argue that we can and need to do better. Bentley and Savage (2017) argue for 'an agenda for system reform that systematically seeks to scale and connect different efforts and build shared institutional capabilities'. Hattie (2017) proposes that our system needs to be rebooted to overcome barriers if Australia is to have 'an education implementation model that is shared between schools and not resident in only a few, dependable recognition of excellence, and a celebration of success of our teachers and school leaders'.

There is a need to establish a confident and sustainable approach to enable the system(s) to learn. Scoular and Heard (2018) argue that 'schools may not be in a position to take a risk in adopting one approach over another without evidence of its effectiveness and researchers can't provide evidence of effective approaches until schools opt-in to trials'. While there are researchers who are ready and willing to work with schools, there may be a need for, and potential gain in, rewriting some of the rules and protocols about how this happens in schools and within and between school systems and sectors. In the few years since it commenced operation in 2016, Social Ventures Australia's Evidence for Learning (E4L) initiative has made a significant contribution to meeting such a need, through its engagement with teachers, schools and school systems to promote an evidence-based national conversation and by making the learning and tools available for all. In particular, its advocacy for innovating, proving and then scaling provides the framework for building evidence-informed practice across the country.

The aphorism 'a rising tide lifts all boats' is very apt in discussion about our national desire to improve progress and attainment for all young Australians, wherever they go to school. It is particularly applicable in our federation in relation to the teaching and assessment of general capabilities, given what is still to be learned and delivered – not just by students.

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