



Australian Government

Review of the Australian Curriculum

Final Report

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Comments and inquiries

Further information on the Review of the Australian Curriculum can be found on the [Strengthening the Australian Curriculum](http://www.studentsfirst.gov.au/strengthening-australian-curriculum) website (<http://www.studentsfirst.gov.au/strengthening-australian-curriculum>).

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Letter to the Minister



Australian Government

The Hon Christopher Pyne MP
Minister for Education
Parliament House
CANBERRA ACT 2600

15 August 2014

Dear Minister

On 10 January 2014 you confirmed the Australian Government's commitment to implementing a world-class national curriculum through the review of the Australian Curriculum to evaluate its robustness, independence and balance.

You asked us to provide a report to you at the conclusion of our review. Accordingly, we are pleased to submit to you the Final Report of the Review of the Australian Curriculum.

Any discussion of the Australian Curriculum inevitably stirs the passions of a very broad range of stakeholders, all of whom want Australian students to have the opportunity to receive the highest possible quality of education.

We have received almost 1,600 submissions and conducted consultations across Australia to consider the views and evidence provided by education authorities, curriculum organisations, peak education bodies, principal associations and parent groups. We commissioned research papers from subject matter specialists to inform our consideration of each learning area in the Australian Curriculum.

The submissions we received, the consultations we conducted and the research we commissioned yielded a wealth of evidence that we have drawn upon in formulating our recommendations.

Of course, in matters of curriculum content there are no easy choices to be made. Any new content to be added must be more than matched by a decision to exclude content from an already crowded curriculum. Similarly, it is not possible to recommend a single structure for the Australian Curriculum that is guaranteed to satisfy all stakeholders.

Throughout the Review we have been mindful of the vital role that schools and teachers play in implementing the Australian Curriculum and have made every effort to capture their viewpoints along with those of parents.

In preparing our recommendations, we have focused on determining whether the Australian Curriculum is designed to deliver, and is so far delivering, what students need, parents expect and the nation requires to equal the best performing international systems. We are confident that the recommendations we are making will improve the Australian Curriculum.

We are very grateful for the time and effort that so many stakeholders have devoted to providing us with their thoughts, experience and evidence as we progressed through the Review.

The conduct of this Review would not have been possible without the highly professional support of the secretariat led by Tim Kinder to whom we express our special gratitude.

Yours sincerely

Dr Kevin Donnelly

Professor Kenneth Wiltshire

Executive summary

There is little as controversial in education as determining what it is that young people should be able to know, understand and be able to do following their time at school. As Chapter Three explains, Australia has wrestled for over 30 years with the issue of what every student should study at school as defined by a more nationally consistent curriculum framework.

Only in recent years has there been substantial progress towards developing a national curriculum for Australia. Prior to that, while there have been attempts at cross-jurisdictional cooperation to achieve greater consensus on school curriculums across the country, most curriculum development was still happening unilaterally at the state and territory level.

In 2008, with the establishment of the Australian Curriculum, Assessment and Reporting Authority (ACARA), it appeared that critical momentum had finally been achieved to develop a truly national curriculum. Commencing with English, mathematics, science and history, ACARA began the task of creating the Australian Curriculum. Other learning areas were soon added to that list: geography, languages and the arts followed in a second phase of development, with the Australian Curriculum to be completed by technologies, economics and business, civics and citizenship and health and physical education in a third phase.

It is clear that desire for a national curriculum has waxed and waned across the country. While the Ministerial Council of Education Ministers determined that the first four subjects were required to be ‘substantially implemented’ in Foundation to Year 10 by 2013, no timelines were applied to geography or the arts – the only other curriculum subjects that have been endorsed by ministers to date. The senior secondary curriculum appears to be mired in uncertainty as to whether it needs to (or should) be implemented.

At all stages there have been concerns expressed at the development of the curriculum. It was too rushed. It lacked a conceptual framework. Were the cross-curriculum priorities mandatory? By far, the greatest concern was the content load expected to be delivered at primary school. Many of these concerns remain and have been raised during this Review. Other concerns have been brought to the Reviewers’ attention, including those about the pedagogical and epistemological assumptions and beliefs underlying the Australian Curriculum. This Report brings these concerns to the attention of ministers, policy makers and educators with recommendations for actions to address them.

The Review

The Review was established by the Australian Government to evaluate the development and implementation of the Australian Curriculum. The desire to ensure Australia was performing well in the international context as measured by tests such as Trends in International Mathematics and Science Study (TIMSS), Programme for International Student Assessment (PISA) and Progress in International Reading Literacy Study (PIRLS) was also an important part of the motivation for the Review.

The Reviewers are aware that it is the Ministerial Council¹ which ultimately determines the nature and extent of the Australian Curriculum, and have explicitly considered the evidence and its findings in the context of Australia's federal system and the constitutional responsibility of the states and territories in relation to school education.

In light of this, while the Review's terms of reference, outlined in the next section of this Report, required the Reviewers to bring recommendations to the Commonwealth Minister for Education, most of the recommendations are directed at the Ministerial Council and ACARA. The Reviewers believe that acting on these recommendations will make a positive contribution to the ongoing evaluation and review of the Australian Curriculum by the Ministerial Council and ACARA, and improve the return on what has already been a significant investment by all jurisdictions.

The development process

The Reviewers believe that there is still strong support across the country for developing and implementing a national curriculum, despite some initial doubts and resistance. The Reviewers note that this support is not uniform and that while there is support for the Foundation to Year 10 curriculum, the states and territories continue to reserve their right to control the senior years of schooling. Smaller states and those who had more closely experimented with Outcomes Based Education (OBE) appear to be the strongest supporters. The larger states, which have had longer histories of curriculum development and the critical mass to undertake their own curriculum research and design, are more reluctant to fully embrace the Australian Curriculum.

It is clear there has been significant compromise in the development of the curriculum. This compromise has been essential in getting all jurisdictions to agree to adopt and implement the Australian Curriculum. What is less clear is the educational basis for these compromises.

The Reviewers heard substantial evidence that content was added to the curriculum to appease stakeholders, which has led to an overcrowded curriculum. Such inclusions pay homage to the very evident inclusive development process undertaken by ACARA. Many of those involved spoke positively of the engagement, although at times indicated there was 'consultation fatigue' and frustration at the haste and minimal timeframes in which feedback was sought.

There were, however, important stakeholders such as parents, representatives of some principals, and experts in special education who argued that they had been overlooked by ACARA in the development process. The Reviewers believe that this haste, and the political imperatives that lay behind it, has had a detrimental impact on the development of the Australian Curriculum.

This is most evident in what the Reviewers have described as 'the missing step' – the development of an overarching curriculum framework that would underpin the development of the learning area and subject content. As Chapter Two outlines, claims that the Australian Curriculum has been developed to world's best practice are wide of the mark – especially in the lack of an explicit values foundation, set of design principles, and holistic approach to schooling of which curriculum is a vital

¹ The Ministerial Council is now known as the Education Council

part. The single-minded adherence to the prescriptions of the Melbourne Declaration² and the failure to initially consider how all the elements of the curriculum would fit together has led to a monolithic, inflexible and unwieldy curriculum. It is imperative that this is addressed as a matter of urgency.

Content across learning areas

There is no doubt that the issue that has caused the greatest amount of angst is the amount of content teachers are required to teach. This issue did not come as a surprise. The Australian Primary Principals Association (APPA) has consistently articulated this concern, and it was echoed throughout the consultation process.

It is clear that there is a significant amount of content for the primary years. While the Reviewers did hear some stakeholders attribute this to the newness of the Australian Curriculum or that it was replacing some more minimalist curriculum frameworks, the evidence of an excessive weight of content is compelling. Not only are teachers required to teach discipline content, they are required to develop students' competencies in the general capabilities and frame their teaching and learning programs in the context of the cross-curriculum priorities. Many of the submissions expressed the concern that depth has been compromised by breadth.

The Reviewers are persuaded that the lack of integration of the curriculum in the primary years – particularly in the humanities and social sciences – has exacerbated the issue of an overcrowded curriculum. It was also apparent that many stakeholders believed the curriculum has far exceeded any nominal time allocations that curriculum writers may have been given. One strongly argued reason was that this was due to the many compromises ACARA made to accommodate the very vocal advocacies of some groups about the essential nature of content relating to their discipline. The arts curriculum was particularly singled out in this regard.

The Reviewers are convinced that immediate and substantial action is required to address the overcrowding of the primary curriculum. Two options to restructure and reconceptualise the Australian Curriculum are outlined in Chapter Six. Recognising that the magnitude of these changes may require medium- to long-term implementation, Chapter Seven provides advice on changes that should be immediately undertaken in each learning area and subject in the interim.

The cross-curriculum priorities have been singled out as an area of concern, both in the media and in consultations for this Review. It is clear that there is strong support for students being taught about Aboriginal and Torres Strait Islander histories and cultures, Asia and Australia's engagement with Asia, and sustainability. There is concern about the seemingly political determination of these three 'priorities' through the Melbourne Declaration and a fear that changes of political persuasion could lead to constant changes in the 'priorities'. However, it is the manner with which the cross-curriculum priorities are being implemented that is of greatest concern. There is widespread misunderstanding as to whether teaching the cross-curriculum priorities is mandatory or not or whether they need to or should be taught in all learning areas and subjects. The Reviewers are not

² Ministerial Council for Education, Employment, Training and Youth Affairs, 2008, Melbourne Declaration on Educational Goals for Young Australians, Melbourne, viewed 13 August 2014, can be accessed at http://www.curriculum.edu.au/verve/_resources/National_Declaration_on_the_Educational_Goals_for_Young_Australians.pdf

convinced of the efficacy of having a cross-curriculum 'dimension' of the curriculum that does not clearly anchor these so-called priorities in the content of learning areas and subjects, and recommend that a complete reconceptualisation of the teaching of the cross-curriculum priorities be undertaken. Concerns have also been expressed about the nature and impact of the general capabilities on the Australian Curriculum and this Report makes a number of observations and recommendations about how to better relate the general capabilities to the intended curriculum.

Robustness

In the context of this Review, robustness is defined in terms of academic rigour, structure, sequencing, clarity, succinctness and evidence of aims, values and principles. As outlined in Chapter Two of this Report, and throughout Chapter Seven where the learning areas and subjects are scrutinised, education systems are benchmarking their curriculums against those of nations that perform well in international tests.

The Reviewers found that while there was some work undertaken by ACARA to benchmark its curriculum, this work is not without its methodological limitations. However, there is evidence from many stakeholders that demonstrates satisfaction with the robustness of the curriculum.

On the other hand, the analysis of the learning areas by subject matter specialists for this Review and a number of other submissions have produced mixed results, with some learning areas and subjects held in high regard and others criticised. The Reviewers urge the recommendations outlined in Chapter Seven of this Report be addressed immediately to deal with this unevenness.

Independence

During the Review, the concept of independence elicited a range of responses. It became clear that there is no uniform interpretation of what an independent curriculum might mean. For some it related to the crossover of the curriculum development process with political processes. For others, it was linked to the governance of ACARA and the representation of state and territory and non-government education authorities on its Board or the influence certain groups had on the inclusion of specific content in learning areas and subjects. Other submissions raised the issue of what constitutes the proper balance between a centralised, or what Professor Brian Caldwell terms a 'command and control'³ model of curriculum development and implementation, and the need to accommodate independence, flexibility and choice at the sector and school level.

What became evident during this Review is the unsatisfactory nature of ACARA's governance, which is outlined in Chapter Four and Chapter Eight of this Report. Clearly, any curriculum which is developed to accommodate the competing demands from education authorities and is approved by a Board that is mainly made up of representatives of those education authorities, is not independent. That ACARA has been established and operates as it does owes more to the nature and requirements of federalism than to purely educational requirements. This Report suggests that an overhaul of ACARA's governance is required to ensure it is truly independent.

³ Caldwell, B, 2014, *Realigning the governance of schools in Australia: Energising and experimentalist approach*, paper delivered at the Crawford School of Public Policy workshop, Twenty-first century public management: The experimentalist alternative, Australian National University, Canberra.

It also became evident that the nature of a national curriculum and the sheer size of the Australian Curriculum have an impact on the independence of schools to offer a tailored curriculum that addresses the specific and local needs of the school's population. The impact the bloated size of the Australian Curriculum was having on a school's ability to offer a school-based curriculum was regularly brought to the attention of the Reviewers. So much mandatory content is included that some argued it was taking up more than the total teaching time available in a school year. This is having an impact on the amount of time available for co-curricular offerings; and for faith-based non-government schools, their ability to imbue the total curriculum with the values, beliefs and teachings that constitute their unique nature and mission. Again, the Reviewers recommend a substantial review of the essential curriculum content that all students are required to be taught in order to enable schools to develop more school-based curriculum that better reflects the needs of their students, parents and communities.

Balance, choice and diversity

In framing its response to the terms of reference, the Review adopted a definition of balanced curriculum as one that includes a comprehensive coverage of basic knowledge, facts, concepts and themes without bias as to the selectiveness of content and emphasis. Here the evidence was more equivocal, with both support for and criticism of the balance of the Australian Curriculum.

The Review received a significant number of submissions arguing that the Australian Curriculum did not pay enough attention to the impact of Western civilisation and Judeo-Christianity on Australia's development, institutions and broader society and culture. While this was raised particularly in relation to the history and the civics and citizenship curriculums, subject matter specialists also raised it in relation to the arts, English and economics and business curriculums. Indeed, in the context of the Melbourne Declaration's aspiration that the national curriculum would enable students to understand the 'spiritual and moral' dimensions of life, there appears to be a distinct imbalance in the Australian Curriculum as these key aspects have been neglected.

As the Review progressed, it also became evident that the Australian Curriculum privileges certain learning styles and pedagogies. The curriculums for geography, history and science all privilege inquiry-based and student-centred teaching and learning. Such an approach is often associated with constructivism and a focus on skills and capabilities at the expense of essential knowledge and the need for explicit teaching of which direct instruction is one example. While the Reviewers are not suggesting that there is no place for inquiry-based learning in the classroom – indeed, all good teachers use a variety of pedagogical approaches – caution should be exercised so that certain pedagogies are not overly privileged or become the prevailing orthodoxy in comparison to other evidence-based approaches. The various approaches to teaching and learning, either implicitly or explicitly favoured by the Australian Curriculum, should also take note of developments in cognitive psychology related to how students' best learn and develop a deep knowledge and understanding of the subject disciplines.

An area in which the Reviewers are convinced the Australian Curriculum is manifestly deficient is its inclusiveness and accommodation of the learning needs of students with disability. It was clear that some stakeholders, with considerable experience in special education, did not consider that the Australian Curriculum catered for all students. They were critical of both the development process and ACARA's subsequent attempts to retro-fit the Australian Curriculum to meet the needs of

students with disability, especially for those working towards the Foundation level of ACARA's curriculum design. They found this particularly difficult to fathom as there are already examples of curriculum that can accommodate students with disability in an inclusive manner, such as Victoria's construction that included the 'Towards Level 1' of the Victorian Essential Learning Standards (VELS).

Although ACARA has done some work in extending the learning continuums for general capabilities, it was considered insufficient; special education experts wanted a greater focus on learning area content – not just general capabilities – particularly for students with an intellectual disability. The Reviewers recommend that immediate effort be focused on making the Australian Curriculum more inclusive.

Future monitoring and review

The Reviewers recognise that implementation of the Australian Curriculum is formative and partial. However, given the issues uncovered by this Review, this may be beneficial – there is a strong argument in favour of delaying further implementation of the Australian Curriculum until the recommendations of this Review have been considered and, where appropriate, implemented. It is important that any change to the Australian Curriculum acknowledges the fact that Australia's education community – especially schools and teachers – have invested a great deal of energy, time and resources in its development and implementation. As such, any change should not contribute to reform fatigue or further exacerbate the work of teachers and schools.

It is therefore understandable that ACARA's development of a framework for future monitoring and review of the Australian Curriculum is not yet complete. However, as outlined in Chapter Eight of this Report, the Reviewers have concerns about the appropriateness of the body responsible for developing the curriculum also being responsible for its review. To that end, the Reviewers' recommendations relating to ACARA's governance should provide a partial solution. Even these reforms would not completely avoid an apparent conflict of interest in ACARA undertaking both roles. To address this, the Reviewers recommend the establishment of a small, educationally focused independent National School Performance Authority to evaluate the Australian Curriculum and assist education authorities to improve its delivery.

Other requests

During this Review, the Minister also asked the Reviewers to consider in relation to the terms of reference, the Daniel Morcombe Foundation's *Daniel Morcombe Child Safety Curriculum*⁴ and the South Australian Government's *Keeping Safe – Child Protection Curriculum*⁵.

The Reviewers note the support materials that have been developed by these organisations, and that the South Australian Government's *Keeping Safe – Child Protection Curriculum* is currently being used in South Australian schools and the *Daniel Morcombe Child Safety Curriculum*, developed as part of the Queensland Government's commitment to promoting child safety, is available to schools

⁴ Department of Education, Training and Employment 2012, *Daniel Morcombe Child Safety Curriculum Parent Guide: Prep – Year 2*, Department of Education, Training and Employment, viewed 4 August 2014, can be accessed at: <http://education.qld.gov.au/parents/school-life/child-safety-curriculum.html>

⁵ Department for Education and Child Development 2014, *Keeping safe – Child Protection Curriculum*, Department for Education and Child Development, viewed 4 August 2014, can be accessed at: <http://www.decd.sa.gov.au/teachingandlearning/pages/pandp/Childprotection/?reFlag=1>

in Queensland and other jurisdictions on request to the Queensland Department of Education, Training and Employment.

In relation to the intended curriculum, the Reviewers received advice from ACARA about how child safety was incorporated in the Australian Curriculum – particularly in the areas of health and physical education and digital technologies. In view of this advice, the Reviewers are persuaded that in terms of curriculum content, opportunities exist in the as yet unendorsed Australian Curriculum in these areas for teaching and learning about child safety.

In general, the Review has not strayed into the area of specific classroom resources, believing that teachers are best placed to choose the most appropriate resources for their teaching and learning plans. However, the Reviewers heard widespread evidence that there is increasing usage of the Scootle website that links curriculum content descriptors to learning resources. The South Australian *Keeping Safe – Child Protection Curriculum* is impressively comprehensive. While the Reviewers noted it was developed very much within the context of South Australian educational and legislative responsibilities, it is considered that other jurisdictions may find worth in identifying its capacity to augment their current work in this area. Additional benefits may also accrue from mapping the *Keeping Safe – Child Protection Curriculum* to Australian Curriculum descriptors if more widespread use is desired.

As ACARA has mapped the *Daniel Morcombe Child Safety Curriculum* against the Australian Curriculum, the Reviewers recommend that the resources developed for schools and teachers by the Daniel Morcombe Foundation and Queensland Department of Education, Training and Employment that are currently password protected in Scootle be made more accessible to all teachers. It is also recommended that they be mapped against the Australian Curriculum for health and physical education and digital technologies when these curriculums are endorsed by education ministers.

Conclusion

The Reviewers accept that the Australian Curriculum is a general improvement on previous attempts to gain greater national consistency in determining what all students, regardless of where they go to school, should know, understand and be able to do. It is also acknowledged that education authorities, teachers and schools have invested significant time, energy and resources and ACARA has expended considerable efforts to develop the Australian Curriculum to this point.

However, despite the considerable success in developing a documented ‘national curriculum’, its patchy implementation by state and territory education authorities and a number of significant flaws in its conceptualisation and design make claims that it is ‘world class’ or ‘best practice’ questionable.

With the continued commitment and willingness of educational jurisdictions, sectors, schools and professional bodies and organisations it should be possible to achieve a better outcome for Australian students, teachers, schools and parents. This Report provides recommendations to guide this process.

Background

Terms of reference

The Review of the Australian Curriculum is guided by the following terms of reference:

- The Review of the Australian Curriculum will evaluate the development and implementation of the Australian Curriculum.
- The Reviewers will consider the robustness, independence and balance of the Australian Curriculum, including:
 - the process of curriculum shaping, development, monitoring, evaluation and review
 - the curriculum content from Foundation to Year 12 for subjects developed to date, with a particular focus on the curriculum for English, mathematics, science, history and geography.
- The Reviewers will provide recommendations to the Commonwealth Minister for Education regarding:
 - the curriculum shaping process followed by the Australian Curriculum, Assessment and Reporting Authority (ACARA) to ensure that the curriculum is balanced and offers students an appropriate degree of choice and diversity
 - the process of curriculum development to be followed by ACARA for the development and revision of all future curriculum content
 - the content in learning areas, cross-curriculum priorities and general capabilities of the Australian Curriculum
 - the ongoing monitoring, evaluation and review of curriculum content used by ACARA to ensure independence, rigour and balance in curriculum development.
- The Reviewers will provide a preliminary report to the Commonwealth Minister for Education by 31 March 2014. The Panel will provide its final report to the Commonwealth Minister for Education by 31 July 2014.⁶

Scope

A fundamental part of the Review is an evaluation of the *robustness, independence and balance* of the process of development and content of the Australian Curriculum. These concepts are central to the Review. It is important to note that the development of the Australian Curriculum and the content of the curriculum itself represent two separate but related areas of focus. Both of these are important areas of focus to ensure a high quality national curriculum that fosters choice and diversity.

The terms of reference acknowledge that the scope of the Review is wide-reaching and will cover consideration of the scope and structure of the Australian Curriculum, development processes, the curriculum content from Foundation to Year 12 (or other years as applicable) in all learning areas completed to date as well the nature of its implementation in states and territories. Given the curriculums for languages were still outstanding at the commencement of this Review, they were considered beyond its scope.

⁶ This deadline was subsequently extended to 15 August 2014.

Methodology

Appointments

The Review of the Australian Curriculum was announced by the Hon Christopher Pyne MP, Minister for Education, on 10 January 2014. The Reviewers, Professor Kenneth Wiltshire AO and Dr Kevin Donnelly, were appointed to undertake the Review of the Australian Curriculum. The appointments to the Review of the Australian Curriculum followed the process specified in the Australian Government's *Cabinet Handbook*. Biographical details of the Reviewers can be found at the end of this Report.

Preliminary and Final Reports

As per the terms of reference the Reviewers were required to provide the following reports to the Hon Christopher Pyne MP:

- a Preliminary Report by 31 March 2014
- a Final Report by 31 July 2014.⁷

In July, the Reviewers sought an extension of time to 15 August 2014 to complete their Final Report, which was granted by the Minister.

Secretariat

A secretariat was established within the Australian Government Department of Education to support the Review. The secretariat consisted of four departmental officers with additional support provided as required.

Panel meetings

Over the course of the Review seven formal panel meetings were conducted. The panel meetings were held at the Department of Education in Canberra.

Process

The Review of the Australian Curriculum was informed by consultation and research to ensure that there was a comprehensive and transparent understanding of the broad range of views on the curriculum. The following processes were used to gather evidence to inform recommendations for the Final Report:

- public submissions
- stakeholder consultations
- research – international and national evidence
- evaluation of Australian Curriculum learning area documentation by subject matter specialists.

⁷ This deadline was subsequently extended to 15 August 2014.

Public submissions

Following the announcement of the Review, invitations for public submissions opened on the Students First website. Members of the community were invited to respond to the terms of reference for the Review. Submissions were able to be submitted by individuals and organisations.

The timeframe for submissions to be lodged was initially 5 pm AEDT on Friday, 28 February 2014. Due to the high level of interest, the public consultation period for the review was extended by a further two weeks to 5 pm AEDT on Friday, 14 March 2014.

Almost 1600 public submissions were received by the Review.

The Reviewers would like to take this opportunity to thank all those organisations and individuals that provided a submission to the Review. They provided detailed and thoughtful information which assisted in informing the outcome of the Review.

Stakeholder consultations

Consultations were conducted from February to May 2014 and were held in Adelaide, Brisbane, Canberra, Melbourne, Perth and Sydney. They were targeted consultations with educational stakeholders including state and territory government and non-government education authorities, teacher associations, subject associations, parent associations, academics and business groups.

There were 69 meetings held around Australia, comprising 72 organisations and eight individuals. Details of stakeholder organisations and individuals who met with the Reviewers are in Appendix 1.

The Reviewers are grateful to those who attended the consultations and would like to extend their appreciation to the organisations and individuals for their time, effort and preparation. The evidence gathered from this process assisted in final deliberations for this Review.

Research – International and national evidence

The research component of the Review consisted of the analysis of Australian and international education data, practices and characteristics. The international comparative research focused on high-performing systems, comparator countries and systems that are going through a process of curriculum renewal.

The following list includes some of the examples of analysis and research that were undertaken by the secretariat, with a full list of items contained in the References section of this Report:

- aims and principles underpinning curriculum development
- concepts of a national curriculum
- archival documents provided by ACARA that underpinned the development of the Australian Curriculum
- recent curriculum renewal projects, particularly by members of the Organisation for Economic Co-operation and Development (OECD) and Asia-Pacific Economic Cooperation (APEC) countries with records of top educational outcomes for their students
- comparison of state and territory characteristics and education practices
- comparison of high-performing systems characteristics and education practices
- consideration of the TIMSS, PISA and PIRLS data in terms of Australia's performance.

Professor Wiltshire also held extensive discussions with representatives from the OECD Directorate for Education and Skills, the English Department for Education, UK-based think tanks, a former UK Minister of Education and other stakeholders. The evidence gathered as part of these official discussions related to international comparisons, principles of curriculum development and approaches used. These meetings also allowed Professor Wiltshire to obtain knowledge and relevant information regarding the reform of the English national curriculum and lessons that could be applied in Australia.

Evaluation of Australian Curriculum learning area documentation

Subject matter specialists were identified and commissioned to undertake an analysis of each of the Australian Curriculum learning areas within the scope of the review. For the Australian Curriculum that is already being widely implemented, a decision was made to have the perspectives of school teachers as well as academics. Their focus was on the content specified in the Australian Curriculum – notably the knowledge, understanding and skills component – with a particular emphasis on its comprehensiveness, structure and sequencing. This analysis was to ascertain:

- whether the intended Australian Curriculum represents what Australian students should be taught in schools
- how the intended Australian Curriculum in each subject area compares with that of high-performing countries and those facing similar challenges
- whether the Australian Curriculum reflects what evidence-based research suggests is a sound, rigorous and balanced curriculum.

The analysis was done for the following Australian Curriculum learning areas and subjects:

- English (Foundation to Year 12)
- mathematics (Foundation to Year 12)
- science (Foundation to Year 12)
- history (Foundation to Year 12)
- geography (Foundation to Year 12)
- the arts (Foundation to Year 10)
- technologies (Foundation to Year 10)
- civics and citizenship (Year 3 to Year 10)
- economics and business (Year 5 to Year 10)
- health and physical education (Foundation to Year 10)

Evidence from the subject matter specialists' reports informed the development of Chapter Seven.

Section One – the context

Chapter One: The Australian Curriculum and the purpose of education

One of the Review's terms of reference is to consider the 'robustness, independence and balance' of the Australian Curriculum, including the 'process of curriculum shaping, development, monitoring, evaluation and review'. Identifying and evaluating how the Australian Curriculum addresses the question of the purpose of education is central to this task.

Such a task is made more important as a number of submissions to this Review criticise ACARA, and its predecessor, the interim National Curriculum Board, for failing to fully articulate an overall conceptual view detailing the purpose of education and the nature of a national curriculum in a federalist system.⁸

The National Catholic Education Commission (NCEC), when suggesting areas of improvement, argues that 'the most urgent need is for the creation of a more inspiring, larger and more comprehensive vision for the whole curriculum'.⁹ The Board of Studies, Teaching and Educational Standards New South Wales (BOSTES NSW), argues the 'Australian Curriculum was not conceived through an overall curriculum framework'.¹⁰ Similar to the BOSTES NSW submission, the Queensland Studies Authority argues 'Queensland has consistently recommended the development of an overarching framework for the Australian Curriculum'.¹¹

No curriculum is ever value free and curriculum designers, whether they are aware of it or not, are building on or privileging a particular belief or philosophy about the nature and purpose of education. It is also important to realise, in addition to the curriculum, that there are various interrelated factors that influence students' experiences at school and determine educational outcomes, including teacher quality, classroom environment, school ethos, pedagogy, home background, student ability and motivation and wider societal influences and forces.

This chapter discusses the nature of the school curriculum, briefly details three curriculum models and then explores various attempts to address the question of the purpose of education. It finishes by examining the Australian Curriculum and identifying how it defines the purpose of education.¹²

⁸ Compared to those systems that achieve the strongest PISA, TIMSS and PIRLS results that are unitary in nature, Australia, like the United States, Switzerland and Germany, is a federalist system.

⁹ National Catholic Education Commission 2014, Submission to the Review of the Australian Curriculum.

¹⁰ Board of Studies, Teaching and Educational Standards, New South Wales 2014, Submission to the Review of the Australian Curriculum.

¹¹ Queensland Studies Authority 2014, Submission to the Review of the Australian Curriculum, p. 2.

¹² Parts of this chapter draw on Donnelly, K 1995, *Liberal Education and the Purpose of Schooling*, Occasional Paper No. 41, Incorporated Association of Registered Teachers of Victoria, Jolimont; and Donnelly, K 2005, *Benchmarking Australian Primary School Curricula*, Department of Education, Science and Training, Canberra.

The school curriculum

A broad definition of a school curriculum involves:

- official curriculum documents that detail what is to be taught and how it will be assessed. Such documents also generally include a rationale and provide some guidance about preferred approaches to teaching, learning and assessment and how particular subjects or areas of learning will be structured
- additional co-curricular activities such as debating, sport, drama, music, school camps, community engagement and other activities in addition to the official curriculum
- the so-called ‘hidden’ curriculum that refers to the way a school is organised and managed and the way staff and students interact and relate to one another. Examples include discipline policy, school values and overall environment and how the school relates to the wider community and society in general.

When discussing curriculum documents it is usual to differentiate between: [see Figure 1]:

- the intended curriculum – the ‘road-map’ detailing what should be taught and how it should be assessed
- the implemented curriculum – how the intended curriculum is being implemented in the classroom and the school
- the attained curriculum – what students actually learn in terms of outcomes as a result of 1 and 2.

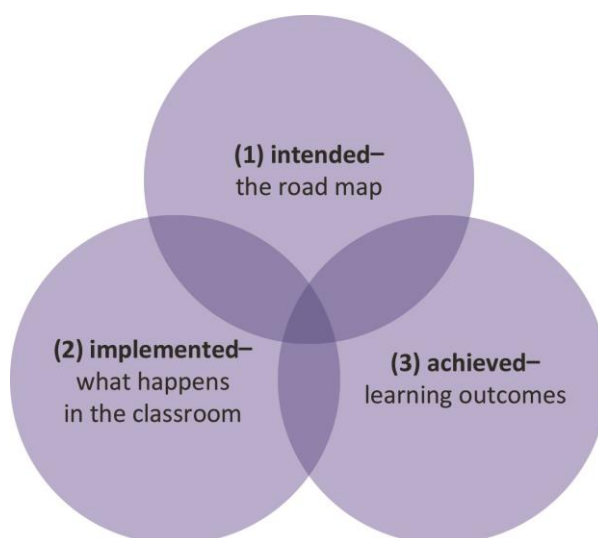


Figure 1: The three aspects of the curriculum

It is important to understand that the intended curriculum, no matter how rigorous or how well thought through, will be of little value if it is not effectively implemented in classrooms and schools. One of the issues raised with this Review is the extent to which schools, jurisdictions and systems are fully implementing the Australian Curriculum and the extent to which schools should be monitored and held accountable.

Another issue is whether the Australian Curriculum is overwhelming schools and classrooms – especially at the primary level – with a crowded curriculum that restricts flexibility and choice at the local level. As a result, teachers are in danger of being de-skilled and the autonomy and the flexibility needed to best meet the learning needs of students are being compromised.¹³

Professor Lyn Yates, in her submission to the Review, makes a similar point when she suggests:

But in the recent past there has been a tendency to move towards an over-detailed and bureaucratic management of the curriculum that takes too little account of the need for time to engage students; and an over-emphasis on the ‘pinning down’ of what is learned and standards at the expense of the work schools should also do to inspire and engage and attend to their different students.¹⁴

It is also important to realise that there are many other factors and influences determining the nature and quality of student learning and teachers’ ability to implement the curriculum [see Figure 2]. Teacher training, professional development, resources, peer group pressure and the nature and extent of parental involvement all impact on what happens or does not happen in a school and a classroom. The sometimes intrusive and demanding nature of accountability regimes imposed on schools also has an impact on the ability of teachers to educate their students.¹⁵

Broader factors such as a student’s socioeconomic background and ability, motivation and interests also influence how the curriculum is structured, delivered and what students achieve in terms of outcomes. Wider societal and global forces, including scientific and technological advances and how cultures evolve and change, also impact on the curriculum and student learning and outcomes.

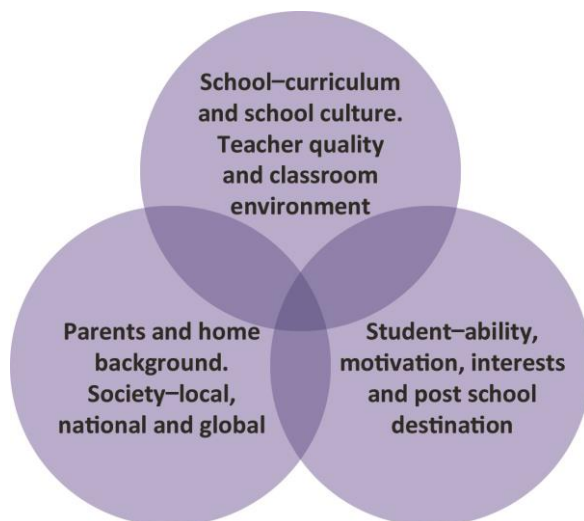


Figure 2: Factors influencing curriculum structure and delivery and student outcomes

¹³ It is ironic that a number of states champion giving schools, especially government schools, greater autonomy while at the same time, imposing increasingly restrictive, mandatory requirements in relation to what is taught, how it is assessed and how teachers are appraised.

¹⁴ Yates, L 2014, Submission to the Review of the Australian Curriculum, pp. 4–5.

¹⁵ See Department for Education 2010, *The Importance of Teaching: The Schools White Paper*, for an analysis of the deleterious impact of over-regulation and control and the need to provide schools with greater flexibility and autonomy at the local level. Professor Yates, in her submission to the Review of the Australian Curriculum, 2014, also warns about the ‘over-detailed and bureaucratic management of the curriculum’ that adversely impacts on the ability of teachers to ‘inspire and engage and attend to their different students’.

The focus of this Report is on the intended curriculum as published on the ACARA website rather than on what is happening in state and territory classrooms or what students have, or have not, achieved. This Review, while acknowledging the importance of teacher ability and teacher quality, is not concerned with evaluating teacher education.

Three curriculum models

When discussing intended curriculum documents it is also useful to differentiate between various models of curriculum in terms of explicit and implicit assumptions about the nature and purpose of education, preferred pedagogy, how particular subjects or areas of learning are identified, structured and defined, and how the curriculum relates to the individual student, society and the wider world.

Different curriculum models also have various ways of defining the nature of knowledge, how learning occurs and is assessed, and how individuals perceive and relate to the world at large.

In relation to how students learn, OBE¹⁶, for example, favours a learning theory described as ‘constructivism’¹⁷ based on the belief that:

*the classroom is no longer a place where the teacher (‘expert’) pours knowledge into passive students, who wait like empty vessels to be filled. In the constructivist model the students are urged to be actively involved in their own process of learning. The teacher functions more as a facilitator who coaches, mediates, prompts, and helps students develop and assess their understanding.*¹⁸

Instead of knowledge being objective, postmodern theory and deconstruction are based on the belief that how we perceive and relate to the world is highly subjective and relative – there are no external truths or absolutes as each person creates his or her own sense of reality based on gender, ethnicity, race, sexuality and class.

Different models of curriculum also vary in relation to assessment and reporting, the amount of time needed to enact the curriculum, what is mandatory and what is voluntary, and what is centrally determined and what is decided at the local level. One way to characterise the curriculum is to distinguish between a syllabus, an OBE model and what, in the United States, is described as a ‘standards approach’¹⁹ [see Figure 3].

¹⁶ The American educationalist William Spady is considered the father of OBE and has visited Australia on a number of occasions. For a detailed description of OBE see Spady, W 1994, *Outcome-Based Education Critical Issues and Answers*, American Association of School Administrators.

¹⁷ Constructivism is based on the idea that students construct their own knowledge and understanding. Similar to discovery learning, the idea is that students should be allowed to negotiate what they learn, to learn at their own pace and not be taught in a formal, structured way.

¹⁸ See Educational Broadcasting Corporation 2004, *Concept to Classroom*, Thirteen ed. online, viewed 23 June 2014, can be accessed at: http://www.thirteen.org/edonline/concept2class/constructivism/index_sub1.html. The idea that traditional approaches to teaching and learning involve filling empty vessels can be traced to the Brazilian Marxist educator Paulo Freire. See Freire, P 1972, *Pedagogy of the Oppressed*, chapter 2, Penguin.

¹⁹ Standards here refer to a particular model of curriculum and not standards in the sense of measuring educational outcomes.

Syllabus	OBE	Standards
<ul style="list-style-type: none"> • based on established disciplines • curriculum descriptors explicit, concise and easily understood • detail what students should be taught • relates to specific year levels • differentiated curriculum where students are streamed in terms of ability and interest • summative, high risk testing and assessment • explicit teaching 	<ul style="list-style-type: none"> • focus on 21st century skills and capabilities • curriculum descriptors often vague, generalised and wordy • focus on learning outcomes • relates to stages of schooling • common curriculum with mixed ability teaching • formative, developmental approach to learning and assessment • constructivist approach to teaching 	<ul style="list-style-type: none"> • based on established disciplines • curriculum descriptors explicit, concise and easily understood • focus on what students should be taught • relates to specific year levels • common curriculum and both mixed ability and streaming • summative and formative assessment including achievement standards • explicit teaching

Figure 3: Three different approaches to curriculum

While such categories are not mutually exclusive, it is possible to identify various stages in the history of Australian state and territory curriculum development when various models have gained prominence. During the 1950s and 1960s, schools generally followed a syllabus approach characterised by explicit teaching, streaming, competitive assessment and a strong focus on the basics and academic subjects.

Many successful Asian education systems, as measured by TIMSS and PISA, also follow a syllabus approach to the curriculum. Streaming in terms of ability is common in Singapore, and in China the highly competitive and academically focused end of secondary school *Gaokao* examinations are high stakes and require explicit teaching and a subject discipline approach to learning.

Figure 3: Three different approaches to curriculum

During the late 1960s and early 1970s, many schools across Australia moved from a syllabus model to one more in tune with what became known, in the 1990s, as OBE. This progressive model²⁰ placed the student centre stage, emphasised formative assessment²¹, a constructivist view of learning and school-based curriculum development instead of centrally mandated syllabuses, inspectors and examinations.

During the 1990s the OBE model prevailed, best illustrated by Australia's national statements and profiles, and various equivalent state and territory frameworks such as Essential Learnings and the New Basics.²² As noted in Figure 3, OBE embraces a futures perspective with an emphasis on skills

²⁰ Progressive education also emphasises the process of learning over content, places the child centre stage instead of the subject disciplines, and gives priority to an inquiry-based approach to learning and a definition of relevance that is often restricted to what is immediate, local and contemporary.

²¹ Formative assessment is descriptive, diagnostic and collaborative, as opposed to summative assessment such as competitive Year 12 examinations that are high-risk and externally set and marked.

²² As noted by Gita Steiner-Khamsi, 2006, during this period OBE was only adopted by a handful of countries, including New Zealand, Australia, England and Wales, Canada and the United States. Top performing Asian systems maintained a more traditional model of curriculum development and implementation.

and capabilities instead of essential content, a developmental approach to learning²³, and a classroom situation where teachers are described as facilitators or ‘guides by the side’ and students become ‘knowledge navigators’ and ‘digital natives’.

Yates and Collins describe the period of Australian curriculum development during the years 1975–2005 in the following way:

*there was a strong shift over the period we are examining from an emphasis on knowing things to being able to do things. In the interviews we conducted with senior curriculum actors we also noted how rarely ‘knowledge’ came into the frame of their talk about curriculum, compared with a focus on outcomes, politics and management of resources; or compared with a focus on the developing child (from a cognitive developmental perspective).*²⁴

Bruce Wilson, the one-time head of Australia’s Curriculum Corporation, notes that even though OBE became the prevailing orthodoxy in many states and territories during the 1990s it represented an ‘unsatisfactory political and intellectual compromise’.²⁵ OBE is criticised for being difficult to implement, for failing to detail essential content, for failing to have a valid and credible system of assessment and for adopting an overly constructivist approach to teaching and learning.²⁶

Such were the criticisms levelled against OBE when it was being implemented in a number of American states that critics argued that a standards model of curriculum should be adopted.²⁷ Compared to an OBE intended curriculum document, a standards curriculum is concise, succinct, teacher-friendly, related to year levels and not stages, based on academic subjects, and explicit in terms of content and assessment.

The purpose of education

The school curriculum is never value free as it either implicitly or explicitly embodies a particular educational philosophy related to the purpose of education. Different approaches to education also embrace a range of beliefs about the role of education, the place of schools in society and what it means to be educated. As noted by Yates, Collins and O’Connor, it is also true that debates and disagreements about the purpose of education and the role of schools have been especially heated in recent times; they write, ‘The late twentieth century has been a hotbed of major debates about forms of knowledge and about the nature of learning’.²⁸

Given that there are different stages of schooling, ranging from pre-primary to senior secondary, it is also the case that particular views about education can vary as children move through primary and secondary school. Whereas the Australian Curriculum, for example, adopts a similar model of

²³ Developmentalism is an approach to teaching and learning that is child-centred, process-driven and based on the belief that children grow naturally into knowledge and understanding.

²⁴ Yates, L & Collins, C 2010, The Absence of Knowledge in Australian Curriculum Reforms, *European Journal of Education*, vol. 45, issue 1, pp. 89–102.

²⁵ Wilson, B 2002, *Curriculum – is less more?* A paper delivered at the Curriculum Corporation Conference, Canberra.

²⁶ For an analysis and critique of OBE see Donnelly, K 2007, *Dumbing down: outcomes-based and politically correct – the impact of the culture wars on our schools*, Hardie Grant Books.

²⁷ For a criticism of OBE, see Manno, BV 1994, *Outcomes-based Education: Miracle Cure or Plague?* Hudson Institute Briefing Paper no. 165.

²⁸ Yates, L, Collins, C & O’Connor, K 2011, *Australia’s Curriculum Dilemmas: State Cultures and The Big Issues*, Melbourne University Press.

curriculum development from Foundation to Year 12²⁹, the English national curriculum varies its approach on the basis that the two elements – knowledge and skills/competencies and dispositions – are not, however:

*equally significant at every stage. In particular, developmental aspects and basic skills are more crucial for young children, while appropriate understanding of more differentiated subject knowledge, concepts and skills becomes more important for older pupils.*³⁰

Within Australia's tripartite system of school education, schools in different sectors are also committed to a particular view about the purpose of education. Whereas government schools are characterised as secular, faith-based schools by their very nature are committed to a view of education that embodies their religious orientation and teachings. Such schools emphasise the moral and spiritual development of students and the transcendent nature of education.

There are also schools, such as Steiner and Montessori, where the curriculum is based on a distinctive educational philosophy that is neither strictly secular nor based on an established religion.

One approach to defining the purpose of education is a utilitarian one where the argument is that outcomes must be work-related and help the Australian economy be more productive in an increasingly challenging global environment. The Mayer, Finn and Carmichael competencies are examples of this approach as are a number of the Australian Curriculum's general capabilities.

The rationale used to justify the OECD's PISA tests also emphasises the utilitarian value of education when it describes the drivers for increased testing and accountability as follows:

*Equipping citizens with the skills necessary to achieve their full potential, participate in an increasingly interconnected global economy, and ultimately convert better jobs into better lives is a central preoccupation of policy makers around the world.*³¹

Also:

*The ongoing economic crisis has only increased the urgency of investing in the acquisition and development of citizens' skills – both through the education system and in the workplace.*³²

Instead of focusing on the essential knowledge, understanding and skills associated with particular subjects, the focus is on developing the ability to work in teams, to access information, to solve problems and to value what can be quantified and measured.

The utilitarian approach, rather than accepting that education might be inherently worthwhile, transcendent in nature and valued for its own sake, argues that content is secondary to developing inquiry skills and preparing students for an uncertain future.

²⁹ Yates, L 2014, Submission to the Review of the Australian Curriculum, describes the ACARA model as 'templating' – a situation where 'subjects that are quite different in their forms of development (over time) are made to meet a common template'.

³⁰ Department for Education 2011, *The Framework for the National Curriculum. A Report by the Expert Panel for the National Curriculum Review*, Department for Education, London, p. 12.

³¹ OECD 2013, *PISA 2012 Results: Ready to Learn – Students' Engagement, Drive and Self-beliefs Volume III*, OECD, p. 3.

³² Ibid., p. 3.

A variation of this utilitarian approach is the belief that education, especially at Years 11 and 12, should be directed at preparing students for either work or further study. The primary purpose of education is to enable students to gain a living by completing a certificate or qualification – whether professional or trade – that allows them to enter the workforce or to begin a career.

A second view about the purpose of education focuses on addressing contemporary issues that are considered critically important for the wellbeing of Australian society in an increasingly interrelated global community. Dealing with issues such as global warming, environmental degradation and cultural diversity and difference are examples of this approach, as is the Australian Curriculum's adoption of the three cross-curriculum priorities: Aboriginal and Torres Strait Islander histories and cultures, Asia and Australia's engagement with Asia, and sustainability.

The justification for such a curriculum, instead of emphasising the introduction of students to essential knowledge, understanding and skills related to particular subjects, is about nation building. Such a view of the curriculum is not restricted to Australia; the Singapore school curriculum, for example, argues that education should be directed at producing:

*a concerned citizen who is rooted to Singapore, has a strong civic consciousness, is informed, and takes an active role in bettering the lives of others around him.*³³

The curriculum in Finland mirrors a similar approach when discussing the values that underpin the curriculum:

*The underlying values of basic education are human rights, equality, democracy, natural diversity, preservation of environmental viability, and the endorsement of multiculturalism.*³⁴

Education with a futures perspective is a variation of this second view of the purpose of education: one where the focus is on 'learning how to learn', 'lifelong learning', 'just in time learning' and teaching students to be 'multi-skilled, adaptable and innovative'. Illustrated by the observation of the English educationalist, GH Bantock, in 1965 that the education system is being pressured to respond to a society that is 'changing rapidly' there is nothing new about the call to develop a curriculum based on change instead of continuity.³⁵

A third view about the purpose of the curriculum is a child-centred one where the student is placed centre stage. Education revolves around the child's interests and personality and is often restricted to what is immediately local, contemporary and relevant. Similar to a utilitarian approach, subjects like history, mathematics, science and literature are secondary to valuing and making use of the student's interests and experience. While child-centred education has been prevalent since the late 1960s³⁶ a more recent variation relates to what is described as 'personalised learning'.

Personalised learning is defined as a classroom where 'the needs, interests and learning styles of students [are] at the centre', there is a strong use of ICT on the basis that students should be

³³ Ministry of Education Singapore 2014, *The Desired Outcomes of Education*, viewed on 30 July 2014, can be accessed at: available at <http://www.moe.gov.sg/education/desired-outcomes/>

³⁴ Finnish National Board of Education 2004, *National Core Curriculum for Basic Education 2004*, Finnish National Board of Education, p. 12.

³⁵ Bantock, GH 1965, *Education and values*, Faber and Faber, p. 118.

³⁶ See Richard Peters' chapter critiquing child-centred learning, titled 'A Recognizable Philosophy of Education': A Constructive Critique', in RS Peters (ed.), *Perspectives on Plowden*, 1969, Routledge & Kegan Paul Ltd.

allowed to ‘live locally whilst learning globally’ and where there is ‘lifelong learning and the provision of flexible learning environments’.³⁷

As with much in education, the concept of personalising learning – without the ICT focus – has been around for many years. Jerome Bruner in 1971 argued against personalisation of knowledge on the basis that:

*A good idea was translated into banalities about the home, then the friendly postman and trashman, and then the community, and so on. It is a poor way to compete with the child’s own dramas and mysteries.*³⁸

As a result of the sociology of education movement, especially influential during the late 1960s and early 1970s, some educators argue that the work of schools and the purpose of education are to transform society by overcoming disadvantage and empowering those most at risk. The Manifesto for a Democratic Curriculum, published in 1984 by the Australian Teachers Federation, illustrates this model when it argues that education must promote ‘equality of opportunity’ and ‘equality of outcomes’.³⁹

According to this fourth view about the purpose of education, competitive examinations and traditional, academic subjects are seen as reinforcing inequality and being biased towards students from privileged backgrounds. In its more extreme form, advocates argue that Australian society is characterised by inequality and injustice and that students must be taught to radically transform society.⁴⁰

As noted in a book detailing contemporary developments in curriculum by Yates, Collins and O’Connor, this was a time when radical educators like Paulo Freire, Ivan Illich, John Holt and Paul Goodman were invited to Australia and when:

*Radical movements, particularly the emerging women’s movement and movements concerned with ethnicity, race and the rights of indigenous populations, were challenging what curriculum was doing as a message system. They argued that curriculum indoctrinated young people into accepting unfair social inequalities, and contributed to reproducing these.*⁴¹

A more recent variation of the sociology of education movement is what Gary Marks describes as ‘critical theory’, a school of thought that:

*seeks human emancipation from oppression by analyzing the forms of oppression, mainly capitalism and other Western institutions (corporations, marriage, the health and education systems, the labor market etc).*⁴²

³⁷ See Office for Education Policy and Innovation 2007, *Personalising Education: from research to policy and practice*. Paper no. 11, August 2007, Victorian Department of Education and Early Childhood Development.

³⁸ Bruner, JS 1971, *The Relevance of Education*, Norton, p. 63.

³⁹ See Ashenden, D, Blackburn, J, Hanna, B & White, D 1984, ‘Manifesto for a Democratic Curriculum’, *The Australian Teacher*, no 7.

⁴⁰ See Joan Kirner’s paper titled ‘Choice, Privilege and Equality – the Socialist Dilemma’, (Pamphlet 41), delivered at a meeting of the Victorian Fabian Society in 1983.

⁴¹ Yates, L, Collins, C & O’Connor, K 2011, *Australia’s Curriculum Dilemmas: state cultures and the big issues*, Melbourne University Press, p. 27.

⁴² Marks, G 2014, *Education, Social Background and Cognitive Ability: The Decline of the Social*, Routledge, p. 9.

The reason students study particular subjects like music, history or literature is not because they have something significant or profound to say about human nature or about how societies and civilisations develop and evolve, but because such subjects are important as instruments to teach about the nature of power and how particular groups in society are either advantaged or marginalised.

The fifth approach to defining the purpose of education values education for its own sake and not because of its utilitarian value. It is one that has existed in various forms since the time of the ancient Greek philosophers and involves, as Matthew Arnold argues, introducing students to the best that has been thought and said.⁴³ This liberal–humanist view differentiates between training and education, and is based on the belief that whereas the first is committed to skills and competencies directed towards utilitarian ends, the other is concerned with knowledge and understanding for less practical purposes.

One submission makes a similar distinction when it describes vocational education as ‘equipping students for an active and valuable contribution to the workforce’, and what it describes as a ‘Renaissance’ viewpoint, where students are equipped with the ‘knowledge and skills that transcend the variables in society and culture.’⁴⁴

The Victorian Blackburn Report describes the more traditional view of education as allowing students to be familiar with our ‘best validated knowledge and artistic achievements’.⁴⁵ Of interest is that the English national curriculum, when describing curriculum aims, acknowledges Matthew Arnold when it states:

*The national curriculum provides pupils with an introduction to the essential knowledge that they need to be educated citizens. It introduces pupils to the best that has been thought and said; and helps engender an appreciation of human creativity and achievement.*⁴⁶

Subjects like mathematics, science, literature, art, music, history are involved and the intention is to cultivate what the Melbourne Declaration describes as ‘the intellectual, physical, social, emotional, moral, spiritual and aesthetic development of young Australians’. Whether faith-based or adopting a liberal–humanist philosophy, the purpose of education is to deal with existential questions about life and death, what constitutes truth and wisdom, how we should relate to one another, the broader community and the wider world, and what constitutes happiness and the good life.

The American educationalist Neil Postman describes this view of education as follows:

I am referring to the idea that to become educated means to become aware of the origins and growth of knowledge and knowledge systems; to be familiar with the intellectual and creative processes by which the best has been thought and said has been produced; to learn how to participate, even if as a listener, in what Robert Maynard Hutchins once called The

⁴³ Arnold, M 1932, *Culture and Anarchy: Landmarks in the History of Education*, in J Dover Wilson (ed.), Cambridge University Press.

⁴⁴ The Melbourne Circle 2014, *Submission to the Review of the Australian Curriculum*.

⁴⁵ Blackburn, J 1985, *Principal Recommendations of the Ministerial Review of Post-compulsory Schooling*, Education Department of Victoria, p. 16.

⁴⁶ Department for Education, 2013, *The National Curriculum in England, Key Stages 3 and 4 Framework Document*, Department for Education, p. 5.

*Great Conversation*⁴⁷, which is merely a different metaphor for what is meant by the ascent of humanity.⁴⁸

Postman goes on to argue that such a view of the purpose of education ‘is not child-centred, not training-centred, not skill-centred, not even problem-centred. It is idea-centred and coherence-centred’.

This belief, similar to the argument in the Melbourne Declaration and Federalist Paper 2⁴⁹, is that all students, regardless of background, location, gender, class or ethnicity, must be familiar with the subject disciplines ‘that shape the way in which experts represent problems in the discipline as well as how they solve them’.⁵⁰

As noted by Professor Brian Crittenden, the various disciplines, while incorporating ‘key concepts, theories and other central content that are relatively stable, evolve over time and are open to contestation and debate’.⁵¹

While being influenced by a range of traditions and cultures, such a view of education is closely associated with Western civilisation, and a conversation – as noted by Michael Oakeshott – that has evolved and developed over hundreds of years since the time of Aristotle, Socrates and Plato.

Oakeshott describes this:

*As civilised human beings, we are the inheritors, neither of an inquiry about ourselves and the world, nor of an accumulating body of information, but of a conversation, began in the primal forests and extended and made more articulate in the course of the centuries ... It is the ability to participate in this conversation, and not the ability to reason cogently, to make discoveries about the world, or to contrive a better world, which distinguishes the human being from the animal and the civilised man from the barbarian.*⁵²

A liberal–humanist view of education is not utilitarian, child centred or concerned with utopian visions about future society; rather, as noted by Paul Hirst, it is:

*based on the nature and significance of knowledge itself, and not on the predilections of pupils, the demands of society, or the whims of politicians.*⁵³

In addition to being inherently good, basing the curriculum on the established disciplines is important as it promotes cultural literacy – a minimum body of knowledge that allows students to enter society as informed and knowledgeable citizens. Examples include being familiar with such expressions as, ‘open a Pandora’s box’, ‘his Achilles’ heel’, ‘turn the other cheek’, the holocaust, common law, a Westminster democracy and freedom of the press.

⁴⁷ Oakeshott, M 1959, *The Voice of Poetry in the Conversation of Mankind, an essay*, London. Bowes & Bowes, also uses the metaphor of a conversation when discussing the purpose of education.

⁴⁸ Postman, N 1993, *Technopoly: The Surrender of Culture to Technology*, New York, Vintage. p. 188.

⁴⁹ Both of these are papers are discussed in Chapter Three of this Report.

⁵⁰ Council for the Australian Federation April 2007, *Federalist Paper no. 2, The Future of Schooling in Australia*, Department of Premier and Cabinet, Melbourne, p. 19.

⁵¹ Crittenden, B 2002, *Notes on Documents Relating to the New Zealand Stocktake (2000–2002)*, Comments sent to Michael Irwin, Policy Analyst with the New Zealand Business Roundtable, Wellington.

⁵² Oakeshott, M 1991, *Rationalism in Politics and Other Essays*, T Fuller (ed.), Liberty Press, p. 490.

⁵³ Hirst, P 1974, Literature, criticism and the forms of knowledge, *Educational Philosophy and Theory*, vol .3, Issue 1, p. 32.

Closely allied with a liberal–humanist view of education is a commitment to a particular set of values and dispositions, including civility, tolerance, truth telling, morality, rationality, objectivity, freedom and creativity. Such values and dispositions are not add-ons, abstract general capabilities or transitory cross-curriculum priorities; instead, they are embedded in particular disciplines and only come alive when students enter and become familiar with the conversation.

Bruce Wilson also stresses the primacy of the disciplines, or domains of learning, when he states:

*And, as I will argue in a moment, there is no such thing as generic skills or essential learnings. There is only the particular form of higher order thinking applicable to each domain, and the capacity to transfer that deep understanding to new contexts. Cross-curricula and multi-disciplinary activity follows the development of higher order skills. It does not precede them.*⁵⁴

Unlike generic capabilities or so-called 21st century skills that are artificially linked to the curriculum and that add to an already overcrowded situation, the values and dispositions associated with a liberal–humanist view of education arise naturally as a critical aspect of the various disciplines.

Those critical of a liberal–humanist view of education often characterise it as conservative and irrelevant to contemporary schools and classrooms. Of interest is that the radical English educationalist, MFD Young, also stresses the importance of a knowledge-based curriculum when he argues, after noting recent developments in England, that:

*many current policies almost systematically neglect or marginalise the question of knowledge. The emphasis is invariably on learners, their different styles of learning and their interests, on measurable learning outcomes and competencies and making the curriculum relevant to their experience and their future employability – knowledge is taken for granted or something we can make fit our political goals.*⁵⁵

The Italian Marxist, Antonio Gramsci, while believing, in the same way Young does, that education should be used to transform capitalist society, also emphasised the importance of a more classical view when he acknowledges the importance of Latin and Greek. Such subjects are important as they enable students to ‘know at first hand the civilisation of Greece and of Rome – a civilisation that was a necessary precondition of our modern civilisation’.⁵⁶

Of interest, is that Gramsci also advocated a disciplined, more traditional approach to pedagogy when he wrote:

*In education one is dealing with children in whom one has to inculcate certain habits of diligence, precision, poise (even physical poise), ability to concentrate on specific subjects, which cannot be acquired without the mechanical repetition of disciplined and methodical acts.*⁵⁷

⁵⁴ See Wilson, B 2002, *Curriculum – is less more?* A paper delivered at the Curriculum Corporation Conference, Canberra.

⁵⁵ Young, MFD 2010, *Curriculum for a Knowledge Society: Lessons from the sociology of knowledge*, Hood Lecture, delivered at the University of Auckland.

⁵⁶ Gramsci, A 1971, *Selections from the Prison Notebooks*, International Publishers, p. 37.

⁵⁷ Ibid., p. 37.

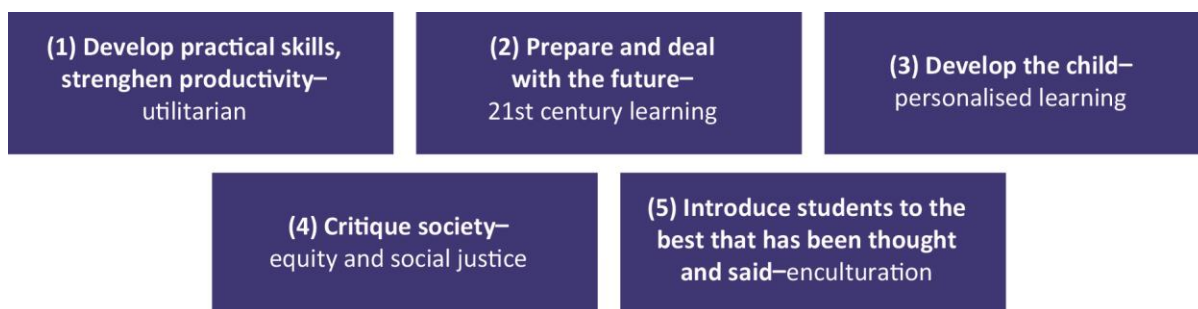


Figure 4: The purpose of education

As expected, the various beliefs about the purpose of education have a significant impact on the nature and role of the intended curriculum and how it is developed, implemented and evaluated in schools and classrooms.

Whether the intention is to foster work-related skills and competencies, prepare students for the 21st century, develop the child, critique society or introduce students to the best that has been thought and said, the reality is that curriculum documents, knowingly or unknowingly, generally privilege one view or a combination of views.

It should also be noted that any one approach to designing a curriculum can, and often does, incorporate a range of beliefs about the purpose of education.

As such, to be balanced, any one approach to the curriculum should acknowledge the need to incorporate what might, at first glance, appear to be conflicting views. The Blackburn Report, for example, argues that the best way to improve equity and social justice is to introduce disadvantaged students to our ‘best validated knowledge and artistic achievements’.⁵⁸

While much of contemporary education is wrapped in new-age jargon and presented as innovative and forward looking, it is also true that the debates surrounding the purpose of education have existed for thousands of years. When discussing the purpose of education, Socrates admonishes those living in ancient Greece who only valued material and utilitarian pursuits:

*Are you not ashamed that you give your attention to acquiring as much money as possible, and similarly with reputation and honour, and give no attention or thought to truth and understanding and the perfection of the soul.*⁵⁹

⁵⁸ Blackburn, J 1985, *Principal Recommendations of the Ministerial Review of Post-compulsory Schooling*, Education Department of Victoria, p. 16.

⁵⁹ Plato’s Apology.

Children also experience various stages of development and growth and, as different stages of schooling have their own unique qualities and challenges, there are times when it is better to emphasise some curriculum models and not others. In addition, not all students have the same interests, abilities, motivation and post-school destinations, and at some stage the curriculum needs to provide a number of distinctive pathways.

The Australian national curriculum

As detailed in Chapter Three of this Report the recent history of curriculum development in Australia illustrates various responses when addressing the question of the purpose of education.

The early Curriculum Development Centre's paper, 'Core Curriculum for Australian Schools' stresses competencies and skills, the national statements and profiles emphasise 21st century learning and Federalist Paper 2 emphasises deep knowledge of the subject disciplines.⁶⁰ It is also the case that since the late 1960s and early 1970s there has been a movement away from the belief that the curriculum should focus primarily on the subject disciplines, and, as a result:

Curriculum documents are now much more likely to be talking about 'learning' than 'knowledge'. There has been a movement towards emphasising students rather than teachers; to prioritising process over content; to wanting subject-learning to be thought of in terms of what the learner should be able to do as a result of that teaching.⁶¹

The foundation document for the Australian national curriculum, the *Melbourne Declaration on Educational Goals for Young Australians*, provides a range of answers when addressing the purpose of education and why we have schools, including the need:

- to promote economic prosperity and innovation in an increasingly challenging and ever evolving global environment
- to equip students to respond to the challenges caused by the advent of the digital age and rapid advances in ICT
- to enable students to address complex environmental, social and economic pressures such as climate change
- to promote social and civic cohesion and equity within a society characterised by disadvantage, diversity and difference
- to ensure that students are literate and numerate and that are introduced to the 'key disciplines'
- to enable students to act with 'moral and ethical integrity' and to be in a position to best 'manage their emotional, mental, spiritual and physical well-being'.⁶²

⁶⁰ Curriculum Development Centre 1980, *Core curriculum for Australian students: What it is and why it is needed*, Curriculum Development Centre.

⁶¹ Yates, L, Collins, C & O'Connor, K 2011, *Australia's Curriculum Dilemmas: state cultures and the big issues*, Melbourne University Press, p. 34.

⁶² Ministerial Council for Education, Employment, Training and Youth Affairs 2008, *Melbourne Declaration on Educational Goals for Young Australians*, Curriculum Corporation.

The *National Curriculum Development Paper* prepared by the precursor to ACARA, the interim National Curriculum Board, also provides a number of answers to the question of the purpose of education, including the need:

- to prepare students for the 21st century
- to prepare students to be productive and promoting national prosperity
- to promote social cohesion
- to ensure students gain a deep understanding of domain knowledge and are familiar with a number of cross-curricular competencies.⁶³

A second paper prepared by the interim National Curriculum Board, *The Shape of the National Curriculum: A Proposal for Discussion*, adopts a similar approach when it argues that the purpose of the national curriculum will be:

- to prepare students to deal with a changing global environment
- to give students an understanding of the past as well as the knowledge, understanding and skills to deal with the future
- to foster knowledge of spiritual, moral and aesthetic dimensions of life and competence and appreciation of the creative arts
- to enable students to develop deep knowledge and skills and the ability to create new ideas and to translate them into practical applications
- to develop general capabilities that underpin flexible and creative thinking and to be familiar with a number of cross-curricular perspectives.⁶⁴

To assist with the process of writing the intended curriculum documents for the national curriculum, the interim National Curriculum Board then published a paper titled *The Shape of the Australian Curriculum* (the following is based on version 4, published by ACARA in October 2012). After referring to the Melbourne Declaration and the need to prepare students for a future 'distant and difficult to predict' the paper suggests that the purpose of the Australian national curriculum will be:

- to improve the 'quality, equity and transparency of Australia's education system'. Quality is defined as 'knowledge, understanding and skills needed for life and work in the 21st century' and equity is defined as 'a clear, shared understanding of what young people should be taught and the quality of learning expected' regardless of school attended
- to address the 'intellectual, personal, social and educational needs of young Australians' within a changing and evolving context so that they become 'successful learners', 'confident and creative individuals' and 'active and informed citizens'.⁶⁵

⁶³ National Curriculum Board 2008, *National Curriculum Development Paper*, National Curriculum Board, viewed 21 July 2014, can be accessed at: http://www.acara.edu.au/verve/_resources/development_paper.pdf

⁶⁴ National Curriculum Board 2008, *The Shape of the National Curriculum A Proposal for Discussion*, National Curriculum Board, viewed 11 July 2014, can be accessed at: http://www.acara.edu.au/verve/_resources/the_shape_of_the_national_curriculum_paper.pdf

⁶⁵ ACARA 2012, *The Shape of the Australian Curriculum, version 4*, viewed 21 July 2014, can be accessed at: http://www.acara.edu.au/verve/_resources/the_shape_of_the_australian_curriculum_v4.pdf

The Australian national curriculum – analysis

Based on the background papers published by the interim National Curriculum Board and *The Shape of the Australian Curriculum* published by ACARA it is clear that those responsible for developing the national curriculum define the purpose of education primarily in terms of:

- developing practical skills and strengthening productivity – utilitarian
- preparing and dealing with the future – 21st century learning
- developing the child – personalised learning
- critiquing society – equity and social justice.

While such approaches are valid and important when defining the purpose of education, taken as a whole they undervalue the significance of students being introduced to what the Blackburn Report describes as ‘our best validated knowledge and artistic achievements’. The way the Australian Curriculum has been developed also fails to adequately reflect the Melbourne Declaration’s belief that a well-rounded, balanced education should deal with the moral, spiritual and aesthetic education of students.

In addition, while various official documents acknowledge the importance of a discipline-based approach to education, such agreement is weakened by the emphasis on cross-curriculum priorities, general capabilities and a utilitarian and technocratic⁶⁶ approach to the purpose of education and how best to design the intended curriculum.

ACARA’s paper titled *The Shape of the Australian Curriculum* describes the cross-curriculum priorities as ‘contemporary issues about which young Australians should learn’ and the paper suggests that each of the priorities ‘is represented in learning areas in ways appropriate to that area’. Describing the cross-curriculum priorities as ‘contemporary’ signals a major weakness.

By its very nature, whatever is contemporary is likely to change, and having to rewrite the national curriculum every four to five years – or whenever there is a change of government – to take account of new and emerging priorities, places an unnecessary burden on teachers and classrooms.

Secondly, instead of being justified on educational grounds the priorities are the result of a politicised process and, as a result, are open to disagreement. Some might argue that sustainability is a key issue, while others might equally argue that entrepreneurship is more important for a nation’s wellbeing and future.

Many of those who responded to this Review’s terms of reference argue that politics should be taken out of education, on the belief that what students learn should be justified on educational grounds and that the curriculum should not be politicised as a result of a particular ideological stance.

⁶⁶ Yates, L, Collins, C & O’Connor, K 2011, *Australia’s Curriculum Dilemmas: State Cultures and The Big Issues*, Melbourne University Press. Yates, Collins and O’Connor, after discussing the establishment of the National Curriculum Board and the early work related to the national curriculum, conclude, ‘A planning and management mentality is more evident than an education one, at least at the governance level.’, p. 40.

The way in which the priorities are signalled with icons in the digital version of the Australian Curriculum also leads to a checklist mentality where, instead of being dealt with in a sustained, rigorous way, the priorities are treated superficially.⁶⁷

The fact that the cross-curriculum priorities are not an essential part of the Australian Curriculum is highlighted by the admission by the Chair of ACARA, Professor Barry McGaw, that there is:

*no requirement in the Australian Curriculum that subjects be taught through the three cross-curriculum priorities.*⁶⁸

To argue that the cross-curriculum priorities, as they are currently dealt with in the Australian Curriculum, should be removed, is not to suggest they should be abandoned. Rather, it is to argue that there are better ways to deal with contemporary issues that are deemed to be important and relevant. One solution is to allow what are considered significant priorities to be incorporated within the context of the relevant discipline or subject – either in an integrated fashion or in standalone subjects. Instead of being dealt with by teachers who might not have a deep knowledge of the priorities being dealt with, an added benefit of this approach is that if subject experts are given this responsibility there is a better chance that learning will occur.

Within the Australian Curriculum, the purpose of education is to make the Australian economy more efficient and productive by teaching work-related skills and competencies. So-called 21st century capabilities and skills are especially important, according to this argument, as the future is impossible to predict.

Such a utilitarian view of education, while important, fails to deal with the reality that what is often most rewarding and beneficial in education – especially related to the emotional, moral, spiritual and aesthetic development of students – might not be immediately practical and utilitarian. It is also the case that if it is impossible to predict what will happen in years to come, then on what basis can we design a curriculum that will address the future?

Also ignored is that capabilities and skills do not exist in a vacuum as they do not arise intuitively or by accident. Capabilities are domain specific, as the research suggests⁶⁹, and each of the disciplines of knowledge contains its own way of posing questions and testing truth claims. Processing information and weighing evidence when solving a mathematical equation is very different to passing judgement on a poem or a Bach concerto.

Of interest is that one of the earlier papers by the interim National Curriculum Board makes the same point when, in relation to cross-curricular learnings, it argues that:

*there is good research evidence that problem-solving competence in one area, particularly high-level problem solving of the type developed by experts, does not transfer readily from one domain to another.*⁷⁰

⁶⁷ Yates, L, Collins, C & O'Connor, K 2011, *Australia's Curriculum Dilemmas: State Cultures and The Big Issues*, Melbourne University Press. Yates, Collins and O'Connor, after referring to this approach, warn about what they describe as 'an over-complexity of matrixes', p. 316.

⁶⁸ McGaw, B 2014, 'Cross-curriculum priorities are options, not orders', *The Canberra Times*, 27 February 2014.

⁶⁹ Sweller, J 2014, Submission to the Review of the Australian Curriculum. He argues, 'We should be teaching domain-specific knowledge, not generic skills.'

⁷⁰ National Curriculum Board 2008, *National Curriculum Development Paper*, p. 6.

Slogans and clichés like ‘lifelong learning’, ‘learning how to learn’, and referring to children as ‘knowledge navigators’ and ‘digital natives’ and teachers as ‘guides by the side’ while sounding forward looking and impressive, disguise the fact that knowledge and an appreciation of the past is equally, if not more important, than focusing on contemporary issues. As argued by TS Eliot, it is important:

*to maintain the continuity of our culture – and neither continuity, nor a respect for the past, implies standing still. More than ever, we look to education today to preserve us from the error of pure contemporaneity. We look to institutions of education to maintain a knowledge and understanding of the past.*⁷¹

This is not only, as argued by George Santayana, because those who cannot remember the past are condemned to repeat it, but also because the disciplines have existed and evolved over hundreds of years. To fully enter the conversation in subjects like history, mathematics, science, art, music and literature students need to be familiar with past arguments, discoveries, theories and the contribution of those who have shaped the conversation.⁷²

The argument that the disciplines are changing so rapidly that it is impossible to identify them with any certainty or precision and, as a result, that all students need to do is to access the internet when wanting information, is misleading. Information is not knowledge and understanding is not wisdom. Education, while dealing with information and understanding, is primarily concerned with knowledge and wisdom that while evolving and open to debate has stood the test of time.

It is also true that teachers, as committed and knowledgeable subject experts, are in a better position to initiate students into the conversation instead of assuming that students will have the ability to take control of their own learning, based on their immediate surroundings and interests.

Basing the curriculum on the world of the child can help motivate students by making learning relevant and enjoyable but it faces the risk of narrowly defining what students learn and what they experience. The purpose of education should be to open doors to a world far removed from the everyday reality of children and to excite their imagination and thirst for knowledge.

In relation to teaching strategies, while it is sometimes useful and worthwhile to relate what is being dealt with to a child’s prior understanding and experience, there will be times when such an approach restricts what is taught. With primary school children, for example, basing topics on the immediate family or the local community, while understandable, stops them learning about family relationships or communities that are far distant, both in time and place.

As argued by the Blackburn Report and *The Manifesto for a Democratic Curriculum*, it is especially important that students from disadvantaged backgrounds, who might not enjoy the same cultural capital as more socially privileged students, experience an education that challenges and enriches their sense of the world and their place in the broader community.

⁷¹ Eliot TS 1965, ‘The Aims of Education’ in *To Criticise the Critic*. Quoted in Bantick, GH 1970, *TS Eliot and Education*. Faber and Faber, London.

⁷² The quote, often attributed to Isaac Newton, that ‘if I have seen further it is only by standing on the shoulders of giants’ sums up the belief that we are all dependent on the contributions of those who have gone before.

Defining the purpose of education in terms of strengthening equity and social justice is warranted. At the same time, adopting a politically correct approach in areas like sustainability, Asia and Indigenous histories and cultures, and in subjects like history and civics and citizenship compromises the integrity of a liberal–humanist view.

As noted by the American academic Israel Scheffler, the curriculum needs to be objective and disinterested in order to:

*facilitate independent evaluation of social practice ... as instruments of insight and criticism, standing apart from current social conceptions and serving autonomous ideals of inquiry and truth.*⁷³

Conclusions

As detailed in Chapter Three of this Report, since the publication of the Curriculum Development Centre's (CDC) Core Curriculum for Australian Schools there have been a number of curriculum models put forward in attempts to develop a national curriculum. Each has addressed the question of the purpose of education in a variety of ways.

With the statements and profiles, for example, and as a result of adopting an Outcomes Based Education model, the focus is on 21st century skills and competencies; a process and inquiry-based model of teaching and learning, and the need to prepare students for, supposedly, what will be an uncertain and ever-changing future.

As previously mentioned, such was the failure of Australia's adoption of OBE that Bruce Wilson describes it as an 'unsatisfactory political and intellectual compromise'. It is also the case that such was the public and political reaction against OBE and fears about falling standards, many in Australia's education establishment who had been responsible for importing OBE from the United States – best illustrated by the work of the Australian Curriculum Studies Association (ACSA) and the Curriculum Standing Committee of National Professional Associations (CSCNEPA) – mobilised in an attempt to regain control of curriculum decision-making.

The need to act was made especially urgent given that both major political parties had committed themselves to a national curriculum.

Best illustrated by the three papers by Wilson, Cole and Reid⁷⁴ outlining different approaches to developing a national curriculum, it is also true that within professional and subject associations, curriculum bodies and educationalists, there was significant disagreement as to how the proposed national curriculum would best reflect the purpose of education and what curriculum model it should adopt.

Such disagreement is understandable as, along with different views about the purpose of education and the efficacy of various curriculum models, the various states and territories have their own unique and distinctive histories of curriculum development and implementation.

⁷³ Scheffler, I 1969, 'Reflections on educational relevance', in RS Peters, *The Philosophy of Education*, Oxford University Press, 1973, pp. 75–84.

⁷⁴ The three papers are detailed in Chapter Three of this Report.

As noted by Emeritus Professor Bill Loudon AM:

*The Australian federation is a beautiful thing. It allows for variation and innovation as states and territories each seek their own solutions to common problems. Sometimes there has been variation without improvement – most notoriously, the idea of different state-based railway gauges was not in the end regarded as an innovation worth keeping. But in curriculum and assessment, state-based variation has often led to creative divergence and opportunities for states and territories to learn from each other.*⁷⁵

New South Wales, for example, prides itself on its syllabus approach to the curriculum whereas the Australian Capital Territory has a history of school-based curriculum development based on 21st century learning and an OBE model.

As a result, the Australian Curriculum represents a compromise where a number of conflicting models of curriculum exist side by side and where, in an attempt to meet the demands of all the key players, rigour, balance and standards are weakened. The need to ensure that all involved would commit to a national curriculum has also led to a consensus model of decision-making and an overcrowded curriculum that has weakened the process of developing the Australian Curriculum. Yates, Woelert, O'Connor and Millar describe this as follows:

*One particular issue is a new form of content cramming (even though the ACARA website cites an explicit guideline that this should not happen). Here the public circulation of documents and the search for a reasonable degree of consensus around the country tends to lead to things being added (especially history) rather than taken away.*⁷⁶

Evidence of this can be found in the way the Australian Curriculum burgeoned from the initial four subjects to embracing the entire Foundation to Year 10 curriculum in eight learning areas, as the various stakeholder experts and subject associations argued that their particular subject or area of learning should not be left out.

As a result, while the Australian Curriculum privileges a combination of a utilitarian, a 21st century, a personalised learning and an equity and social justice view of the curriculum and the purpose of education, it undervalues introducing students to the conversation represented by 'our best validated knowledge and artistic achievements'.

The Australian Curriculum being implemented across the Australian states and territories also fails to do full justice to the Melbourne Declaration's belief that the curriculum has a vital role to play in the moral, spiritual and aesthetic development and wellbeing of young Australians.

⁷⁵ Loudon, W 2014, *Australia's National Curriculum: A Step in the Right Direction?*, Centre for Strategic Education Seminar Series, Centre for Strategic Education.

⁷⁶ Yates, L, Woelert, P, O'Connor K & Millar V 2013, 'Building and managing knowledge: Physics and history and the discipline rationales in school curriculum reform', paper prepared for the Australian Association for Research in Education 2013 Conference.

Chapter Two: An international context

As a key element of this Review, comprehensive research was conducted regarding international experience, especially in relation to top performing systems and those with a similar context to that of Australia. This included interviews with key officials of the OECD in Paris and interviews in London with a range of experts and officials involved with the recent review of the curriculum in England. This chapter draws mainly on this material. In addition, extensive desktop research has been conducted by the secretariat, the results of which are drawn upon throughout this report.

For the past decade there has been a rising interest in international comparisons of the performance of education systems. The causes are many and include the various facets of globalisation and the competitiveness and associated comparisons it produces. A driving force has been the rising significance of international benchmark testing such as PISA, TIMSS and PIRLS which are causing countries to endeavour to raise their performance.

However, there has also been a concern in many countries about a drift from traditional standards of both content and teaching, leading to fears about low motivation and gaps in achievement. Some of these concerns resulted in several jurisdictions reviewing their curriculums in the 1990s, including New Zealand (1991), Sweden (1994), Massachusetts in the United States (1997) and Singapore (2000).

Added to this has been a demand for new knowledge and skills associated with economic transformations, changing socio-demographics and the impact of technology, including information and communication technologies. In this context the United Nations Educational, Scientific and Cultural Organization (UNESCO) commissioned the Delors Report on 'education for all' in the 21st century. The report endorsed an approach to education which centred around four pillars – Learning to Know, Learning to Do, Learning to Be and Learning to Live Together.⁷⁷ Many systems, particularly in developing countries, redesigned their curriculum and other elements of their education system along these lines.

In developed countries, the growth of demand for choice in schooling and better accountability and reporting, has led parents and industry to question whether their country's schools are of international standard and, indeed, many schools have adopted internationally certified programs as options in their repertoire.

A key focus in this endeavour has been on curriculum, as communities want to know just what future generations need to know and how they can best be taught. For very many countries, states and provinces in Europe, Asia and North America, this concern has resulted in curriculum review at system and school levels. There has also often been a trend towards developing a more rigorous national curriculum where one previously existed or, as in federal systems such as Germany and the United States, the development of a new national curriculum of some kind.

As mentioned, all these trends have been facilitated and exacerbated by the availability of benchmarking tools applied internationally which result in a form of league table to aid international

⁷⁷ International Commission on Education for the Twenty-first Century 1996, *Learning: The Treasure Within*, Report to UNESCO of the International Commission on Education for the Twenty-first Century, UNESCO Publishing.

comparisons. The best known are probably PISA, TIMSS, and PIRLS. This Review has examined the results of the PISA tests, and supplemented that analysis with interviews with key officials at the OECD in Paris.

The OECD perspective

The OECD does not assess curriculum content since that is considered a matter for the sovereign member countries themselves. However, through all of its other comparative work on education systems, the OECD gains a general overview of each education system and a keen insight into the context and impact of curriculum. Also, the PISA tests themselves now contain more assessment of content rather than before, when they were primarily related to competencies and not the intended curriculum, as do the TIMSS tests.

OECD experience confirms that there are many facets which contribute to the achievement of a high-performing education system. They include a focus on student learning and the wellbeing of students, a sound curriculum based on a clear set of values and principles and educational aims, high quality teachers who are motivated and appreciated, leadership from school principals, resourcing, parental and community support, and accountability and reporting linked to systemic school improvement.

Observations conveyed to this Review by representatives of the OECD include the following:

- It has emerged that the key feature of countries which perform best in international benchmarking tests is the *conceptualisation capacity of students*, with the knowledge and ability to apply that conceptualisation capacity to new contexts, themes and topics. Over the past decade this has been a key feature of top performing Asian countries.
- Although there has been a substantial debate in most countries about what should be mandated in the curriculum there has now been a clear trend to introduce core content. The typical model is for the intended curriculum to contain core content which is mandatory, but to leave pedagogy to teachers and school settings. Assessment and reporting, and the consequent accountability are shared between school-based and system-wide regimes. Even Finland, a top performer with its renowned emphasis on teacher quality, and which has significant school autonomy, has prescriptive content in its national curriculum.
- However, maximum school autonomy with no standards will produce a fall in performance. School autonomy operating within a strong curriculum framework is a recipe for top PISA results. It makes no sense to have a national curriculum containing national standards with no national assessment and reporting. Accountability is a key factor in educational improvement. The challenge is to design a system that balances autonomy and accountability.
- Countries vary in the mix and balance between knowledge and competencies in their curriculum, but to be a top performer, countries have to be excellent in both (they are weighted equally in PISA now). You cannot teach competencies without content; capabilities must be grounded in content. Critical thinking, in particular, is best embedded in learning areas. Knowledge, competencies and problem solving is the usual formula.
- Learning areas need to be a mix of structure, student-centred learning, explicit teaching, and project-based activity (e.g. most countries teach languages structurally).

- OECD research reveals that resourcing is important up to a point, but beyond that, extra funding per student makes little difference to results.
- Quality teaching and professional development for teachers makes a big difference. Finland and Singapore and other high-performing countries, for example, provide sabbatical arrangements and placements in curriculum development centres as well as other opportunities for teachers. Also, there needs to be time for collaboration and mentoring within schools, especially for beginning teachers. Pre-service teacher education needs to have a good balance between theory and practical experience, and relevance to the school curriculum.
- Most countries have designated inspectorates or similar school support agencies in the form of inspectors, or monitors, consultants, and advisers, operating with data from school assessment and offering advice as to how to use assessment for improvement. Germany, a federal country, has a National Institute for Quality Assurance.
- Both external and internal assessment is needed and assessment needs to be viewed positively as enabling school improvement and curriculum development. There needs to be alignment between assessment and curriculum content and the school principal has a key role in this domain. Principals need to have a hands-on role in curriculum monitoring and development within a school.
- Formative assessment will always be crucial to performance, being closest to the student, but needs to be conducted within an overall framework for assessment monitoring and addressing individual student needs – it must become part of the whole pedagogic approach. Other research indicates that the need for summative assessment is also extremely important, concluding that high risk, externally set and marked, academically based exit exams are important.
- Accountability needs to flow from school evaluation but not be based solely on the narrative explained by the school. There is a spectrum of models from external agencies such as the Office for Standards in Education, Children's Services and Skills (Ofsted) in England, through to collaborative models such as in Scotland and New Zealand. There is also a need to build school evaluation expertise.
- Some countries make good use of parent surveys in school assessment. In many countries the public is asking for more transparency in information, quality standards, equity, and the monitoring of individual student progress.
- Scepticism is building in relation to so called 21st century thinking and skills, a movement which has permeated some of the educational establishment in some countries. Essentially this movement focuses primarily on competencies to the neglect of knowledge, and tries to minimise learning of content based in disciplines, preferring generalised attempts at interdisciplinarity. The OECD warns that knowledge is paramount and this requires discipline areas. It is a big mistake to replace disciplinary boundaries with cross-curricular competencies as students will lose the faculty of transferring knowledge because they do not have the conceptual understanding. They need to be able to understand concepts to apply them. And, once again, competencies cannot be taught without content, and critical thinking is best embedded in a learning area.

OECD perspective on Australia

OECD reports of recent times have much positive comment on Australia's education system but also some concerns. Interviews with OECD officials and analysis of reports reveal the issues and challenges which are relevant to the Australian Curriculum:

- It is widely known that the overall PISA results for Australia have not improved since 2000. Moreover there has been a fall in both reading and mathematics results. What is not so widely known is that in more recent years there has been a significant fall in the results of top performing students, which has had a major influence on Australia's overall performance.
- Over the past decade there appears to have been too much emphasis on competencies rather than content. The fall in content could also account for the decline in overall performance.
- Australian students appear to be relatively poor at conceptualisation and understanding. They cannot project their experience to new content, i.e. they cannot apply knowledge. (It will be recalled that the OECD believes that conceptualisation ability is the key aspect of the world's top performing education systems).
- There seems to be no significant difference between public and private schools on these indicators; however, it should be noted that other research has disputed this view.⁷⁸ Rural and Indigenous populations have lower academic performance and less access to tertiary education than the Australian average. More of a focus on reducing these and other inequities seems to be required.
- Australia needs more information of the kind that would allow schools to identify areas for improvement, and more support is required for professional development for teachers and school leaders combined with more information on how the school can improve. Teachers need more feedback from principals and colleagues and more opportunities for mentoring and working collaboratively. Principals need more preparatory training before taking up their leadership positions, which varies substantially across state and territory jurisdictions.
- There needs to be a clearer articulation on how evaluation and assessment frameworks can generate improvements in classroom practice – there is currently very great diversity in practices based on local performance frameworks. There is also a need for more balance and consistency in various forms of classroom, school, and system assessment. The Australian Government's goals for formative assessment need more visibility.
- A key priority is to strengthen teachers' capacity to assess student performance against the Australian Curriculum and to use student assessment data to improve student performance.
- The quality of teacher appraisals varies widely across Australia and needs to be improved by external inspectors. The Australian Institute for Teaching and School Leadership (AITSL) has created teaching standards that have been endorsed by governments but these do not seem to have made an impact on OECD analysis.
- A better alignment is required between school self-evaluation and external evaluation using common criteria and sharing a common language of quality:

⁷⁸ See for example: Marks, G 2014, *Education, Social Background and Cognitive Ability: The Decline of the Social*, Routledge; Hanushek, E & Woessman, L 2010, *The Economics of International Differences in Educational Achievement*, National Bureau of Economic Research Working Paper 15949; Miller, PW & Voon, D 2011, 'Lessons from My School', *The Australian Economic Review*, vol. 44, Issue 4, pp. 366–386.

*School self-evaluation is an expectation and some form of external review mechanism is increasingly common. Test results, focusing on literacy and numeracy, are widely used to inform evaluation. However there remains a need to clarify a number of vital issues relating to the relationship between the role of reviews in both accountability and improvement, the scope of reviews in relation to the emerging national agenda, the critical areas on which reviews should focus, the role and nature of externality, and the extent of transparency. Different jurisdictions have addressed mixtures of these issues in their own context but no clear national direction of travel has emerged. The scope and frequency of external reviews are also important issues. The implementation of the broadening Australian Curriculum suggests a more general focus than that which a 'failing schools' agenda might imply. For these reasons, developing policy on school evaluation in Australia should seek to use its potential to challenge complacency and provide evidence about progress on a broad front.*⁷⁹

- The My School website information needs to be broadened and improved. One particular suggestion is to publish externally validated school evaluation reports to complement the publication of national test data.
- The National Assessment Program – Literacy and Numeracy (NAPLAN) needs to be aligned with the Australian Curriculum, particularly the extent to which NAPLAN is balanced in its representation of the depth and breadth of intended student learning goals. There needs to be more clarity as to the formative uses of NAPLAN results by teachers.
- Significant confusion and inconsistency exists across the nation in the A to E ratings provided on reports to parents. The current A to E ratings have not been consistently aligned with the Australian Curriculum and definitions have varied across states and territories. Current work on this needs to be expedited.
- There is a need for a better link between accountability and improvement and student monitoring. Better monitoring of all assessment practices is required; particularly better articulation and linkage to classroom practice. This includes better monitoring of the non-government sector. It also requires better capacity-building for evaluation and assessment including at the school level.
- The National Assessment Program (NAP) needs to be strengthened to ensure all components of national testing and assessments are articulated with the whole Australian Curriculum as it is rolled out and implemented.

Generally speaking, the OECD appraisal, while acknowledging the need for a balance between system and local/school roles in curriculum development and assessment, argues for clearer linkages, closer alignment, and greater consistency with the national curriculum in all levels and components of assessment, classroom practice, monitoring, reporting and accountability.

The OECD also observes that the whole Australian education system needs more clarity on all policies and school funding.

⁷⁹ Santiago, P, Donaldson, G, Herman, J & Shewbridge, C August 2011, *OECD Reviews of Evaluation and Assessment in Education-Australia*, OECD, p. 11.

The case study of England

England provides a very useful and informative guide for the Australian experience given the very similar context, and also because the British Government has, in recent times, embarked on a comprehensive review of the national curriculum in England as part of the reform of the whole school sector. As is the case in Australia, there have also been concerns there regarding a slippage in international ratings in educational performance. Our Review engaged in interviews with key officials, academics, experts, and policy makers, who have been involved with the curriculum review in England.

Most Australian attention has focused on the experiments that give greater autonomy to English schools, including the creation of academies and Free Schools, but there is less awareness here of the complete systemic nature of school education in England, which comprises at least the following elements:

- curriculum
- school autonomy
- focus on teaching and teachers
- school inspectorate
- benchmark testing
- reporting throughout the system
- impact of the Graduate Certificate of Secondary Education (GCSE) examinations
- support for schools
- concern for the disadvantaged.

In other words, it is important to appreciate that the shift to greater school autonomy has been carried out within the traditional strong reporting and accountability and support framework characteristic of the English school education system.

The current UK government began its reform process with a Teaching White Paper with a key goal of raising the attainment for all children and young people – especially those from poorer families. Continuing to attract outstanding people to teaching was a key objective. Other goals were to create leadership, accountability, and improved teaching quality, and to benchmark expectations of children against the expectations of the most successful nations to ensure that English qualifications matched the best in the world. Extension of school freedom would be accompanied by reforms in the performance tables and a reformed inspectorate.

A review of the curriculum was launched in January 2011 (the English approach distinguishes between the national curriculum and the school curriculum). The aim was to raise expectations for all children and young people in the subjects of English, mathematics and science – the core subjects in England – to be as high as in the best performing countries. The curriculum would be simplified and slimmed down to a core, and schools would be given more responsibility over the school curriculum alongside the national curriculum. However, schools would be made accountable for attainment of progress by publishing results and school inspections.

This was followed by a review of the curriculum in 2011–13 which included an expert panel, consultations, and research into high performing jurisdictions.

The resulting Framework Document for the National Curriculum in England (September 2013) stated:

Aims

The national curriculum provides pupils with an introduction to the essential knowledge that they need to be educated citizens. It introduces pupils to the best that has been thought and said; and helps engender an appreciation of human creativity and achievement.

The national curriculum is just one element of the education of every child. There is time and space in the school day and in each week, term, and year, to range beyond the national curriculum specifications. The national curriculum provides an outline of core knowledge around which teachers can develop exciting and stimulating lessons to promote the development of pupils' knowledge, understanding, and skills, as part of the wider school curriculum.⁸⁰

The framework places great stress on the curriculum being broad and balanced. The concept of breadth and balance in curriculum goes back to the *Education Act 1944* in England and was continued following this review. It was announced that all schools would be required to teach a 'balanced and broadly based' curriculum which 'promotes the spiritual, moral, cultural, mental and physical development of pupils at the school and of society' and 'prepares pupils at the school for the opportunities, responsibilities and experiences of later life'.⁸¹

These elements would define the purpose of the whole school curriculum including the national curriculum. Maintained schools in England are legally required to follow the statutory national curriculum which sets out in programs of study on the basis of key stages, subject content for those subjects that should be taught to all pupils. All schools must publish online their school curriculum for all subjects by academic year. For the programmes of study covered in the primary years, the school curriculum is more detailed than the national curriculum, sets high expectations, and is set out by academic year.

Free schools and academies do not have to follow the national curriculum. They are bound by their funding agreements with the department to offer a 'broad and balanced curriculum' which has to include English, mathematics and science, but the details of what they teach in those subjects does not have to follow in detail the national curriculum. They are also obliged to make provision for religious education.

However, in reality many choose to follow the national curriculum or base their curriculum around it. Their curriculum decisions are also affected by the fact that their pupils will have to take Key Stage 2 tests in English and mathematics at the end of primary education and GCSEs at 16 years of age – the content of these tests or qualifications is also determined by what is in the national curriculum.

In England the core subjects are English, mathematics and science, with Foundation subjects being art and design, citizenship, computing, design and technology, languages, geography, history, music,

⁸⁰ Department for Education 2013, *The National Curriculum in England, Key Stages 3 and 4 Framework Document*. Department for Education, London, p. 5.

⁸¹ *Ibid.*, p. 4.

and physical education. All schools must teach religious education to pupils at every stage, and sex and relationship education to pupils in secondary education. Schools may teach other subjects.

Space does not permit a full description of changes for all subjects, but the brief aspects below give something of the flavour of the reforms:

- *English*: The emphasis is on teaching grammar, spelling and punctuation in primary schooling with spoken language integrated throughout the program of study. There is greater freedom for teachers in secondary schooling where pupils apply and expand the knowledge gained in primary with greater demands in the range of reading and formal writing skills. There is also a strong phonics and phonemic awareness approach to the early years of literacy.
- *Mathematics*: There are benchmarked expectations with those in high-performing jurisdictions. There is a focus on the three aims of fluency, mathematical reasoning and solving problems. In primary schooling, there is greater focus on arithmetic and proportional reasoning (e.g. with fractions and decimals) while secondary schooling builds on the primary years and has more advanced algebra, geometry and probability in preparation for post-16 study.
- *Science*: The focus is on the importance of scientific knowledge and a greater emphasis on the scientific concepts underpinning pupils' understanding.
- *History*: There is comprehensive chronological coverage of British history across Key Stages 2 and 3. There is less focus on teaching abstract concepts and processes.
- *Geography*: There is a greater focus on locational knowledge and fieldwork, with clear content on physical and human geography.
- *Foreign languages*: There is a new requirement to teach foreign languages for 7–11 year olds, enabling schools to be more ambitious about teaching languages in secondary school with new content on translation, grammar, vocabulary, and literature for 11–14 year olds.

One interesting development in the English experience is the emergence from private publishers of extremely helpful material for parents and students explaining the national curriculum. One particularly worthwhile example is the series *What Your Child Needs to Know: Core Knowledge Series* edited by ED Hirsch, published by CIVITAS. There have been comparable series in other countries. This series, one for each year level, provides concise and extremely well-illustrated books that include an array of extensive resource material and teaching and learning aids. There is no current equivalent in Australia.

Lessons from past national curriculum attempts

According to various writers there have been clear benefits and problems in past attempts at introducing a national curriculum in countries – especially the previous attempt in England in 2007. Benefits include higher expectations of young people, enhanced rate and pattern of pupil progression, reduction of inappropriate repetition of content, balanced coverage in the primary phase particularly in respect of science, enhanced performance of girls in mathematics and science, more effective pupil transfer that previously affected vulnerable groups of children in particular, and entitlement concepts helping in raising attainment.

Problems included acute overload with resulting pressure on teachers to move with undue pace through material, encouraging a 'tick list' approach to teaching; all groups clamouring to ensure that

subject content which reflects their interest is included in the 'core' content leading to a lack of clarity as to what should legitimately be included or not included; and overbearing assessment with adverse impact on teaching and learning with specific problems emerging in drilling for tests and a failure of the assessment to provide policy makers with robust information on national standards.⁸²

The latest curriculum review in England also engaged in international benchmarking against top performing countries. This work was undertaken with the assistance of a review panel chaired by Tim Oates, whose seminal paper *Could Do Better* was a key influence on school reform in England. Oates identifies many of the faults of past experience in England. They include confusion between content and context; vagueness in content descriptions, which also lead to a poor relationship between content and assessment; and drifts into cross-curriculum approaches with too many generic statements of little value that have led to a highly doctrinaire view of teaching delivery and testing which is not validated.

He makes an observation relating to the way the curriculum has been developed that is highly pertinent to recent Australian experience. The concern is that new subjects have been added and old ones modified largely in response to pressure groups rather than for sound pedagogical reasons. He draws on research into the character of national reform in different countries which highlights:

*The extent to which English processes tend towards satisfying the conflicting demands of competing societal and lobby groups rather than developing more radical policy solutions, which have greater potential to confront chronic structural problems.*⁸³

This factor and other pressures have also resulted in overload in the curriculum. Moreover, there is danger in simply seeking to achieve consensus in curriculum development. Oates points out that:

*Social support for a National Curriculum is vital – any national curriculum must enjoy high levels of societal support and confidence - but there are indications that the developers involved in recent reviews were preoccupied with generating consensus ... Generic statements of content may appease different educational lobbies, but simply because each can find what they want in such statements.*⁸⁴

Statements which 'keep all happy' in fact detract from the very purpose of a national curriculum. (Oates quotes the statement in a previous chemistry curriculum that 'pupils must understand that there are patterns in the reactions between substances' – a statement which is vague and unhelpful, especially regarding assessment).⁸⁵

There are inherent dangers in simplistic international comparisons with systems which perform highest on international tests, and these are well documented by Oates in commenting on Finland, Singapore, Hong Kong, Japan, and other nations. They include the underestimation of cultural and contextual factors such as the high esteem in which teachers are held, parental active engagement in education of children at home, community support of schools, mandating of literacy through

⁸² Oates, T, 2010, *Could Do Better: Using International Comparisons to Refine the National Curriculum in England*, Cambridge Assessment, pp. 3-4.

⁸³ Ibid., p. 3.

⁸⁴ Ibid., p. 16.

⁸⁵ Oates, T 2010, *Could Do Better: Using International Comparisons to Refine the National Curriculum in England*, Cambridge Assessment, p. 16.

legislation in other parts of the public sector, length of school day, and automatic extra personal tutoring for low achievers.

There is also a size factor. It is striking that there is an observable concerted drive for improvement in smaller high-performing jurisdictions like Singapore, Finland, Hong Kong, Massachusetts, and Alberta (in Canada).

While large systems may have greater potential for important innovation to occur, they have greater challenges in disseminating that innovation in order to secure system improvement. Change processes possess higher risk in respect of misappropriation and distortion. Inertia is higher.⁸⁶

This has considerable implications for improvement strategies. Nevertheless, according to the Expert Panel for the National Curriculum Review, it is possible to identify common elements in the approach of high-performing nations in that they:

are explicit about the practical and functional contributions that education makes to national development. In almost all cases schools are expected to contribute, in a balanced way, to development in all of the following domains:

- *Economic – the education of pupils is expected to contribute to their own future economic wellbeing and that of the nation or region.*
- *Cultural – the education of pupils is expected to introduce them to the best of their heritage(s), so that they can contribute to its further development.*
- *Social – the education of pupils is expected to enable them to participate in families, communities and the life of the nation, and*
- *Personal – the education of pupils is expected to promote the intellectual spiritual moral and physical development of individuals.⁸⁷*

Top performing countries have clear aims and underlying values for curriculum, accompanied by a mission – many using words which relate to the desire to create a love of learning, as well as the other goals relating to personal, social, and economic fulfilment.

The systems focus on:

- concepts
- principles
- fundamental operations
- key knowledge.

The comparisons undertaken in England also confirmed the OECD perspective that *conceptualisation* is the key ingredient for a national curriculum to instil in pupils.

Two key concepts which facilitate understanding of how other nations have developed their national curriculum to good effect are ‘curriculum control’ and ‘curriculum coherence’.

⁸⁶ Ibid., pp. 10–11.

⁸⁷ Department for Education 2011, *The Framework for the National Curriculum. A Report by the Expert Panel for the National Curriculum Review*, Department for Education, London, p. 15.

*The weight of evidence from transnational comparison is that a certain degree of curriculum control is necessary (that this need not be associated with ‘top-down’ control or control exercised exclusively by the State), and that this control should be directed towards attaining ‘curriculum coherence’.*⁸⁸

The national curriculum itself cannot guarantee control – the whole system must do so. Different systems will lay emphasis on different elements of the control functions but the analysis of different countries revealed an array of the curriculum control factors which included the following:

- curriculum content (national curriculum specifications, textbooks, support materials etc.)
- assessment and qualifications
- national framework-system shape (e.g. routes, classes of qualifications)
- inspection
- pedagogy
- professional development
- institutional development
- institutional form and structures (e.g. size of schools, education phases)
- allied social measures (such as that which links social care, health care and education)
- funding
- governance (autonomy versus direct control)
- accountability arrangements
- selection and gatekeeping (e.g. university admissions requirements).

These factors form a system of complex relations and balances and a nation may choose to place its particular emphasis on all of them or particular ones. However, it is crucial to realise that they do form a system and so altering one will have an effect on the others – policy makers need to be aware of this. Coherence is considered to be achieved:

*when the national curriculum content, textbooks, teaching content, pedagogy, assessment and drivers and incentives are all aligned and reinforce one another.*⁸⁹

It is very doubtful that Australia takes this systemic approach to schooling, to some extent because of the fragmentation due to the federal system.

According to the review panel in England, one area where the comparative studies could not reach an evidenced-based conclusion was in relation to transitions between key stages – in particular, on more detailed consideration of provision for children with learning difficulties, special educational needs and disabilities and/or those regarded as high achievers.⁹⁰

⁸⁸ Oates, T 2010, *Could Do Better: Using International Comparisons to Refine the National Curriculum in England*, Cambridge Assessment, p. 4.

⁸⁹ Ibid., p. 13.

⁹⁰ Department for Education 2011, *The Framework for the National Curriculum. A Report by the Expert Panel for the National Curriculum Review*, Department for Education, London, p. 5.

Conclusions

Countries which aspire to be top performers adopt a holistic approach to schooling, an approach that is not in evidence in Australia.

The OECD identifies facets which contribute to the achievement of a high performing system as including:

- a focus on the wellbeing of students and their individual progression
- a sound curriculum based on a clear set of values, principles, and educational aims
- high quality teachers who are motivated and appreciated
- leadership from school principals
- resourcing
- parental and community support, accountability reporting and quality assurance linked to systemic school improvement
- the key feature of countries which perform best in international benchmarking tests is the conceptualisation capacity of students.

Other research⁹¹ indicates there are other factors such as:

- high stakes externally set and marked academic examinations
- a schooling system that encourages parental choice and diversity.

The OECD perspective on Australia is that there are many strengths, but there are also weaknesses:

- There is too much past emphasis on competencies rather than knowledge and content.
- Australian students appear to be relatively poor at conceptualisation and understanding and projecting their experience to new content i.e. they cannot apply knowledge.
- Teachers need more feedback and support and principals need preparatory training before taking up their leadership positions.
- All assessment, including NAPLAN and school formative assessment, needs to be related more closely to curriculum content.
- A better alignment is needed between school self-evaluation and external evaluation.
- There needs to be more consistency across Australia in assessment ratings, e.g. A to E reporting.
- A better relationship is needed between accountability and student monitoring and linkage to classroom practice.
- The whole Australian education system needs more clarity on all policies and funding.

⁹¹ See, for example:

Woessmann, L 2002, 'How Central Exams Affect Educational Achievement: International Evidence from TIMSS and TIMSS-Repeat', *A paper prepared for the conference Taking Account of Accountability: Assessing Politics and Policy*, John F Kennedy School of Government, Harvard University;

Bishop, JH 1997, 'The Effect of National Standards and Curriculum-Based Exams on Achievement', *The American Economic Review*, vol. 87, no. 2. *Papers and Proceedings of the Hundred and Fourth Annual Meeting of the American Economic Association*, pp. 260–264;

Jürges, H, Schneider, K & Büchel, F 2003, *The Effect of Central Exit Examinations on Student Achievement: Quasi-Experimental Evidence from TIMSS Germany*, CESifo Working Paper no. 939, IFO Institute.

The experience in England again reinforces the need for a holistic approach to school education.

As mentioned earlier, in England the main components include:

- curriculum
- school autonomy
- focus on teachers and teaching
- schools inspectorate
- benchmark testing
- reporting throughout the system
- impact of GCSE examinations
- support for schools
- concern for the disadvantaged.

The review of the curriculum in England introduced more emphasis on knowledge and fundamentals in all learning areas, more rigour, more international benchmarking, more realistic approaches to student progression and less overload.

The results of the international benchmarking done in England in relation to the national curriculum are highly pertinent for Australia.

International benchmarking with England: summary of main points

There are substantial benefits to having a national curriculum, not least being a lift in the aspirations and expectations of all students and improvements in their attainment and rate of progression. There are also design challenges – particularly in determining the balance between the roles and functions of content and learning to be allocated to a central authority and school levels. Appropriate structure and progression of content are vital, and if achieved will alleviate unnecessary repetition.

The main focus in curriculum design and delivery should be on the content of the curriculum in relation to individual students accompanied by careful monitoring of their individual progression, and the key aim is to develop in students the capacity to conceptualise and apply that capacity to new knowledge and context.

A curriculum must be based on a clear vision, preferably expressed in a statement of aims, underlying values, a mission, and a set of principles.

Curriculum design and implementation are but part of the whole pattern of schooling, and policy makers must take a systems approach involving many factors and facets, and not a piecemeal attempt to borrow single policies or institutions. Policy makers need to be aware of the interrelationship of various parts of the system when they are tempted to tinker with just certain segments of it. Control and coherence are vital and all the stakeholders in the education system have a role to play here.

A national curriculum should be concept-led and knowledge-led not context-led. Competencies are meaningless unless linked to content and knowledge.

A national curriculum must have a clearly defined core which is mandatory in its content. The purpose of a statutory core is to establish an entitlement, to establish standards, to promote continuity and coherence, and to promote public understanding. Schools will be innovative and add to the core, and use flexible and suitable pedagogy.

There are significant dangers in having a curriculum design process that simply encourages compromise over core content which should be determined on educational grounds and not on lobbying capacity. There must be absolute clarity for teachers and parents about the content of the core curriculum and certainty as to exactly what is mandatory.

Schools have a vital role in bringing a national curriculum to life and enhancing it with their school curriculum. Generally speaking pedagogy is a matter for teachers and schools but it must be recognised that teachers will most likely not have skills in curriculum development and will need professional development in this domain.

Quality teaching and leadership from school principals are vital for the delivery of a national curriculum to develop in students the will to achieve.

There must be alignment between clear curriculum content and assessment. Clear links must be established between what is taught and what is assessed. Assessment must provide policy makers, teachers and parents with robust information on standards facilitating fast remedial action to address underachievement.

Curriculum control is vital leading to coherence but control is the responsibility of the whole education system including schools.

Accountability is paramount, especially to parents, and schools need to communicate their curriculum in simple language to parents, as well as the results of their endeavours including individual student progress. Some form of external inspectorate or school support agency seems essential to accompany school autonomy in educational management.

Cultural factors are important especially support for teachers, enhancement of their status, and engagement of parents and the community in the learning process. Ephemeral fads in content and pedagogy, generic statements, and compromise, without an epistemological basis have no place in determining curriculum and delivery. There are sound educational approaches to reducing overcrowding in the curriculum.

Curriculum stability is necessary, especially for teachers, but a national curriculum needs constant updating. As Oates states in *Could Do Better: Using International Comparisons to Refine the National Curriculum in England*:

The principal motor for driving revision of subjects in the National Curriculum should be change in the structure and content of knowledge. If highly contextualised content is inserted into the National Curriculum – specific issues of contemporary relevance – then the pace of change is likely to be extremely fast. If however the National Curriculum focuses on the essential elements of subjects, then the pace of change is likely to be considerably slower – yielding considerable advantage for teachers, and enhancing the supply of well-grounded textbooks and support materials.

Ultimately the national curriculum, like the education system of which it forms a central part, should encourage in all students a quest for knowledge, the satisfaction of attainment, and a love of learning.

An Asian focus

There is currently considerable particular interest in the curriculum approach of Asian countries, which have been among the top performing countries in international testing. From the intended curriculum documents of a number of countries, Appendix 2 to this Report contains summaries of the nature of curriculum in many of these and other top performers. A more detailed examination of the curriculums of Hong Kong, the Republic of Korea (South Korea), Shanghai and Singapore identifies a number of common characteristics.

Aims and values

In all of these Asian countries there are very explicit aims and objectives for the school curriculum. The focus is clearly on the individual student, their moral values, and their wellbeing and personal development. It is a holistic approach to the student.

Hong Kong speaks in terms of enabling students to learn how to learn and providing experiences for the whole-person development in the domains of ethics, intellect, physical development, social skills and aesthetics. The Republic of Korea emphasises assisting every citizen to build character based on humanitarianism and managing a humane life by developing autonomous life skills and the qualifications needed as a democratic citizen, and to contribute to the development of a democratic country and realise the public idealism of humankind. This is crystallised in a 'vision for the educated person', who is a 'global creative person' who should possess key competencies such as self-respect and self-understanding, communication, creativity, logic, problem-solving, citizenship, cultural sensitivity and leadership.⁹² In Shanghai, the aim is 'to enable the educatee to learn in active and lively ways and develop morally, intellectually and physically, in an all-round way, and to turn out a new generation who have (lofty) ideals, moral virtues, and are cultured/educated and disciplined'.⁹³ In Singapore, the desired characteristics for students are a good sense of self-awareness, a sound moral compass, and the necessary skills and knowledge to take on challenges of the future. Also important is a sense of responsibility to family, community and the nation, and an appreciation of the beauty of the world, a healthy mind and body, and a zest for life. The aim is to foster the student to become a confident person, a self-directed learner, an active contributor and a concerned citizen.

Teachers

It has long been observed that Asian cultures accord teachers high status as knowledge bearers and shapers of lives and nations. All of these Asian countries reinforce this status with a significant focus on teachers.

Shanghai and Singapore are probably best known in this regard. Shanghai has instruction and mentoring programs for teachers which involve frequent classroom observations with constructive feedback, a practice known to improve student learning. All teachers in Shanghai have mentors. New teachers have district-based mentors and two in-school mentors (one on classroom management and the other on subject content). Singapore has a high-quality teaching workforce, an active

⁹² Lee, K 2014, *Competency based curriculum and curriculum autonomy in Korea*, IBE Working Papers on curriculum issues, no. 12, UNESCO International Bureau of Education.

⁹³ Nanzhao, Z, Muju, Z, et al. 2006, *Educational Reform and Curriculum Change in China: A Comparative Case Study*, International Bureau for Education, p. 23.

professional development program for teachers, and a comprehensive system for selecting, training, compensating and developing teachers and principals.

Curriculum structure and core

There are some variations between these countries but they all feature a combination of three elements – content in key learning areas, generic skills or capabilities, and values and attitudes.

In terms of content, the approach to defining a mandatory core differs across the countries. Hong Kong has a Basic Education Curriculum for primary 1 to secondary 3. Subjects in this curriculum are grouped into eight Key Learning Areas (KLAs): Chinese; English; mathematics; personal, social and humanities; science; technology; art; and physical education. From primary 1 to secondary 3 all eight KLAs are mandatory; however, in primary 1 to primary 6 three KLAs (science; personal, social and humanities; and technology) are grouped into one subject ‘General studies for primary schools’.

In the Republic of Korea, elementary and middle school are compulsory, and mandatory subjects include Korean language, social studies/moral education, mathematics, science/practical course, physical education, arts (music/fine arts) and English. The curriculum for the first grade is structured differently: into Korean language, mathematics, disciplined life and pleasant life, as well as ‘we are the first graders’ in first year. In high school, students must take 10 mandatory subjects: Korean language, ethics, social studies (including Korean history), mathematics, science, technology and home economics, physical education, music, fine arts, and English. However, students can select their own subjects in Years 11 and 12.

In Shanghai, the mandatory subjects’ curriculum covers eight domains of learning: language and literature, mathematics, natural sciences, social sciences, arts, skills (including ICT), sports and fitness, and integrated practical learning – which comprises community service and other activities which motivate the students to engage with the community. Interestingly, this curriculum is divided into three broad subject categories: Foundation Subjects (the first seven); Expanded Subjects; and Inquiry/Research Subjects, which include both independent studies based on a student’s interests, and another type based on the foundation subjects and focused on disciplinary knowledge. By providing three categories of subjects it is hoped that students from primary to senior secondary levels will be given more options to choose courses based on their interests and aptitude while being commonly grounded on a firm foundation of basic content knowledge.

Shanghai schools also have to meet municipal requirements, such as the requirement that every student should engage in at least one hour per day of physical education along with some campus duties and community service.

In Singapore, primary is a broad-based curriculum and there is effectively no core in secondary where streaming occurs. Subjects that are examined in the Primary School Leaving Exam are English, mother tongue, mathematics, and science. In addition to these subjects, students also take non-examinable subjects: co-curricular activities, character and citizenship education, national education, program for active learning, physical education, and values education. The combination of subjects and streams taken by each student is decided by parents with advice from teachers.

The curriculums in two of these countries are organised by key stages, and in the other two, by years.

Assessment

In all these countries there is a combination of external and internal assessment with the external authority also providing guidance or formats and monitoring for the internal testing. Typically there are major external tests on a selection of learning areas for at least three milestones – end of primary, end of junior secondary, and end of secondary. Systems like Singapore use ‘high stakes’ tests to stream students and use external, competitive examinations like China’s *Gaokao* to drive what is taught in the classroom and the style of pedagogy adopted.

School inspections

All of these countries have external school inspection authorities of various kinds. The inspections complement the school-based self-evaluations and include curriculum assessment.

Summary

In all of these Asian countries, some of the distinguishing features in relation to the curriculum include:

- an explicit emphasis on values – both personal and national – in educational aims, with a keen eye also to the significance of globalisation
- a strong focus on quality teaching and intense fostering of teachers
- a combination of knowledge base and capabilities with the capabilities very explicitly stated and encompassing personal values and attitudes
- a mandatory core that includes the same learning areas which would be common to western experience but with a much stronger emphasis on personal development, including values and physical education
- a diagnostic system incorporating external and school-based assessment and evaluation that is aimed at ensuring close monitoring of student progress
- a fairly strict regime of quality assurance with a strong emphasis on external inspection nicely described in Singapore as a ‘School Excellence Model’
- a much longer school day and year than most western countries.

Trends

In recent times these Asian countries have reviewed their school education and curriculum systems. There has been a general tendency to reduce the curriculum load and offer more school autonomy and choice for students, although changes to date are incremental. Most have also introduced measures to identify individual student needs and address these throughout the school years spectrum.

Singapore has a direct intervention program for low achievers. Some flexibility is also being considered for different contexts to suit local relevance and needs – this includes creating greater space for school-based curriculum. The Republic of Korea has introduced level-differentiated instruction in order to better respond to individual differences in student abilities, aptitudes, needs and interests.

Attention is also being given to sound approaches for education reform. In Hong Kong the government has organised meticulous activities to prepare schools for change, and well-designed preparations for management of perceptions including engagement with the media. The reform

provides schools with a platform but they are then able to adopt diverse approaches to implementation. Singapore, like the other countries, engages in close attention to international benchmarking. No policy is announced without a plan for building the capacity to meet it. Shanghai has worked hard on curriculum reform typically piloting new curriculum before it is rolled out to the rest of the country. Further international comparisons are included in Chapter Seven of this Report.

In all these countries the reforms that have been introduced have taken keen cognisance of the need for the curriculum to address the challenges and opportunities of economic globalisation and cater for creating career paths that will be relevant.

Reform in these Asian countries is undertaken in a tightly coordinated and holistic manner, with all arms of the system moving in synchronisation.

Chapter Three: The Australian context

One of the tasks included in the terms of reference for the Review of the Australian Curriculum is evaluating the ‘development and implementation of the Australian Curriculum’.

In November 2013, ACARA presented to education ministers for their endorsement, the Foundation–Year 10 Australian Curriculum for health and physical education, economics and business, civics and citizenship and technologies. From ACARA’s perspective this completed the development of the Foundation–10 Australian Curriculum, apart from the content for languages which lies outside of the scope for this Review and is still being finalised. In total, ACARA had developed, at the direction of ministers, a curriculum structured as per Figure 5.

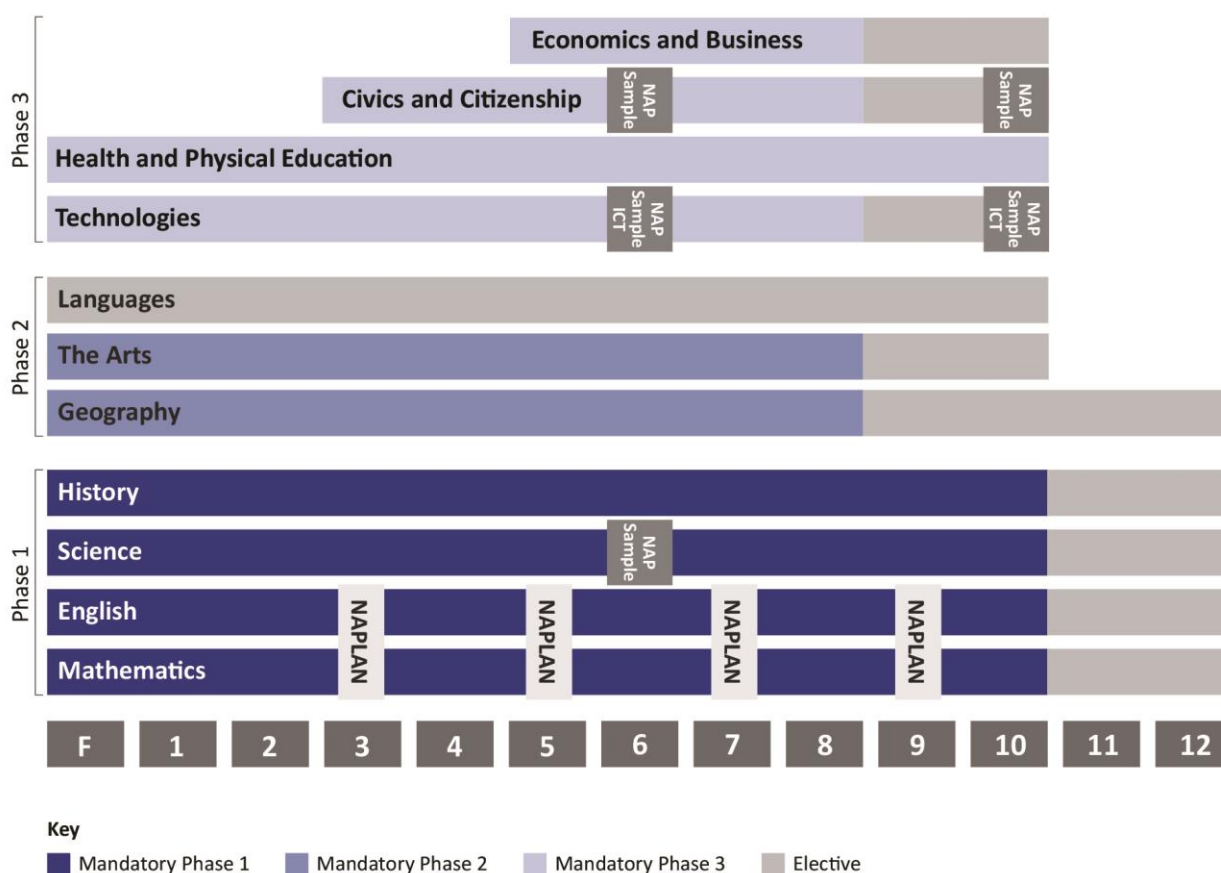


Figure 5: The Foundation–10 Australian Curriculum (as at November 2013)

However, the Australian Curriculum currently being implemented across the various states and territories has not been developed in isolation and can only be fully understood in the context of curriculum debates and developments, especially during the last 40 years. It is also the case that intended curriculum documents implicitly or explicitly privilege particular views and assumptions about the nature or reality and the purpose of education and, as such, they are never neutral or values free.⁹⁴

⁹⁴ See Chapter One for a discussion about the purpose of education and the characteristics of three different curriculum models.

While not pretending to be exhaustive, this chapter seeks to identify and evaluate some of the key official and unofficial papers informing the development of the Australian Curriculum that have influenced what is currently being implemented by state and territory jurisdictions.

An outline of the various stages of curriculum development, including papers, can be found on the ACARA website http://www.acara.edu.au/curriculum/curriculum_design_and_development.html.

Key documents on the ACARA website include:

- *National Curriculum Development Paper*
- *The Shape of the Australian Curriculum* (version 4)
- *The Curriculum Development Process* (version 6)
- *The Curriculum Design Paper* (version 3.1).

While not mentioned on the ACARA website, other relevant papers⁹⁵ include:

1. *National Approaches to Curriculum Forum* (February 2006)⁹⁶ and *Approaches to National Curriculum Work, Invitational Symposium – Report* (August 2006)⁹⁷. Both papers summarise national meetings organised by the Australian Curriculum Studies Association involving peak curriculum and education bodies.
2. ‘A Guide to productive national curriculum work for the twenty first century’⁹⁸ – produced by ACSA (the Australian Curriculum Studies Association) as a result of the two national forums.
3. *Developing a twenty-first century school curriculum for all Australian students* (August 2007)⁹⁹ – a working paper prepared for the CSCNEPA.
4. Two papers presented at a 2007 ACSA sponsored conference, one titled *School curriculum for the 21st century*¹⁰⁰ (Bruce Wilson), and the other titled *School curriculum for the 21st century: A rough guide to a National Curriculum*¹⁰¹ (Peter Cole).
5. *Federalist Paper 2. The Future of Schooling in Australia Revised Edition*¹⁰² – A Report by the Council for the Australian Federation (September 2007).
6. Australian Curriculum Coalition: Common View on the Australian Curriculum (the Australian Curriculum Coalition was formerly known as the CSCNEPA)
7. *Rethinking National Curriculum Collaboration: Towards an Australian Curriculum* – Professor Alan Reid.¹⁰³

⁹⁵ Most of the following papers can be accessed at <http://www.acsa.edu.au/pages/page510.asp> (viewed 23 June 2014).

⁹⁶ Zbar, V 2006, *National Approaches to Curriculum Forum*, Australian Curriculum Studies Association.

⁹⁷ Zbar, V 2006, *Approaches to National Curriculum Work, Invitational Symposium – Report*, Australian Curriculum Studies Association.

⁹⁸ Australian Curriculum Studies Association 2006, ‘A Guide to productive national curriculum work for the twenty-first century’, *Curriculum Perspectives*, vol. 26, no. 4, p. 5. Australian Curriculum Studies Association.

⁹⁹ Curriculum Standing Committee of National Education Professional Associations 2007, *Developing a twenty-first century school curriculum for all Australian students*, CSCNEPA.

¹⁰⁰ Wilson, B n.d., *School curriculum for the 21st century*, viewed 23 June 2014, can be accessed at: http://www.acsa.edu.au/pages/images/paper%20-%20Bruce%20Wilson%20_NC_.pdf.

¹⁰¹ Cole, P 2007, *School curriculum for the 21st century: A Rough Guide to a National Curriculum*, viewed 23 June 2014, can be accessed at: http://www.acsa.edu.au/pages/images/paper%20-%20peter%20cole%20_nc_.pdf

¹⁰² The Council for the Australian Federation 2007, *Federalist Paper no. 2, The Future of Schooling in Australia*, rev. edn, Department of Premier and Cabinet, Melbourne.

¹⁰³ Reid, A 2005, *Rethinking national curriculum collaboration; towards an Australian Curriculum*, Department of Education, Sciences and Training, Canberra, viewed 21 July 2014, can be accessed at: http://pandora.nla.gov.au/pan/48203/200504200000/www.dest.gov.au/research/publications/national_curriculum/report.pdf.

Varying attempts to develop a national curriculum

Notwithstanding that the Australian Constitution gives responsibility for school education to the states, and not the Australian Government, there have been a number of Australian Government attempts to develop a national approach to the curriculum over the last 35 or so years.

Core curriculum for Australian Schools – 1980

The federally funded CDC with Malcolm Skilbeck as director published the *Core Curriculum for Australian Schools* in 1980. The paper defines core curriculum as, ‘the basic and essential learnings and experiences which can reasonably be expected of all students who pass through our schools’.¹⁰⁴

The paper argues against what is characterised as a simplistic and old-fashioned view of the basics and essential learning, represented by the three Rs and traditional subjects, and states that it is not the CDC’s role to provide ‘detailed curriculum content and teaching methods, or to prescribe syllabuses or texts’.

Similar to outcomes based education inspired curriculum models like Tasmania’s and South Australia’s Essential Learnings, the CDC approach gives priority to so-called capabilities and competencies such as learning and thinking techniques, ways of organising knowledge, dispositions and values, skills or abilities, forms of expression, practical performances and interpersonal and group relationships.

The focus is on the learning process and capabilities as opposed to the type of knowledge, understanding and skills represented by the subject disciplines. The so-called areas of knowledge and experience chosen to constitute the core curriculum are described as:

- *arts and crafts* – including literature, music, visual arts, drama and more practical subjects like working with wood, metal and plastic
- *communication* – including verbal and non-verbal communication, listening, speaking, reading and writing as well as visual communication related to mass media
- *environmental studies* – a study of the environment, both natural and manmade, in order to promote ‘awareness and understanding of both the physical and man-made environments and sensitivity to the forces that sustain or may destroy them’
- *health education* – involving both physical activities as well as learning about different areas of health education, including physical, emotional, mental and community health
- *work, leisure and lifestyle* – including life skills, such as driving a car and planning a budget; as well as examining the nature of work, human relationships and leisure time activities
- *mathematical skills and reasoning and their application* – dealing with applied mathematics as well as basic number processes and how mathematics presents a unique way to deal with the world in terms of mathematical symbols and processes
- *scientific and technological ways of knowing and their social applications* – dealing with scientific ways of thinking and their applications, including the social and economic impact of science and the unique way science deals with problem solving, decision-making and synthesising ideas and concepts

¹⁰⁴ Curriculum Development Centre 1980, *Core curriculum for Australian schools: what it is and why it is needed*, Curriculum Development Centre.

- *social, cultural and civic studies* – a study of important social, cultural and political institutions and processes, including society's belief and value systems, within a national and global context. Students should also be given the chance to be involved as active citizens
- *moral reasoning and action, value and belief systems* – does not include teaching based on a particular religious faith, but includes teaching about different religions and helping students to develop a critical understanding of morality and the types of values evident in society.

The Core Curriculum for Australian Schools had little, if any, impact on state and territory curriculum development and the work of schools, and in 1988 the CDC was absorbed into the Commonwealth Department of Employment, Education and Training. Of interest are that more recent curriculum initiatives – such as the outcomes based education inspired models adopted in Western Australia, South Australia, Queensland, Tasmania and the Australian Capital Territory during the early to mid-1990s – embraced a similar approach to the CDC model by giving priority to a futures perspective and generic competencies and capabilities.

The emphasis on the three cross-curriculum priorities and general capabilities in the Australian Curriculum developed by ACARA also mirrors important aspects of the curriculum model advocated by the CDC.

National Statements and Profiles – early to mid-1990s

A more extensive and influential attempt to develop a national curriculum involved the national statements and profiles developed during the early to mid-1990s.¹⁰⁵ The curriculum was divided into eight key learning areas and the statements and profiles, instead of representing clear and succinct syllabuses (or road maps) that teachers could use in schools, provided a framework detailing the so-called learning outcomes expected of students at the different stages of schooling. While not as progressive as the CDC's curriculum plan, the statements and profiles, by embodying an OBE model of curriculum, adopted many of the tenets of progressive education.¹⁰⁶

Such were the criticisms of the statements and profiles that the 1993 Perth meeting of Australian ministers of education failed to fully endorse them and decided that implementation should be a matter for individual states and territories to decide. The one-time head of Australia's Curriculum Corporation, Bruce Wilson, while being involved in the design and development of the statements and profiles, has described them as 'now part of the problem'.¹⁰⁷ As noted by the New South Wales Eltis Report, part of the problem was that the national statements and profiles were based on an OBE model that was largely experimental, had not been successfully implemented elsewhere in the world, and appeared to have little, if any, research evidence about the benefits or strengths of such an approach.¹⁰⁸

¹⁰⁵ Marsh, CJ 1994, *Producing a National Curriculum: Plans and Paranoia*, Allen and Unwin. See for a description of the process involved in developing the national statements and profiles.

¹⁰⁶ As previously noted, progressive education emphasises the process of learning over content, places the child centre stage instead of the subject disciplines and gives priority to an inquiry-based approach to learning and a definition of relevance that is often restricted to what is immediate, local and contemporary.

¹⁰⁷ Wilson, B 2002, 'Curriculum – is less more?', paper delivered at the Curriculum Corporation Conference, Canberra.

¹⁰⁸ Eltis, K 1995, *Focusing on Learning: Report of the Review of Outcomes and Profiles in NSW Schooling*, New South Wales Department of Education and Training; Steiner-Khamsi, G, Silova, I & Johnson, EM 2006, 'Neoliberalism liberally applied: Educational policy borrowing in Central Asia' in J Ozga, T Seddon, & T Popkewitz (eds), *2006 World yearbook of education. Education research and policy: Steering the knowledge-based economy*, Routledge, pp. 217–245.

Since 1993, the states and territories have made use of the national statements and profiles to varying degrees – jurisdictions such as Western Australia, Tasmania, the Northern Territory and the Australian Capital Territory developed intended curriculum frameworks very much based on the statements and profiles approach, while New South Wales and Victoria sought to retain elements of their locally developed curriculum. Criticisms of an OBE curriculum model include:

- the excessive number of curriculum outcomes, especially at the primary school level, that overwhelm teachers and promote a check list mentality in deciding what should be taught
- a superficial and patchy nature of the outcome descriptors that work against the acquisition of essential knowledge, understanding and skills associated with the subject disciplines
- the difficulties involved in managing and recording individual student assessment as a result of adopting a criteria-based, continuous and diagnostic approach to assessment
- linking assessment and reporting of student outcomes to levels incorporating a number of year or grade levels
- a sense that curriculum development is occurring far removed from the realities of the classroom and unresponsive to the needs of teachers and students.

Such has been the opposition to OBE that the term is rarely now ever used, with policy advisors and curriculum designers now talking about a standards approach to curriculum development.¹⁰⁹ It is also relevant to note that given their experience of implementing OBE, jurisdictions like the Australian Capital Territory, Western Australia, South Australia and Tasmania have welcomed the advent of the Australian Curriculum. Compared to previous state- and territory-based models of curriculum the Australian Curriculum provides greater clarity and detail about what needs to be taught.

Statements of Learning: 2004 to 2008¹¹⁰

While not developing a national curriculum in a more formal sense, a third attempt involved ensuring a 'greater national consistency in curriculum outcomes' across Australia by mandating what are termed 'Statements of Learning' (part of the *Schools Assistance Act 2004*).¹¹¹

Statements of Learning are defined as 'Common curriculum outcomes to be used by jurisdictions to inform their own curriculum development' and are meant to ensure consistent learning outcomes across states and territories at Years 3, 5, 7 and 9. Consistent outcomes are described as 'what is meant to be achieved by students – and as a consequence what is taught in schools – as set out in curriculum documentation i.e. the intended curriculum'.

¹⁰⁹ A detailed analysis of Australia's adoption of OBE and its shortcomings can be found in:

Donnelly, K 2007, 'Australia's adoption of outcomes based education: A critique', *Issues in Educational Research*, vol. 7, viewed 21 July 2011, can be accessed at: <http://www.iier.org.au/iier17/donnelly.html>

¹¹⁰ See:

Curriculum Corporation 2005, *Statements of Learning for English*, Curriculum Corporation, Carlton South
 Curriculum Corporation 2006, *Statements of Learning for Mathematics*, Curriculum Corporation, Carlton South
 Curriculum Corporation 2006, *Statements of Learning for Science*, Curriculum Corporation, Carlton South
 Curriculum Corporation 2006, *Statements of Learning for Civics and Citizenship*, Curriculum Corporation, Carlton South
 Curriculum Corporation 2006, *Statements of Learning for Information and Communication Technologies (ICT)*, Curriculum Corporation, Carlton South

¹¹¹ The *Schools Assistance Act 2004* (Cwlth), viewed 11 July 2014, can be accessed at: <http://www.comlaw.gov.au/Search/schools%20assistance%20act%202004>

Developing the Statements of Learning was ongoing over a number of years with learning outcomes completed in English, mathematics, science, civics and citizenship and information and communications technology (ICT.) Adoption of the Statements of Learning was tied to Commonwealth funding and the expectation was that states and territories would embed the statements into their various locally-produced curriculum documents, with a deadline for compliance set at 1 January 2008.

Unlike the Australian Curriculum currently being implemented across Australia, the Statements of Learning, instead of applying to the entire curriculum from Foundation to Year 12, only related to Years 3, 5, 7 and 9. And unlike the Australian Curriculum that describes all that should be taught in each particular subject, the intention of the Statements of Learning was to encapsulate the essential skills and knowledge and *not* describe the whole learning within the subjects/curriculum domain covered.

Other characteristics associated with the Statements of Learning include:

- building on common elements of existing state and territory curriculum documents
- drawing on 'some of the generic and trans-disciplinary capacities and understandings from the National Goals of Schooling (the Adelaide Declaration)'¹¹²
- sequencing learning in order to identify what represents rate of progress
- being limited in detail and scope in order to leave 'systems, sectors and schools with flexibility and autonomy to integrate these statements into their own curriculums in a manner that suits the diversity of students needs and types of schools across the country'
- being 'written in plain language to ensure that they are accessible to parents and community members'.

Relevant ACSA and ACARA policy documents and papers

The process of developing and implementing a national curriculum has been, and continues to be, informed by a number of significant papers and documents.¹¹³

A guide to productive national curriculum work for the twenty first century – The Australian Curriculum Studies Association¹¹⁴

In response to public and media debates questioning the rigour and effectiveness of Australia's education systems, ACSA held two invitational forums in February and August 2006. The forums involved representatives from the majority of Australia's educational organisations and bodies with the purpose of fashioning the education debate and exerting influence over future policy. The *National approaches to curriculum* forum held in February 2006 had as its purpose to 'explore a

¹¹² Ministerial Council on Education, Employment, Training and Youth Affairs 1999, The Adelaide Declaration on National Goals for Schooling in the Twenty-First Century, viewed 11 July 2014, can be accessed at: <http://www.scseec.edu.au/archive/Publications/Publications-archive/The-Adelaide-Declaration.aspx>

¹¹³ Many of these papers, as previously noted, can be accessed either at the ACARA website, see http://www.acara.edu.au/curriculum/curriculum_design_and_development.html or the Australian Curriculum Studies Association website at <http://www.acsa.edu.au/pages/page510.asp>

¹¹⁴ Australian Curriculum Studies Association 2006, A Guide to productive national curriculum work for the twenty-first century, *Curriculum Perspectives*, vol. 26, no. 4. Australian Curriculum Studies Association, p. 5.

range of issues relating to national approaches to curriculum and, in particular, generate much needed informed discussion and debate about this rapidly evolving agenda'.¹¹⁵

The intention of the second forum, titled *Approaches to national curriculum work*, was for the key stakeholders in education to meet, discuss and encourage 'productive discussion and action in relation to approaches to national curriculum work between all stakeholders'.¹¹⁶

As a result of the two ACSA-sponsored forums a guide was produced describing the 'principles to engage sensibly, intelligently and ethically with government, the public and the profession in productive national curriculum work'. As opposed to what was considered a one-sided media presentation of curriculum issues, the paper provided a 'productive alternative to partial and often misleading statements and at times misrepresentations that currently appear in much of the public debate around curriculum'.

The view of curriculum adopted was one based on the need to meet the 'demands of a globalising world' and to 'develop capabilities needed for individuals and communities to thrive in the twenty first century'.

The guide argued that any attempt to establish a national curriculum should:

- establish clear moral purpose and rationale – included in this is the need to prepare students for the world of the 21st century
- promote a view of the curriculum consistent with the rationale – promote high expectations and standards for all students
- follow a principled process – be research-based, involve teachers, allow enough time to be developed, reflect community expectations and encompass 'multiple models of curriculum design and development'
- ensure adequate resources and funding – ensure enough resources are provided to enable successful implementation, including professional learning.
- demonstrate impact and outcomes – raise standards, improve professional practice, make schools more accountable, meet the needs and be accountable to various stakeholders and the wider community and integrate curriculum with assessment.

Developing a twenty-first century school curriculum for all Australian students – A working paper prepared for the Curriculum Standing Committee of National Education Professional Associations – August 2007 (CSCNEPA)¹¹⁷

The working paper builds on previous curriculum work of ACSA and also an initial version of *Federalist Paper 2: The Future of Schooling in Australia* (published April 2007 and written by the Council for the Australian Federation). The purpose of the paper is described as outlining what a 'twenty-first century curriculum must achieve for all Australian students and how we can go about producing it'.

¹¹⁵ Zbar, V 2006, *National Approaches to Curriculum Forum*, Australian Curriculum Studies Association, p. 1.

¹¹⁶ Zbar, V 2006, *Approaches to National Curriculum Work, Invitational Symposium — Report*, Australian Curriculum Studies Association, p. 3.

¹¹⁷ Curriculum Standing Committee of National Education Professional Associations 2007, *Developing a twenty-first century school curriculum for all Australian students*, CSCNEPA, viewed 21 July 2014, can be accessed at: http://www.acsa.edu.au/pages/images/CSCNEPA_paper_June087.pdf

Similar to the ACSA paper previously referred to, this paper argues for what is described as a 21st century curriculum. The justification for such a curriculum is given as:

- the impact of globalisation, involving globalisation of economies and the impact of international markets
- environmental degradation caused by water and energy shortages, global warming and pandemics
- insecurity of nations and the need to build alliances and to deal with conflict
- internationalisation of employment – including accelerated migration
- the growth of the knowledge economy as a generator of wealth and jobs and the resultant need to ‘work in multidisciplinary teams to identify solutions, to manage complex and multidimensional tasks, to synthesise ideas and to communicate effectively’.

When describing the purposes of a 21st century curriculum the paper argues that any proposed national curriculum ‘needs to go beyond content and skills’ and be fashioned to enable students to ‘develop the personal qualities and skills required of them to be informed and responsible participants in a society that is becoming increasingly global in nature and diverse in composition and outlook’. More specifically, the paper argues:

*The broad overarching purposes of a twenty-first century curriculum should be to strengthen civil society and participative democracy, to promote individual development and social cohesion, to develop economic prosperity and environmental sustainability and to prepare students for active global citizenship.*¹¹⁸

A national curriculum should also enable students to understand the factors shaping society and to develop personal qualities and skills to live in a society ‘increasingly global in nature and diverse in composition and outlook’. The paper suggests that any national curriculum should be ‘flexible and responsive to diversity and designed so that teachers can tailor learning experiences to the interests and needs of students’.

After acknowledging the decision of education ministers at a Ministerial Council meeting in April 2007 to develop a ‘nationally consistent curricula that will set core content and achievement standards that are expected of students at the end of their schooling and at key junctures during their schooling’ the paper details what such a national curriculum might look like.¹¹⁹

A national curriculum should differentiate between the nature and challenges of a senior school curriculum compared to the early and middle school years. While acknowledging that students need ‘a general understanding of core concepts and ideas in key learning areas’ the paper goes to argue that the compulsory curriculum ‘needs to consist of more than discipline learning’. The paper also appears to warn against an overcrowded national curriculum when it states that there needs to be ‘time for in-depth learning and for local and personal studies to be developed’.

¹¹⁸ Curriculum Standing Committee of National Education Professional Associations 2007, *Developing a twenty-first century school curriculum for all Australian students*, CSCNEPA, p. 5.

¹¹⁹ Of interest is that the Ministers at the April 2007 Ministerial Council meeting also agreed to link the proposed national curriculum standards to a ‘National Testing and Measurement Program’.

In relation to assessment, in order to ‘develop generic skills and in-depth and authentic learning’, the paper argues in favour of collaborative, open and activity-based assessment. More formal methods of assessment, such as examinations and tests, are criticised for testing the ‘recall and manipulation of facts and the ability to mimic procedures associated with a particular discipline’.

The paper concludes by offering what it describes as an indicative 21st century curriculum – one that:

*extends beyond the concepts and skills that are usually contained in discipline-based school subjects and draws upon a number of the most recent state and territory formal curriculum documents which have already anticipated what a twenty-first century curriculum should achieve for all Australian students.*¹²⁰

Such a curriculum, after students have completed the compulsory years of schooling, should enable them to:

- receive, retrieve and express complex ideas and information in visual, written and spoken form
- have personal and interpersonal skills
- have an historical and contemporary understanding of humanity and human society including a basic knowledge of psychology and philosophy
- have an understanding of science and technology through knowledge of specific scientific content, the history and philosophy of science as well as how science and technology is being applied
- be aesthetically and creatively aware, be familiar with cultural activities and artefacts and the significant contributors to cultural life
- be global in outlook and see themselves as citizens of the world, be culturally aware and sensitive to other societies and proficient in a second language
- be environmentally aware and ecologically responsible.

Federalist Paper 2: The Future of Schooling in Australia – A report by the Council for the Australian Federation, Revised edition, September 2007¹²¹

An initial copy of Federalist Paper 2 was released in April, 2007 and the final copy in September of the same year. The paper was developed under the direction of the then Secretary of the Victorian education department, Professor Peter Dawkins, with input from the different states and territories, curriculum authorities and Professor Barry McGaw (the current Chair of ACARA).

The purpose of the document was to inform a Ministerial Council led process to review the Adelaide Declaration on the National Goals for Schooling in the Twenty First Century (the Adelaide Declaration was replaced by the Melbourne Declaration). The following comments and observations relate to the revised copy of the report dated September 2007.

¹²⁰ Curriculum Standing Committee of National Education Professional Associations 2007, *Developing a twenty-first century school curriculum for all Australian students*, CSCNEPA, p. 8.

¹²¹ The Council for the Australian Federation 2007, *Federalist Paper no. 2 The Future of Schooling in Australia*, rev. edn, Department of Premier and Cabinet, Melbourne, viewed 21 July 2014, can be accessed at: <http://www.caf.gov.au/Documents/TheFutureofSchoolinginAustralia.pdf>

The report begins by suggesting that, as a result of the collaboration between the states, territories and Commonwealth governments, students' results in international tests 'are recognised as among the highest in the Organisation for Economic Co-operation and Development'.¹²²

Similar to the paper authored by the CSCNEPA previously mentioned, the Federalist Paper 2 notes that since the Adelaide Declaration was written in 1999 the world has undergone significant economic and technological change. As a result, education is increasingly vital to ensure Australia's economic prosperity, young people need the skills and knowledge required to thrive in an information-rich world, education is critical to address environmental challenges, education needs to promote social cohesion and intercultural understanding, schools need to better overcome disadvantage and provide a fair go for all and education needs to contribute to the 'spiritual, moral, cultural and physical development of young people as well as their intellectual development'.

In relation to the intended curriculum the paper, while acknowledging the need to develop competencies, argues that what is described as 'deep knowledge'¹²³ associated with the various disciplines is critically important. The Federalist Paper 2 states:

*Expertise requires deep knowledge of a particular subject discipline that shapes the way in which experts represent problems in the discipline as well as how they solve them. Expertise does not readily transfer across disciplines and skills such as high-level problem-solving are not disembodied competencies that can be used independent of a deep knowledge of a particular subject discipline.*¹²⁴

While acknowledging the importance of general capabilities and personalised learning, when discussing a national curriculum, the paper also argues that all students need a solid foundation in literacy and numeracy and the key subject disciplines.

When describing what a national curriculum might look like, Federalist Paper 2 refers to a core-plus model. The national curriculum will set core content and achievement standards and states, territories, systems and schools will have the flexibility to fashion the rest of the curriculum to best suit their needs, teaching styles and educational philosophy.

While suggesting that there be an agreed common core the Federalist Paper 2 argues, such is the rapid rate of change and the need for curriculum to respond and adapt, that any proposed national curriculum provide flexibility and choice at the local level. The paper states:

However a national curriculum will benefit if there is flexibility for states and schools to innovate and adapt and to share their experiences of what approaches achieve the best results. A level of autonomy for individual schools and teachers to make professional

¹²² The counter case can also be put, notwithstanding the increase in expenditure, that standards as measured by PISA, TIMSS and PIRLS for Australian students have generally flat lined and that we are consistently outperformed by six to seven other countries and education systems.

¹²³ For a description of what is meant by so-called deep knowledge, one based on a 'rich body of knowledge based on subject matter', see:

National Research Council 2000, *How People Learn Brain, Mind, Experience and School*, National Academies Press.

¹²⁴ The Council for the Australian Federation 2007, *Federalist Paper no. 2, The Future of Schooling in Australia*, rev. edn, Department of Premier and Cabinet, Melbourne.

*decisions about curriculum drives the high performance level of a large number of government, Catholic and independent schools across jurisdictions.*¹²⁵

The belief that flexibility at the local level is desirable is once again referred to when the paper, when discussing curriculum standards, states that it should be possible to vary content 'in order to reach the standards in different settings'. After acknowledging the benefits of cooperative federalism, the paper once again signals the benefits of autonomy when it states that any move to greater consistency should emphasise the 'importance of diversity and innovation [as] a key focus for achieving enduring reform'.

Part 5 of Federalist Paper 2 is titled 'An Action Plan' and under the heading 'Working towards national curricula' a number of guidelines are listed that should inform the development of a national curriculum that will:

- set core content and achievement standards that are expected of students at the end of their schooling and at key junctures during their schooling, starting with English, mathematics and science
- provide flexibility for jurisdictions, systems and schools to implement a curriculum for students to achieve these standards
- establish the standards as the basis for the national testing and measurement program already agreed by governments, to measure student progress
- broaden options for students considering different futures, preparing students for further study in all areas of future employment across the trades and technical and professional fields and in new and emerging areas of knowledge
- ensure that student achievement is reported on the same scale and in a similar way nationally.

Australian Curriculum Coalition Common View on the National Curriculum¹²⁶

Published in October 2010 the paper and accompanying letter, endorsed by 'a forum of Presidents, Executive Officers and Executive Directors of National Education Organisations' and addressed to the Commonwealth Minister, expresses a number of concerns about the development of the national curriculum.

After noting that those who had signed the letter had participated as part of the Australian Curriculum Coalition (formerly CSCNEPA) in shaping the national curriculum debate, the letter accompanying the paper states:

The Coalition shares a number of similar concerns about the process of development, work to date, conceptual framework and structural issues of the first drafts, assessment and reporting issues and, finally, implementation issues.

The paper expresses support for a national curriculum and congratulates ACARA for making 'substantial progress in the limited time that has been available'.

¹²⁵ Ibid., p. 20.

¹²⁶ Australian Curriculum Coalition 2010, Common View on the Australian Curriculum, Australian Curriculum Coalition, viewed 21 July 2014, can be accessed at: <http://www.acsa.edu.au/pages/images/Australian%20Curriculum%20Coalition%20common%20view%20on%20the%20Australian%20Curriculum4.pdf>.

Notwithstanding such positive sentiment that paper goes on to raise a number of concerns, including:

Process

- imposing short timelines that ‘in the end will be self-defeating’ as there is not enough time for teacher professional development and for schools to properly evaluate and plan for implementation
- failing to properly engage with professional associations and teachers to ensure ownership of the curriculum
- not always being transparent in relation to submissions and how ACARA has responded.

Conceptual framework and structural issues

- failing to provide ‘a strong and clearly stated rationale and curriculum theory’ and ‘clarity about the conceptual model underpinning it (the curriculum)’
- lack of coherence as a result of designing the curriculum in three stages, initially beginning with phase one and then moving on to phases two and three
- lack of coherence both within and across subjects in the terminology used to describe content
- failure to match the national curriculum against the needs of 21st century learning, including segmenting the curriculum and failing to focus sufficiently on thinking skills, imagination and links to the real world and student engagement
- imposing an excessive quantity of content leading to ‘serious overcrowding of the curriculum’, especially at the primary level
- fear that the Australian Curriculum will restrict innovation and flexibility as it fails to clarify what is essential and what is optional. The paper states that the ‘four drafts released in Stage 1 would constitute the whole of the time available in the primary curriculum and a high proportion of the secondary curriculum. This means there would be no flexibility; the documents are not only a complete curriculum, but one which is too large to be realistically implemented.’
- failing to clarify the function and place of the general capabilities and cross-curriculum dimensions in the various content areas, made more problematic as a result of subjects being presented in silos and the volume of material in the drafts
- failure to fully articulate the importance of equity in the curriculum, including taking account of the diverse needs of students.

Assessment and reporting

- failure of the achievement standards to adequately ‘define the quality of learning’ and to ‘ensure consistency in their use for assessment and reporting’
- lack of clarity about the relationship between achievement standards and assessment and reporting.

Implementation issues

- uncertainty about responsibility for implementation and how implementation will be monitored and evaluated.

Funding and support for professional learning and resources

- underestimating the cost of implementing the national curriculum and properly resourcing schools and teachers. In particular, supporting programs to address ‘curriculum, pedagogy and assessment’, especially for primary school teachers.

The Melbourne Declaration on Educational Goals for Young Australians

The Melbourne Declaration, agreed to by all of Australia’s education ministers and published December 2008, replaced the previous 1999 Adelaide Declaration. In its preamble the Declaration states that schools have a vital role to play in ‘promoting the intellectual, physical, social, emotional, moral, spiritual and aesthetic development and wellbeing of young Australians’.

In relation to the challenges facing Australian education the Declaration refers to global integration and international mobility; the need to be Asia-literate given the rising prominence of India and other Asian nations; globalisation and technological change; complex environmental, social and economic pressure such as climate change, and rapid advances in information and communication technologies.

In relation to the curriculum, the Melbourne Declaration argues ‘Literacy and numeracy and knowledge of the key disciplines remain the cornerstone of schooling for young Australians’. While arguing that all students have the right to study what are described as the ‘fundamental disciplines’ the Declaration also emphasises the importance of general capabilities, inter-disciplinary approaches and the need to deal with sustainability and Indigenous content.¹²⁷

The disciplines referred to in the Melbourne Declaration include English, mathematics, science, languages, humanities and the arts and the intention is that students ‘understand the spiritual, moral and aesthetic dimensions of life’ as well as ‘deep knowledge within a discipline, which provides the foundation for inter-disciplinary approaches to innovation and complex problem-solving’.

The need to develop ‘a range of generic and employability skills that have particular application to the world of work and further education and training’ is also referred to as is the need for students to learn about ‘Australian society, citizenship and national values’.

In relation to the relationship between the national curriculum and local variations developed by jurisdictions and schools the impression is that the Melbourne Declaration supports flexibility and freedom at the local level. The document implies there might be two sets of curriculum documents when it refers to ‘national curriculum and curriculum specified at the State, Territory and local levels’.

Allowing flexibility at the local level is also suggested by the statement, notwithstanding that the national curriculum defines learning areas, and that ‘Schools and school systems are responsible for delivering curriculum programs that reflect these learning areas, with appropriate flexibility to determine how this can be achieved in a local context’.

¹²⁷ Of interest, given the inclusion of Asia as one of the Australian Curriculum’s cross-curriculum priorities, is that Asia is not specifically referred to in the Melbourne Declaration.

The Melbourne Declaration, in addition to suggesting that schools and jurisdictions will have a degree of curriculum flexibility, also makes the statement that the learning areas ‘are not of equal importance at all year levels’.

National Curriculum Development Paper – interim National Curriculum Board¹²⁸

This paper was circulated as background reading to the national curriculum forum held in Melbourne on 27 June, 2008. The paper and the forum’s deliberations were to be used to detail the ‘writing guidelines for drafting curriculum documents’ related to the proposed national curriculum. To assist in the process of developing a national curriculum the paper also put a number of questions related to what a national curriculum might look like and how might it be structured.

Similar to the Federalist Paper 2, and notwithstanding the evidence otherwise, this paper claims that international comparisons show Australian students’ performance ‘to be among the best in the world’. The paper also stresses the importance education has to prepare students for the 21st century, a time ‘for futures that are distant and seen only dimly’.

When discussing the role of the national curriculum the paper stresses the importance of students developing a ‘sense of themselves and Australian society’, gaining the ability to work ‘productively and creatively’, to ‘contribute effectively to society’, help build the ‘strong foundations for future national prosperity’ and, while helping to develop a ‘cohesive society’, recognise the ‘rich diversity of histories and cultures that have shaped it’.

The paper also details the principles for developing the national curriculum, including:

- providing students with an understanding of the past that has shaped the culture in which they are living and providing them with the knowledge, understanding and skills that will help them with their future lives
- being based on the premise, while students learn at different rates, that ‘all students can learn’
- making clear to teachers what has to be taught and to students what they should learn and also the achievement standards that are expected
- being feasible in terms of time and resources, including ‘length of documentation, extent of specification and accessibility of language’
- improving student learning by establishing ‘essential content and achievement standards’
- being flexible enough to ‘allow jurisdictions, systems and schools the ability to deliver national curriculum in a way that values teachers’ professional knowledge and reflects local school and regional differences and priorities’
- being collaboratively developed and being based on effective learning and pedagogy and what research suggests is ‘best practice’.

The paper also details the various aspects of the proposed national curriculum, including core content defined as the ‘knowledge, understanding and skills that students are to acquire or develop’, based on the assumption that being able to solve problems relies on ‘deep understanding of domain knowledge’.

¹²⁸ National Curriculum Board 2008, *National Curriculum Development Paper*, viewed 21 July 2014, can be accessed at: http://www.acara.edu.au/verve/_resources/development_paper.pdf

It also states that while setting down core content, the national curriculum will allow flexibility at the local level. It states there will be an 'opportunity for systems, schools and teachers to exercise discretion over some of the content to reflect local and regional circumstances and to take advantage of teachers' special knowledge and teachers and students' interests'.

The paper acknowledges the need to accommodate the differences between the primary and secondary stages of schooling and the fact that whereas secondary teachers are subject specialists, in primary schools teachers have 'responsibility across the curriculum'.

The achievement standards are defined as indicating the 'level of knowledge, understanding and skills that students are expected to achieve, usually at some particular point in time'. The paper warns against setting low expectations and argues that 'clear definitions of achievement standards should provide the means to set appropriately challenging expectations for all students'.

Cross-curricular learnings are also detailed as the third aspect of the proposed national curriculum. Contrary to the belief that competencies are transferable across disciplines, it argues that 'there is good research evidence that problem-solving competence in one area, particularly high-level problem solving of the type developed by experts, does not transfer readily from one domain to another'. Notwithstanding such a caveat the paper does argue that some competencies are 'genuinely cross-curricular' – such as monitoring one's learning and working together. Literacy and numeracy, using ICT and being creative are other examples named.

In addition to the competencies the paper also refers to cross-curricular perspectives, suggesting that 'a range of subjects' would contribute with examples including cultural sensitivity and respect, engaged citizenship and a commitment to sustainable patterns of living. The paper also suggests that the initial national curriculum subjects (English, mathematics, the sciences and history) 'will need to address cross-curricular competencies and perspectives explicitly'.

In relation to what is described as the development process the paper suggests that the national curriculum 'will be developed collaboratively'. The statement is also made that the national curriculum will build on the best of local and international practice and that it will 'need to be carefully bounded to preserve space and status for subjects or learning areas that are not part of the national curriculum, but which are essential to the whole curriculum and for which systems will be responsible'.

The paper then details what the process of the developing the national curriculum will involve, including writing guidelines based on the development paper and feedback, establishing national subject chairs and reference groups, recruiting project officers, convening state and territory and non-government school subject or reference groups, drawing on critical friends and establishing groups to provide cross-disciplinary perspectives.

Attachment 1 of the paper details the age groups and stages or junctures or bands of curriculum documents being implemented across Australia. Attachment 2 outlines the different curriculum structures in mathematics as taught in Finland, Ontario (Canada), Hong Kong and Singapore.

***The Shape of the National Curriculum: A Proposal for Discussion*¹²⁹**

This paper, published by the interim National Curriculum Board, outlines the Board's responses to questions raised in the National Curriculum Development Paper previously referred to. After detailing a further consultation process, the paper refers to a draft version of the Melbourne Declaration. Once again, the central role of education is described as dealing with the 'intellectual, personal, social and economic development of young Australians' in a changing environment where futures are 'distant and only seen dimly'.

The paper then lists the five major changes that 'have altered the way in which the citizens of the world interact with each other' contained in the Melbourne Declaration:

- global integration and international mobility
- the need to be Asia-literate given the rising prominence of India, China and other Asian nations
- globalisation and technological change
- complex environmental, social and economic pressure such as climate change
- rapid advances in information and communication technologies.

The paper signals that the National Curriculum Board, later renamed ACARA, will develop K-12 curriculum in English, mathematics, the sciences and history and also, at a later stage, geography and languages other than English. The paper, after noting that Australia 'will be taking the lead among federal countries in the OECD' in developing a national curriculum, cites mobility of students and economies of scale as justification for a taking a national approach.

The paper reiterates the educational goals for young Australians contained in the draft Melbourne Declaration and argues that equity in education requires setting high expectations for all students with 'differentiated levels of support to ensure that all students have a fair chance to achieve them (strong outcomes)'.

Of interest, given the extensive nature of the Australian Curriculum currently being implemented, is that the paper makes the statement that 'Since the Board is not responsible for the whole curriculum it will seek to ensure that its curriculum connects with the curriculum areas that will continue to be developed by the states and territories'.

In relation to the principles and specifications informing the development of the national curriculum the paper states that the curriculum should:

- be explicit in relation to content and achievement standards and provide 'a clear foundation for the development of a teaching program'
- be based on the assumption that all students can learn
- connect with the early years of learning framework
- 'build firm foundational skills and a basis for the development of expertise for those who move to specialised advanced studies in academic disciplines' as well as meeting the needs of Vocational Education and Training (VET) students

¹²⁹ National Curriculum Board 2008, *The Shape of the National Curriculum A Proposal for Discussion*, National Curriculum Board, viewed 11 July 2014, can be accessed at: http://www.acara.edu.au/verve/_resources/the_shape_of_the_national_curriculum_paper.pdf

- give students an understanding of the past as well as the knowledge, understanding and skills to deal with the future
- be feasible and take account of the time and resources available to teachers and students, especially in relation to primary teachers where the volume of material should be limited as such teachers are 'responsible for several learning areas'
- be concise, expressed in plain language, adopt a similar approach in terms of language, structure and length and be directed as classroom teachers as the primary audience
- acknowledge the need to 'leave room for learning areas that will not be part of the national curriculum'
- allow jurisdictions, systems and schools to implement the curriculum in a way that 'values teachers' professional knowledge and reflects local contexts'
- reflect a 'strong evidence base on learning, pedagogy and what works in professional practice' and 'encourage teachers to experiment systematically with and evaluate their practices'.

Once again, when detailing the expected outcomes to be delivered by the national curriculum, the paper refers to the draft Melbourne Declaration and the need to provide students with:

- a solid foundation in skills and knowledge on which further learning and adult life can be built, including literacy and numeracy skills, history, culture and science and 'knowledge of spiritual, moral and aesthetic dimensions of life and competence and appreciation of the creative arts'
- deep knowledge and skills that will enable advanced learning and an ability to create new ideas and translate them into practical applications. Students need to 'develop expertise in specific disciplines' that will build a 'foundation for development of multidisciplinary capabilities' that can be applied to new challenges 'such as climate change, genetic engineering and understanding and managing cultural differences'
- general capabilities that underpin flexible and creative thinking, a capacity to work with others and an ability to move across subject disciplines to develop new expertise. In particular, the ability to 'develop a range of generic skills such as the ability to think flexibly, to communicate well and work collaboratively with others' and the 'capacity to think creatively and innovate, to problem solve and to engage with new subject disciplines'

Unlike many of the state and territory intended curriculum documents that are expressed in stages of learning, the paper states that the national curriculum will be in year levels. The paper also notes the relative decline in Australian students' performance in PISA is as a result of the decline in the performance of high-achieving students.

Under the heading 'Deep knowledge and skills' the paper notes the tendency for the curriculum to be overcrowded as:

*competing claims for priority have been dealt with by compromise rather than by rigorous evaluation to determine what to include and what to exclude. The result is a volume of curriculum content that cannot be covered adequately in the time available.*¹³⁰

¹³⁰ National Curriculum Board 2008, *The Shape of the National Curriculum A Proposal for Discussion*, National Curriculum Board, viewed 11 July 2014, can be accessed at: http://www.acara.edu.au/verve/_resources/the_shape_of_the_national_curriculum_paper.pdf, p. 6.

To address the overcrowding issue the paper states that the board will ‘develop a national curriculum that provides for rigorous, in-depth study and will prefer that to breadth wherever a choice needs to be made’. The paper also warns against the idea that the process of learning can be detached from dealing with the type of deep knowledge and understanding associated with the subject disciplines. It states ‘the separation of content and process is not helpful and will be avoided in the development of the national curriculum’.

In relation to flexibility at the school level the paper states that there will be room for ‘teacher professional judgement about what to cover and in what sequence, about how to reflect local and regional circumstances and about how to take advantage of teachers’ special knowledge and students’ interests’.

Under the heading ‘General Capabilities’ the paper suggests that such is the nature of work in the 21st century, the national curriculum incorporate the general capabilities listed in the then draft Melbourne Declaration. After referring to the 1992 Mayer competencies and the 2002 updated version, the paper states that the Board will deal explicitly with general capabilities within its English, mathematics, the sciences and history curricula. Cross-curriculum competencies such as literacy and numeracy and ICT are also referred to as important.

Similar to Federalist Paper 2 the paper argues that it is incorrect to suggest that problem solving is a generic capability; instead, it is domain specific on the basis that ‘Problem solving in history is not the same as problem solving in physics’. Notwithstanding the argument that so-called generic capabilities are domain specific, the paper does suggest that there are cross-curriculum competencies that ‘are clearly not domain specific’. Examples cited include a capacity to work in teams and the ability to monitor one’s learning.

In relation to what are described as cross-curriculum perspectives – such as cultural sensitivity and respect, engaged citizenship, a commitment to sustainable patterns of living and knowledge of the world beyond Australia – the paper notes that these will also be addressed in the national curriculum.

Achievement standards, according to the paper, indicate the ‘quality of achievement that is expected and provide the basis for judgements about the quality of students’ work’. After noting the flaws of simply setting a single achievement standard for a year level or by using descriptors such as ‘limited’, ‘considerable’ and ‘substantial’ to denote levels of achievement, the paper discusses the benefits of using examples of students’ work graded A to E.

The three purposes of achievement standards are described as making clear the quality of work expected, providing the language teachers use to discuss students’ work and identifying students who are at risk of underachieving.

The Shape of the Australian Curriculum Version 4.0 – October 2012¹³¹

Version 4.0 of the original May 2009 document states it ‘provides background to the development of and for the implementation of the Australian curriculum’.

¹³¹ ACARA 2012, *The Shape of the Australian Curriculum*, version 4, ACARA.

The Shape of the Australian Curriculum states that the guiding document for the national curriculum is the Melbourne Declaration and that the rationale for introducing a national curriculum is to improve the 'quality, equity and transparency of Australia's education system'.¹³² In addition, the paper suggests that, in order to shape the lives of the nation's future citizens, education should address 'the intellectual, personal, social and educational needs of young Australians' in a changing and evolving context.

After citing the changes to education set out in the Melbourne Declaration the paper argues that the curriculum must prepare young people for a future that is 'distant and difficult to predict' and provide them with the knowledge, understanding and skills 'to meet the changing expectations of society' in the 21st century. Developing a national curriculum also provides economies of scale and a 'substantial reduction in the duplication of time, effort and resources'.¹³³

Once again the paper, under the heading the 'Goals of education', refers to the Melbourne Declaration and its description of the educational goals for young Australians. Broadly speaking, these goals include students being successful learners, confident and creative individuals and active and informed citizens.

Under the heading 'Propositions shaping the Australian Curriculum', many of which are flagged in *The Shape of the National Curriculum: A Proposal for Discussion*, the paper details a number of propositions informing curriculum development including that:

- each student is entitled to the essential knowledge, understanding and skills necessary for lifelong learning
- the Australian Curriculum make explicit what is to be taught, what students should learn and the quality of learning
- the assumption is that each student can learn
- the Australian Curriculum is aligned to the Early Years Learning Framework
- the Australian Curriculum prepares students for 'advanced studies in academic disciplines, professions and technical trades' and is designed to be taught in the overall teaching time and with available resources
- the Australian Curriculum provides rigorous in-depth study preferring depth to breadth and the fact that learning areas might not relate to all year levels
- the primary audience is teachers and the curriculum is 'concise and expressed in plain language'
- jurisdictions, systems and schools have flexibility in implementation and schools and teachers will 'determine pedagogical and other delivery considerations'
- The curriculum is 'established on a strong evidence base, which is related to learning, pedagogy and what works in professional practice, and has been benchmarked against international curricula'.

Under the heading 'Curriculum development process' the paper states that the process of developing the Australian Curriculum is collaborative and consultative, involving four interrelated

¹³² Given school education is the responsibility of the six states and two territories, each with its unique history and culture, it is unclear whether the description 'Australia's education system' best describes the current situation.

¹³³ ACARA 2012, *The Shape of the Australian Curriculum*, version 4, ACARA.

phases: curriculum shaping, curriculum writing, implementation and curriculum evaluation and review. In relation to flexibility at the school level, the paper suggests:

*Schools are able to decide how best to deliver the curriculum, drawing on integrated approaches where appropriate and using pedagogical approaches that account for students' needs, interests and the school and community context. School authorities will be able to offer curriculum beyond that specified in the Australian Curriculum.*¹³⁴

The final point in this section of the paper once again refers to the Melbourne Declaration when it details 'the three broad categories of outcomes that the curriculum should deliver for students'. The three outcomes are:

- a solid foundation in knowledge, skills and understanding, and the 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 the ability to move across subjects disciplines to develop new expertise.

Under the second outcome above the paper suggests that the Australian Curriculum will enable students 'to understand the spiritual, moral and aesthetic dimensions of life' and develop 'deep knowledge within a discipline, which provides the foundation for interdisciplinary approaches to innovation and complex problem solving'.

Based on the concept of a 'learning entitlement' the paper describes the Australian Curriculum as a three-dimensional curriculum model involving 'discipline-based learning areas, general capabilities as essential 21st century skills and contemporary cross-curriculum priorities'.¹³⁵

In relation to balancing the tension between a curriculum involving a discipline-based education and preparing students for the 21st century, the paper states:

*However, 21st century learning does not fit neatly into a curriculum solely organised by learning areas or subjects that reflect the disciplines. Increasingly, in a world where knowledge itself is constantly growing and evolving, students need to develop a set of knowledge, skills, behaviours and dispositions, or general capabilities that apply across subject-based content and equip them to be lifelong learners able to operate with confidence in a complex, information-rich, globalised world.*¹³⁶

The paper goes on to argue that the 'general capabilities define knowledge, skills, behaviours and dispositions that can be developed and applied across the curriculum to help students become successful learners, confident and creative individuals, and active and informed citizens'.¹³⁷ The general capabilities listed include literacy, numeracy, information and communication technology (ICT) capability, critical and creative thinking, personal and social capability, ethical understanding and intercultural understanding.

¹³⁴ ACARA 2012, *The Shape of the Australian Curriculum*, version 4, ACARA, p. 13.

¹³⁵ Note the description of the cross-curriculum priorities as contemporary in nature.

¹³⁶ Ibid., p. 15.

¹³⁷ Ibid., p. 15.

Again after referring to the Melbourne Declaration, the paper suggests that the cross-curriculum priorities ‘enrich the curriculum through development of considered and focused content that fits naturally within learning areas’.¹³⁸ The priorities include Aboriginal and Torres Strait Islander histories and cultures, Asia and Australia’s engagement with Asia, and sustainability.

In relation to how the Australian Curriculum will be structured, the paper suggests that the proposed curriculum model will accommodate the requirements of the different stages of schooling including the early years, upper primary, lower- to middle-secondary and the senior years. Literacy and numeracy, for example, will be the focus of the early years while at Years 9 and 10 the curriculum will recognise that ‘many students commence senior secondary pathways and programs, including vocational pathways’.

The paper also acknowledges the diverse nature of the student population and the need for the curriculum to meet the needs of ‘students with disability, gifted and talented students, and students for whom English is an additional language or dialect’. The list of learning needs ‘encompass cognitive, affective, physical, social and aesthetic curriculum experienced’.¹³⁹ Given the diverse range of students across states and territories the paper suggests that teachers will have flexibility in how they tailor the Australian Curriculum to suit local needs.

When describing the structure of the intended Australian Curriculum learning area documents, the paper distinguished between rationale, aims, curriculum content and achievement standards. The content descriptions specify the knowledge, understanding and skills that ‘teachers are expected to teach and young people are expected to learn’. The content elaborations are described as support material that provides ‘illustrations and/or examples of the content descriptions’ and the achievement standards as ‘what students are typically able to understand and able to do. They describe expected achievement’.

In relation to the learning areas, the paper states that knowledge is rapidly expanding and that all students should have the opportunity to develop ‘the knowledge and understanding on which the major disciplines are based’ as ‘each discipline offers a distinctive lens through which we interpret experience, determine what counts as evidence and a good argument for action, scrutinise knowledge and argument, make judgements about value and add to knowledge’.

The paper also suggests that rather ‘than being self-contained or fixed, disciplines are interconnected, dynamic and growing. A discipline-based curriculum should allow for cross-disciplinary learning that broadens and enriches each student’s learning’.

The paper, in relation to the general capabilities, suggests that they will be ‘represented to different degrees in each of the learning areas’ and that some ‘are best developed within specific learning areas’. The paper also states that the general capabilities should be seen in the context of a ‘learning continuum’ and that states and territories will determine ‘whether and how student learning of the general capabilities will be separately assessed and reported’.

¹³⁸ ACARA 2012, *The Shape of the Australian Curriculum*, version 4, ACARA, p. 18.

¹³⁹ Of interest is that the moral and spiritual aspects of education are not mentioned.

The cross-curriculum priorities are described as ‘contemporary issues about which young Australians should learn’ and the paper suggests that each of the priorities ‘is represented in learning areas in ways appropriate to that area’.

In relation to Years 11 and 12 the paper acknowledges that ‘state and territory curriculum, assessment and certification authorities will continue to be responsible for the structure and organisation of their senior secondary courses’, including ‘how they integrate the Australian Curriculum content and achievement standards into their courses’, as well as ‘the assessment and certification specifications for their courses’.

In relation to the assumptions underlying the Australian Curriculum, the paper suggests:

- the teaching and learning programs implemented by schools ‘are based on the Australian Curriculum, in conjunction with state and territory curriculum and other learning opportunities and activities determined by the school’
- ‘each learning area describes core content that should be taught when the curriculum is offered’
- for each year of schooling, from Foundation to Year 10, the Australian Curriculum ‘should not take up more than 80 per cent of the total teaching time available to schools’ – peaking at Years 7 and 8 and ‘reducing significantly in Years 9 and 10 as core expectations are reduced’
- the curriculum content for any learning area ‘should be “teachable” within an indicative time allocation that ACARA sets for curriculum writers, to avoid overcrowding and to allow the inclusion of other content’
- decisions relating to organisation and delivery, including time allocations, rest with education authorities and schools who can specify more teaching time
- teachers should take into account ‘current levels of learning of individual students and the different rates at which students develop’
- schools should decide whether to apply ‘integrated approaches where appropriate and use pedagogical approaches to account for students’ needs, interests and school and community context’
- the Australian Curriculum ‘leaves scope for education authorities and/or schools to offer additional learning opportunities beyond those provided by the Australian Curriculum’
- teachers will use a range of assessment strategies when ascertaining what each student has learnt – actual achievement – and will ‘make judgements about the extent and quality of each student’s achievement in relation to the achievement standards’
- reporting to parents will relate a student’s actual achievement against achievement standards, thus contributing to national consistency
- reporting to parents requires A to E grades or an equivalent 5-point scale
- education authorities and schools will determine, in consultation with parents and communities the style and format of reporting
- ACARA will continue to work with states, territories and the Australian Government to strengthen national consistency in reporting
- the Australian Curriculum is ‘dynamic’ and its online publication provides the opportunity to update it ‘in a well-managed and effectively communicated manner’
- any updating will be based on review and evaluation data, new national and international developments and contemporary research

- the Australian Curriculum will be subject to ‘evaluation and validation during implementation’ as well as being ‘benchmarked against the curricula of countries that are leading the world in education excellence and performance’.

In conclusion *The Shape of the Australian Curriculum* argues that there has been extensive consultation, that the curriculum has been benchmarked against the curriculums of leading nations during the development process, that it sets challenging standards and does not overload the curriculum, and that it pursues deep learning.

Background papers informing the national curriculum debate

Whereas the papers referred to above are official documents written by ACSA and ACARA the following papers are written by individuals with the purpose of informing discussion and debate about what a national curriculum might look like. The papers are significant and helpful as they are written by acknowledged school education experts and provide insight into recent curriculum controversy and debate and the development of the Australian Curriculum.

*School curriculum for the 21st century – Bruce Wilson*¹⁴⁰

Bruce Wilson, past head of the Curriculum Corporation, prepared this paper for the Curriculum Standing Committee of National Education Professional Associations in 2007 – a committee established at the instigation of ACSA to influence the public and policy debate related to developing a national curriculum. More specifically, Wilson’s paper informed the CSCNEPA’s deliberations about what might constitute a 21st century curriculum for all Australian students.

Wilson begins by outlining the existing government statements and policies that will influence any new curriculum. The list includes the 1999 Adelaide Declaration¹⁴¹, the National Statement for Engaging Young Australians with Asia, the National Framework for Values Education, the National Statement on Languages and the Statements of Learning.

The paper also refers to ACSA’s *A Guide to Productive National Curriculum Work for the 21st Century*, the Australian Education Union’s (AEU) *Educational Leadership and Teaching for the 21st Century* and the Tasmanian and South Australian curriculum frameworks. Wilson notes that the two state curriculum frameworks (as do the other documents referred to) adopt a futures perspective and both argue ‘for a significant shift in the curriculum to recognize the changed world’.

As a result, the focus is on competencies and dispositions such as thinking, communicating, personal futures, social responsibility and world futures and not to what the South Australian document refers to as ‘a prescribed body of knowledge’.

When discussing the environment in which a national curriculum will operate, Wilson notes issues such as increasing technological change and the impact of the knowledge economy, a more competitive international environment brought on by globalisation, skills shortages and the values debate in education.

¹⁴⁰ Wilson, B n.d., *School curriculum for the 21st century*, viewed 21 July 2014, can be accessed at: http://www.acsa.edu.au/pages/images/paper%20-%20Bruce%20Wilson%20_NC_.pdf.

¹⁴¹ Replaced by the Melbourne Declaration, 2008.

The paper notes, broadly speaking, that there are two responses to the above scenario. One involves being futures-oriented and re-shaping a more conservative approach to education, based on the belief that students will be entering a radically different world to that which exists today. The second response is to argue that education, instead of being new-age and futures-oriented, must acknowledge the past and that new-age and progressive approaches have led to falling standards. The observation is made that while the media, public commentators and politicians prefer the second option, Australia's education establishment favours the first. Wilson states:

*To put it bluntly, the leaders of the education community largely support a radically reformed curriculum, while politicians, much of the media and many members of the public seek a return to the kind of education they remember from their own schooling.*¹⁴²

Option one involves an adaptation of Australia's outcomes-based education approach¹⁴³, while, at the same time, addressing the more obvious shortcomings. The curriculum would be futures-oriented, provide an innovative alternative to the more conservative content-driven approach and 'would look quite different to current arrangements'. The second option would stress 'traditional categories and traditional forms of knowledge', define a core curriculum in some detail and treat the disciplines as distinct and separate areas of learning.

On detailing a third option – Wilson's preferred option – the paper argues that the best and most realistic way forward is to blend elements of options one and two. Any new curriculum model should acknowledge the value of the subject disciplines, while promoting higher-order conceptual skills and abilities with real-world application. A core-plus model is favoured, detailing what is essential and what can be left to local choice. Wilson argues that if educators, like those associated with ACSA, are to have any positive impact on the debate, they need to adopt the third option.

School curriculum for the 21st century: A rough guide to a national curriculum by Peter Cole (April 2007)¹⁴⁴

This paper was also prepared for the Curriculum Standing Committee of National Education Professional Associations in 2007. More specifically Cole's paper, as did Wilson's, informed the CSCNEPA's deliberations about what might constitute a 21st century curriculum for all Australian students.

Cole argues that to have any real purpose and value, a national curriculum should 'enable all students to develop a broad general knowledge of the world' and 'that all students have acquired a broad general knowledge that enables them to understand their own society (e.g. its history, institutions, economy and values), engage with society's issues, be enriched by society's cultural life and be open to the wider world'.

To that end, Cole argues it is not enough to base a national curriculum on the various existing state and territory curriculum documents and that any new curriculum should 'enable virtually every

¹⁴² Wilson, B n.d., *School curriculum for the 21st century*, viewed 21 July 2014, can be accessed at: http://www.acsa.edu.au/pages/images/paper%20-%20Bruce%20Wilson%20_NC_.pdf ().

¹⁴³ The National Statements and Profiles, and most equivalent state and territory curriculum frameworks, adopted an outcomes-based education model based on the works of the American academic William Spady.

¹⁴⁴ Cole, P 2007, *School curriculum for the 21st century: A Rough Guide to a National Curriculum*, viewed 21 July 2014, can be accessed at: http://www.acsa.edu.au/pages/images/paper%20-%20peter%20cole%20_nc_.pdf

student to stay engaged with learning so that they can complete secondary schooling and gain a recognised certificate’.

The following propositions are also listed:

- a national curriculum should be concerned with the common learning undertaken by all students, largely confined to the compulsory years and ‘should not consume all of a school’s learning time’
- in addition to a national curriculum, national subjects (and common credentialing requirements) should also be developed for the senior years
- national curriculum subject content ‘should support inter-disciplinary study and promote “big picture” general knowledge’
- the national curriculum should be taught in ‘ways that enable students to appreciate the distinct contribution that each of the disciplines/subjects makes to enrich their understanding of society’
- the national curriculum should also promote global perspectives, incorporate ‘soft skills’ and include second language learning
- assessment should be intra- and cross-disciplinary, and more concerned with reasoning than recall.

Cole suggests that there are three relatively recent developments in curriculum that are worthwhile preserving. They are detailing the various stages of learning and curriculum orientation, the dimensions of personal and social development, and being explicit about learning outcomes and achievement standards.

When answering the question ‘Where to start?’ when developing curriculum, Cole suggests that the process should begin with what he describes as a ‘futures scanning’ – factors include globalisation of economies and Asian economic power, reliance on international markets, concerns about environmental degradation and global insecurity, internationalisation of employment, impact of science and technology, and the growth of the knowledge economy.

Drawing on existing state and territory curriculum documents, in addition to some aspects of the curriculum Cole considers important, the paper lists what all students need to know by the time they leave school, including:

- the ability to deal with complex information and ideas in multimedia forms
- having personal and interpersonal skills to be able to ‘sustain a healthy lifestyle and build positive relations with others’
- understanding human society – including what accounts for economic differences, religious differences, political differences and differences in traditions and values
- understanding science and technology – including the history and philosophy of science
- being familiar with cultural activities and artefacts
- being global in outlook
- being environmentally aware and ecologically responsible.

While acknowledging that it would be possible to base 21st century learning on the established disciplines, Cole argues that to be done properly, this requires that the ‘content that has been traditionally taught within the disciplines in schools would need to be significantly changed’. Cole

goes on to argue that the content ‘usually associated with school subjects in the disciplines is out of step with the kind of learning that is needed’ for 21st century learning.

In answer to those, such as Bruce Wilson, arguing that ‘less is more’ and that the curriculum should focus on promoting ‘deep learning’, Cole warns against a narrow and restricted view of the curriculum. Instead he suggests that all students are entitled to a general education and that specialising in particular areas of study should not occur until the senior years.

Cole, while acknowledging that ‘problem solving does not happen in a knowledge vacuum’, warns about the dangers of adopting a discipline-based approach to the intended curriculum. He states that ‘school subjects derived from the disciplines are experienced by students as disconnected bits of knowledge to be learnt for their own sake’.

In addition to arguing for a multidisciplinary model – one that addresses in-depth research about ‘big topics’ – Cole stresses the importance of what he terms ‘soft skills’, such as the ability to synthesise ideas and information, generate fresh and original ideas, work in teams and be empathetic and tolerant. Working against such ‘soft skills’ is an assessment system that largely tests ‘the recall and manipulation of facts, and the ability to mimic procedures associated with a particular discipline’. Cole ends his paper by calling for a greater concentration on teaching second languages and overhauling what he sees as a restrictive and obsolete assessment system.

***Rethinking national curriculum collaboration: Towards an Australian Curriculum*¹⁴⁵ –
Professor Alan Reid**

The paper is a result of a research project undertaken by Professor Reid, while working in the then Australian Government Department of Education, Science and Training as the 2002–03 Research Fellow. The paper examines whether developing a national curriculum is relevant in an increasing global world and, if viable, how it might best be achieved. Previous attempts at national curriculum collaboration are examined, as are existing state and territory curriculums.

Professor Reid’s preferred model of a national curriculum stresses what are termed ‘capabilities’, described as representing ‘what personal capacities might be required to live, work, sustain relationships and be a citizen in a nation-state in a globalising world’.¹⁴⁶ Much like William Spady’s transformational outcomes based education model and Tasmania’s Essential Learnings approach, the focus is on competencies, dispositions and generic skills (possible examples include active participation, understanding self, intercultural understandings and knowledge work).

Professor Reid’s outline of a capability-driven curriculum has much in common with what Bruce Wilson describes as ‘option one’. As such, Professor Reid criticises the more conservative view of curriculum based on established subjects. While recognising the place of school subjects, Professor Reid argues that their value is as a vehicle to introduce and deal with capabilities; he states, ‘the knowledge-content part of the curriculum is no longer the starting point for curriculum

¹⁴⁵ Reid, A 2005, *Rethinking national curriculum collaboration: towards an Australian Curriculum*, Department of Education, Science and Training, Canberra, viewed 21 July 2014, can be accessed at: http://pandora.nla.gov.au/pan/48203/200504200000/www.dest.gov.au/research/publications/national_curriculum/report.pdf.

¹⁴⁶ Ibid., p. 54.

planning, as it is in the dominant model. Rather it is the vehicle through which capabilities are developed'.¹⁴⁷

Conclusions

The various attempts to develop a national curriculum over the last 35 or so years, and related papers both official and unofficial outlined in this chapter, illustrate various approaches to developing the intended curriculum. The different approaches also privilege particular beliefs about pedagogy, the nature of knowledge, theories of learning and what it means to be educated.

The CDC's Core Curriculum for Australian Schools and Professor Reid's paper emphasise so-called 21st century skills and capabilities with a futures perspective whereas Federalist Paper No 2 and the interim National Curriculum Board's Development Paper acknowledge the central importance of what the Blackburn Report describes as 'our best validated knowledge and artistic achievements'.

The Statements and Profiles, and subsequent state and territory equivalent documents such as Tasmania's and South Australia's Essential Learnings, favour an inquiry, process approach to teaching and learning, whereas Federalist Paper No 2, in addition to placing what it terms 'deep knowledge' centre stage, also argues that it is wrong to separate 'process' from 'content'.

The various national curriculum models also vary in terms of their scope and detail and the extent to which they impact on flexibility and diversity at the school and classroom level. Whereas the Statements of Learning only relate to Years 3, 5, 7 and 9 in five subject areas – English, mathematics, science, civics and citizenship and ICT – the current national curriculum includes eight areas of learning across Foundation to Year 10.

Whereas some of the early papers detailed in this chapter suggest a core-plus approach, thus allowing teachers and schools greater flexibility and choice at the school level, it is also the case that as the current national curriculum was developed by ACARA it increased the amount of mandatory curriculum content, both in terms of the number of subjects and areas of learning and the range of year levels.

The current Australian Curriculum, by seeking to incorporate subject disciplines, cross-curriculum priorities and general capabilities, can also be seen as an attempt to integrate a range of often conflicting approaches embodied in previous curriculum models.

¹⁴⁷ Reid, A 2005, *Rethinking national curriculum collaboration; towards an Australian curriculum*, Department of Education, Sciences and Training, Canberra, p. 57.

Chapter Four: Governance for curriculum design and delivery

Education architecture in Australia

Under the Australian Constitution the conduct and oversight of school education is the formal responsibility of the state and territory governments. However, for some decades the responsibility for schools funding, policies, and programs, has become a shared responsibility with the Australian Government. State governments have responsibility for the delivery of school education in Australia with schools operated by government and non-government education authorities, including Catholic Education Commissions and independent school authorities.¹⁴⁸ The Australian Government provides national leadership in coordinating national policy priorities for school education and investing in action to secure nationally-agreed policy priorities.

At the national level, development of the Australian Curriculum has been undertaken by ACARA, while implementation has been supported by Education Services Australia (ESA) which has procured and made available digital learning and teaching resources linked to the Australian Curriculum.

Establishing ACARA

ACARA was established as a Commonwealth statutory authority in December 2008 following Royal Assent for the *Australian Curriculum, Assessment and Reporting Authority Act 2008*¹⁴⁹ (ACARA Act). ACARA was also subject to the requirements of the *Commonwealth Authorities and Companies Act 1997*¹⁵⁰ until 30 June 2014, when it became subject to the *Public Governance, Performance and Accountability Act 2013*.¹⁵¹

ACARA became operational in May 2009 with appointment of ACARA's initial board members. ACARA assumed the roles and responsibilities of the interim National Curriculum Board that had been established to commence initial development of the Australian Curriculum pending the establishment of ACARA.

The ACARA Act provides the legislative basis for ACARA's operations. In relation to the Australian Curriculum, section 6 of the Act requires ACARA to:

develop and administer a national school curriculum, including content of the curriculum and achievement standards for school subjects specified in the Charter ... [and] provide school curriculum resource services, educational research services, and other related services.

The same legislation also provides the basis for ACARA's direction setting. As a cooperative enterprise between the Australian Government and state and territory governments, section 7 of the Act requires ACARA to:

¹⁴⁸ Department of Education, *School Education*, Department of Education, Canberra, viewed 4 June 2014, can be accessed at: <http://education.gov.au/school-education>

¹⁴⁹ *ACARA Act 2008* (Cwlth), viewed 4 June 2014, can be accessed at <http://www.comlaw.gov.au/Details/C2014C00108>

¹⁵⁰ *The Commonwealth Authorities and Companies Act 1997* (Cwlth), viewed 4 June 2014, can be accessed at <http://www.comlaw.gov.au/Details/C2013C00259>

¹⁵¹ *The Public Governance, Performance and Accountability Act 2013* (Cwlth), viewed 7 July 2014, can be accessed at <http://www.comlaw.gov.au/Details/C2013A00123>

perform its functions and exercise its powers in accordance with any directions given to it by the Ministerial Council in writing ... [and] perform its functions and exercise its powers in accordance with the Charter.

ACARA's Charter¹⁵² provides greater detail on ACARA's activities. The current iteration of ACARA's Charter was approved by the Ministerial Council on 3 August 2012 and provides the strategic priorities for ACARA. In relation to curriculum development, ACARA is required to:

- 4. Develop a national curriculum from Foundation to Year 12, in the eight learning areas under the Melbourne Declaration, as directed by the Standing Council. This will include the:*
 - a) development of content descriptions, content elaborations, achievement standards and annotated work samples for each subject or learning area*
 - b) development of continua of learning for the general capabilities and cross-curriculum priorities, and*
 - c) integration within appropriate content descriptions and content elaborations of general capabilities and cross-curriculum priorities.*

Further, ACARA is required to:

- 5. Support [state and territory education authorities] to advise the Ministerial Council on:*
 - a) how the national curriculum addressed the diverse needs of students with disability and students for whom English is another language or dialect*
 - b) the most effective processes for implementing and sustaining the national curriculum within the states and territories*
 - c) the most effective process for implementing the national curriculum into the senior secondary years of schooling*
 - d) the most effective processes for ensuring the continuous improvement of Australia's national curriculum reflecting evidence and experience as the curriculum development work continues and the curriculum is implemented*
 - e) the support required for states and territories to implement national curriculum as it is developed, including teaching resources and teacher professional development*
 - f) how the achievement standards and annotated work samples provided as part of the national curriculum can support nationally consistent teacher professional judgement and A-E reporting to parents, and*
 - g) whether alternative curriculum frameworks meet the requirements of the national curriculum.*

¹⁵² Standing Council on School Education and Early Childhood, *Charter for ACARA*, 2012, viewed 4 June 2014, can be accessed at: [http://www.acara.edu.au/verve/_resources/ACARAs_Charter_\(3_August_2012\).pdf](http://www.acara.edu.au/verve/_resources/ACARAs_Charter_(3_August_2012).pdf)

In August 2012, the Ministerial Council agreed a Letter of Expectation for ACARA.¹⁵³ The letter set out priorities and expectations of the Ministerial Council for ACARA for 2012–13 and 2013–14. In the Letter, the Ministerial Council required that ACARA would, among other priorities, finalise:

- the first 14 subjects of the senior secondary Australian Curriculum for English, mathematics, science and history
- curriculum for geography, the arts, languages, health and physical education, technologies, civics and citizenship and economics and business.

Funding and staffing of ACARA

Reflecting ACARA's cooperative enterprise, funding is provided by both the Australian Government and state and territory governments. The share of each government's funding reflects a formula maintained by the Ministerial Council Secretariat, with 50 per cent provided by the Australian Government and the remaining 50 per cent provided by state and territory governments that reflects the proportion of the population in each jurisdiction. Section 9 of the ACARA Act also allows ACARA to charge fees for things done in performing its functions.

To date, ACARA has had two quadrennial budgets decided by the Ministerial Council – approximately \$97 million for 2008–09 to 2011–12, and \$109 million for 2012–13 to 2015–16. ACARA's financial statements are audited by the Australian National Audit Office.

As at June 30 2013 ACARA's workforce comprised 128 staff, including direct and temporary hires as well as three staff on secondment from state and territory education agencies. The breakdown of expenditure across ACARA's four business units is:

- curriculum: 30.1 per cent
- assessment and reporting: 41.3 per cent
- Office of the CEO/ACARA Board: 7.4 per cent
- corporate services: 21.2 per cent.¹⁵⁴

ACARA's structure

ACARA's important deliverables are mostly focused on curriculum development and maintenance, assessment and reporting, and its organisational structure reflects this.¹⁵⁵

ACARA's operations are overseen by a board, the membership of which is prescribed by the ACARA Act. Nine members are nominated by the Australian Government and state and territory ministers of education, one each is nominated by the National Catholic Education Commission (NCEC) and the Independent Schools Council of Australia (ISCA). A Board Chair and a Deputy Board Chair are also agreed to by the Ministerial Council. While the Board seeks to make consensus decisions, majority

¹⁵³ Standing Council on School Education and Early Childhood 2012, *Australian Curriculum, Assessment and Reporting Authority Letter of Expectation*, viewed 4 June 2014, can be accessed at:

http://www.acara.edu.au/verve/_resources/ACARAs_Letter_of_Expectation_12-14_July.pdf

¹⁵⁴ ACARA 2013, *ACARA 2012-13 Annual Report*, Sydney, viewed 22 July 2014, can be accessed at:

http://www.acara.edu.au/verve/_resources/Annual_Report_2012-2013.pdf

¹⁵⁵ ACARA 2014, *ACARA's governance and advisory structure*, viewed 22 July 2014, can be accessed at:

http://www.acara.edu.au/verve/_resources/ACARA+Governance+and+Advisory+Structure+-+2014.pdf

voting principles are available for decision-making. Minutes of ACARA's board meetings are not publically available.

The composition of the Board must be agreed by the Ministerial Council which must ensure the Board collectively possesses an appropriate balance of professional expertise in matters relating to school curriculum, school assessment and data management, analysis and reporting in relation to school performance and financial and commercial matters, and corporate governance. Board nominees are put forward by their ministers (in the case of government nominees) or their organisations (in the case of the NCEC and the ISCA). The Ministerial Council itself determines whether it is satisfied with the collective expertise through a decision at a Council meeting. Apparently they have always believed that the Board has the appropriate stipulated expertise (minutes of Ministerial Council meetings are not made public). Appointments are then made according to Australian Government processes outlined in the Australian Government's *Cabinet Handbook*¹⁵⁶ and are executed by the Minister for Education.

Under section 25 of the ACARA Act, the Chief Executive Officer of ACARA is appointed by the ACARA Board after consultation with the Commonwealth Minister for Education.

Reporting requirements

As ACARA receives its direction from the Ministerial Council, ACARA reports to each meeting of the Council with a progress report on its activities, as well as bringing relevant items for decision to ministers. While minutes of the Ministerial Council are not publicly released, meeting communiqués are released after each meeting.¹⁵⁷

ACARA has reporting requirements that are established through legislation. Section 43 of the ACARA Act 2008 requires ACARA to provide the Ministerial Council with a report relating to its activities undertaken in the previous financial year.

Under section 9 of the *Commonwealth Authorities and Companies Act 1997*, ACARA has been required to provide the Commonwealth Minister for Education with an annual report. To date, ACARA has presented annual reports for each financial year commencing from 2009–10. The ACARA annual report is tabled in the Australian Parliament.

ACARA's Charter outlines its general reporting requirements to education ministers. The Charter states:

Matters relating to ACARA will be considered at each Standing Council meeting. At each meeting ACARA will provide a written report to Ministers which should include, but not be limited to, a report on ACARA's progress against its annual work plan (which is informed by the Letter of Expectation), an update on recent activities and any emerging issues.

On a quadrennial basis, ACARA will prepare for the Standing Council a four-year work plan and budget to assist in ensuring it continues to meet the strategic needs of the Standing Council.

¹⁵⁶ Department of the Prime Minister and Cabinet 2012, *Cabinet Handbook*, 7th edn, Commonwealth of Australia, Canberra, viewed 22 July 2014, can be accessed at: http://www.dpmc.gov.au/guidelines/docs/cabinet_handbook.pdf

¹⁵⁷ Education Council 2014, *Communiqués and Media Releases*, viewed 22 July 2014, can be accessed at <http://scseec.edu.au/archive/Communiqu%C3%A9s-and-Media-Releases.aspx>

On an annual basis, ACARA will, according to a financial year, prepare a detailed work plan for the Standing Council's endorsement that sets out the key deliverables, budget and timeframes for addressing the strategic directions and work priorities set out in this Charter and the Letter of Expectation. The forward work plan will include reasonable timelines to ensure the Standing Council can support ACARA's work.¹⁵⁸

ACARA also appears before the Senate Education and Employment Legislation Committee during Senate Estimates Hearings.

Analysis: Schooling – the need for a systemic approach

As we have observed, nations with top educational performance tend to take a systemic approach to schooling. The many facets of curriculum are one part of that approach – indeed a fundamental pillar. However, other elements are required to be linked in order to make the whole system achieve. They include teaching quality and continuous professional development for teachers, leadership from school principals, sound pedagogy and classroom practice, resourcing, assessment that yields results which are used for monitoring and improving individual and system performance, transparency and accountability with meaningful reporting especially to parents, inspectorates or equivalent quality assurance agencies, and evaluation methods for continuous review and improvement.

For various reasons Australia does not take such a holistic system-based approach, primarily because policymaking for these various aspects is fragmented and scattered around various jurisdictions, institutions and sectors. Therefore, policy makers do not think this way, and as the OECD has observed, the whole Australian education system needs more clarity on all policies and funding. It seems fair to state that Australia will not match high-performing countries until we take a more comprehensive approach to the many facets of schooling, identify the strengths and weaknesses in various parts of the system, and achieve closer and more productive linkages amongst the components. Even with the best curriculum in the world, high performance will not be attained if other parts of the system are not performing and are not well linked.

Any regime for the governance aspects of curriculum needs to take account of this systemic nature of the whole school education system. Australia clearly falls short of this ideal due in large part to the fact that the various elements of the schooling system are under the control of different jurisdictions and players in schooling. Indeed, it is arguable whether Australia has a national school education 'system' as the data in Appendix 3 testifies. It is not even totally clear whether compulsory schooling is actually enforced across Australia, although it is meant to be so.

Governance and curriculum design

Good governance is always a sound aim in itself. However, the key aim of good governance in this instance is to produce sound curriculum design and delivery. Before addressing the structure and processes of curriculum governance, it is therefore important to identify the key foundations of curriculum design for which suitable governance arrangements will need to be in place. This can be facilitated by looking to experience in high-performing systems. There are, of course, many variations, but from our analysis of individual countries and various benchmarking exercises which

¹⁵⁸ Standing Council on School Education and Early Childhood 2012, *Charter for the Australian Curriculum, Assessment and Reporting Authority*, p. 4, viewed 4 June 2014, can be accessed at: [http://www.acara.edu.au/verve/_resources/ACARAs_Charter_\(3_August_2012\).pdf](http://www.acara.edu.au/verve/_resources/ACARAs_Charter_(3_August_2012).pdf)

have been undertaken around the world, together with submissions and consultations relating to this Review involving those with international experience, the common aspects of best practice curriculum design would appear to include the following principles.

Curriculum design principles

1. The prime focus is on students, their wellbeing and their personal development.
2. The curriculum must be underpinned by, and anchored in, aims, values, and principles. The values will be universal ones but often also incorporate values relevant to the culture of that nation.
3. Knowledge is the educational foundation. Disciplines are the pillars of learning.
4. Competencies, standards, assessment and reporting must be related to content knowledge.
5. There will be a core content which is mandatory. The breadth and depth of the core varies but it comprises the essential knowledge.
6. The content of all learning areas is based on educational foundations and is rigorous and balanced.
7. The overall design of the curriculum is outlined in a framework document to show clearly the structure of learning areas, phasing of content and notional time and space allocations within core content and between core and non-core content.
8. The inclusion of organising concepts within the curriculum is valuable, and careful sequencing of dependent subjects is critical. However, the evidence does not suggest that learning areas should be forced into a 'one size fits all' common curriculum framework.
9. The shape of the whole curriculum is not monolithic but is tailored to the learning capacity of students at each level, age or year, and to modes of learning which are appropriate for each learning area.
10. The core content is usually designed in a syllabus format, but whatever the style used, it is written in a way that facilitates pedagogical approaches and formative assessment; it is teacher-friendly, and is supplemented by additional resource material and aids to teaching, including indicative lists of reading matter appropriate for each level, such as books for English, key events for history, or key concepts for science.
11. Content is parent friendly and so should be written in a way that parents and families can understand what their children are being taught.
12. Independent quality assurance is undertaken through assessment, inspection, and comparisons, both to ensure effective curriculum delivery, and to provide accountability and assurance to parents.
13. Pedagogy in relation to the core content is usually a matter for schools, along with some flexibility in the phasing of that content into year levels where local circumstances require this. Schools and their teachers bring the core content to life.
14. Even in countries which take a centralised approach, curriculum is never exclusively centralised – there is always some element of local or school-based decision-making about curriculum.
15. In addition to the core content there is a rich and stimulating school-based curriculum, which may extend the core content, and will also contain additional content which will incorporate local knowledge, programs or topics important for that school, including encouragement for low achievers and gifted and talented students.

Australian experience will be compared with international practice later in this report. Curriculum design is a blend of both educational expert evidence and representative viewpoints, so there are roles for many stakeholders in curriculum governance. Clearly they include teachers, students, principals, academics and researchers, parents, sector leaders, community leaders, officials and experts from many education authorities both government and non government, and policy makers.

In all nations where schooling is compulsory it is governments which have the final responsibility for approving and implementing school curriculum across all sectors, both public and private. This is particularly the case wherever public funding of schools is concerned. Ministers act in a representative and responsible capacity to represent the public interest in education as in so many other areas of public policy. Technically and legally the Minister of Education is usually the 'owner' of the school curriculum. However, in democracies there is a basic belief in the pluralism which should underlie the education system and a concern that the curriculum should not become politicised. This poses a challenge for ministers and their advisers in that they possess ultimate power and responsibility in this domain, but must, at the same time, ensure that curriculum design and delivery operates at arm's length from the machinery of government which they oversee, and which is meant to operate on the basis of professional educational expertise.

How governments structure the governance of their school systems varies from country to country in relation to curriculum development, management, assessment, reporting, implementation and accreditation. Tension often exists between institutions charged with conducting these functions and there seems to be no perfect model which would segment the diverse curriculum functions, precisely because they should form part of a systemic continuum. In most countries the departments of education play a prominent role in curriculum development and many other functions, usually aided by advisory councils or committees with members' representative of the school sectors, plus academics and experts. Curriculum is often written by departmental officers or contracted out under their supervision. Other facets of the school system with particular functions – such as assessment and reporting – are often handled by independent statutory bodies. Funding and accreditation are usually tied to a range of conditions including adoption of the official curriculum.

However, there are some universally recognised principles which are generally followed. To avoid politicisation as well as the appearance of such, the body developing curriculum should either be organisationally at arm's length from the minister or at least have a recoup concept in place so that all directions from the minister are made transparent.

The matter of linking curriculum development and assessment is a contentious area. Many say that the two functions should be co-located to ensure that assessment is based on curriculum content. Others say that to avoid bias in assessment of content, there is a case for separating these two functions – viz. content determination and assessment – in organisational terms. The key is to ensure that assessment does not unduly become the sole driver of teaching. Evaluation of the curriculum content should never be in the hands of the body developing the curriculum. It is a moot point whether reporting on the system should be also in the hands of the body developing the curriculum – general opinion is that this is a conflict of interest.

Some functions sit more logically together, such as development and research; some are more process oriented, such as assessment; others such as accreditation monitoring, quality assurance, and system-wide evaluation and reporting need a measure of statutory or organisational independence; yet others, such as dissemination lend themselves to a commercial orientation. All facets of the curriculum system contribute to policy, each from its own perspective, knowledge, and experiential base. Accountability and transparency should pervade all functions.

The federalism conundrum

The existence of federalism adds another layer of complexity to an already complex picture. In particular it adds the necessity of determining the roles and responsibilities of each level of government to that of all the other actors on the curriculum stage.

The key distinguishing feature of a federal system of government is that the sub-national units are sovereign within their own sphere of powers, and therefore meant to be quite separate from the national government and one another, with their own discrete list of powers. The allocation of federal–state functions can only be changed in a formal sense through an amendment to the constitution. However, constitutional arrangements often exist to allow a temporary exchange of powers between levels or some form of collaboration. Very occasionally, in a particular functional area, there will be some asymmetry whereby the national government actually provides a function for smaller or less resource rich states, which other states run for themselves. More often, federal–state collaboration is the result of political–administrative arrangements.

In all federal systems school education is the constitutional responsibility of the state or provincial government. This has usually occurred because of regional or cultural differences, or simply because education was seen as a key aspect of sovereignty of communities within each state. Control of schooling and curriculum is one of the most potent symbols of sovereignty and cultural identity, as any Canadian province or Swiss canton will testify.

Any role for the national government has usually arisen through provision of additional funding, coordinating state actions, honouring international treaties, achieving some national policy objective, commissioning research, addressing the needs of particular groups, or in response to some major national social or economic crisis, challenge, or dysfunctionality.

However, as with all countries over the past decade, many federal countries have also become focused on their rankings in international tests and have sought to achieve nationwide improvement. This has led to a greater role for national governments to coordinate the states and take on some new functional responsibilities, to achieve a more concerted effort in school education including curriculum reform.

United States and Germany

Two interesting case studies are the federations of the United States and Germany.

In the United States, education is a state-level responsibility and it is government and the non-government sectors and communities and schools that are responsible for curriculum. The Federal US Department of Education has a remit on financial aid and the Council of Chief State School Officers brings together officials who head departments of elementary and secondary education in the states, to provide leadership, advocacy, and technical assistance and seek consensus on major educational issues. The Federal *No Child Left Behind Act 2001* was enacted to raise school accountability and literacy standards across the country. The Act was to provide and require:

- accountability for results
- state and local flexibility and reduced red tape

- resourcing for proven educational methods
- expanded school choices for parents and their children.

Schools are required to show improvements in test scores on standardised achievement tests in order to continue to receive federal funding.

In a quite separate development the states and local authorities led the implementation of the Common Core State Standards including how the standards are taught, the curriculum developed, and the materials used to support teachers as they help students reach the standards. These standards came about because of the lack of standardisation in the approach to determining standards of what students in grades 3–8 and high school should be able to do and their proficiencies. These Common Core State Standards are academic standards in mathematics and English language arts and literacy defining the knowledge and skills students should possess at the end of each grade through years of primary and secondary school.

The standards support teachers by:

- providing them with consistent goals and benchmarks to ensure students are progressing on a path for success in college, career, and life
- providing them with consistent expectations for students who move into their districts and classrooms from other states
- providing them the opportunity to collaborate with teachers across the country as they develop curricula, materials and assessments linked to high-quality standards
- helping colleges and professional development programs better prepare teachers.

Forty-three states, the District of Columbia and four territories have adopted the standards.¹⁵⁹ States and school districts, as well as teachers and school leaders, are in varying stages of changing curriculum, instruction, assessments and teacher professional development to ensure a successful implementation of the standards. In recent times some states seem to have decided not to enact the standards.

The US Department of Education assists the effort to fully implement the standards by providing the states with financial funding to create assessments aligned with the standards. The department provided US\$350 million to two consortia to do the work. The new tests are being introduced in schools in 2014.

In other academic content areas various other national and state based organisations are committed to developing standards in science, world languages and the arts.

In Germany, responsibilities for education are shared between the federal government and 16 states. There are legislative and policy mechanisms in place that oblige the states to work with the federal government and with one another on education reform. The states cooperate with one another via the German Ministry of Education and Cultural Affairs. The ministry is the coordinator between the federal government and the states.

¹⁵⁹ Common Core State Standards Initiative 2014, *Standards in Your State*, Common Core State Standards Initiative, viewed 22 July 2014, can be accessed at: <http://www.corestandards.org/standards-in-your-state/>

The federal ministry has established various organisations to support the development, implementation monitoring and review of the education standards. They include the Institute for Educational Progress established in 2004 to define the education standards and use them as a basis for developing tasks to determine whether the expected outcomes are being met. A Research Centre for International Large Scale Assessment is responsible for assessment of the performance of the German education system including implementing PISA in Germany until 2016 and ensuring educational research is undertaken in the context of international comparative studies. Organisations such as these also work collaboratively at the state, national, and international level on curriculum development and monitoring of student learning outcomes. The federal and state governments jointly fund these projects.

Curriculum development is a state responsibility and often devolved to the school level, but state school supervisory authorities ensure that state requirements are being met. They develop the curriculum framework, comparative tests across the states and schools in core subjects, and centralised final examinations for lower and upper secondary.

Following concern about low performance in PISA tests, Germany strongly invested in research-based curriculum development. The education standards are part of a comprehensive federal government strategy for educational monitoring that includes:

- undertaking international comparative studies of student achievement
- a central review of the achievement of student performance between different states and also between individual schools within states
- joint education reporting at the national and state level.

In June 2002, the federal ministry adopted a resolution to introduce education standards as mandatory for most subject areas in primary and high schools, and in 2003 commenced developing national standards. The standards describe in detail specific competencies students are expected to meet. However, the curriculum is the responsibility of each state and should describe how the national education standards will be achieved. A strong focus of the standards is measurability against national testing and benchmarking against international standards. Student performance is regularly monitored through international tests and is used for continual improvement of the educational standards and implementation at the state and school levels.

In short, Germany has proven defined processes for monitoring student performance implemented at all levels of government. For over a decade Germany has aligned and tested its education standards (underpinning all curriculums) to both national and international benchmarking. The federal and state governments are working together to use data collection to further inform and enhance the education standards, and subsequent curriculum development to ensure learning outcomes are met. Most importantly, there appears to be strong strategic support and collaboration processes at the federal and state level that support curriculum development.

Thus it appears that, in these two federations, states and their schools still play the predominant role in curriculum development but they now do so within national standards, which are closely monitored, tested, and evaluated by their national governments. The standards are mandatory (in the United States once a state adopts them), but states are free to devise their own approach towards meeting them. In the United States, the standards were largely the result of states'

collaborative efforts with some federal encouragement and later some funding. In Germany, the standards were set through more formal collaboration between federal and state governments, perhaps reflecting the broader constitutional system in Germany in which the states are formally involved in policymaking and legislation of the federal government through the federal upper house and other joint task mechanisms. In both the United States and Germany the national government also funds and encourages research into curriculum, often carried out by independent institutes. Germany seems to go further in aligning evaluation of performance to international benchmarks and instituting regular procedures for continuous improvement.

Australia compared

It becomes clear that Australia has moved further than both these federations into joint federal-state curriculum content development, and has a more comprehensive national curriculum in that it comprises more than just national standards. However, Germany seems to have more systemic curriculum implementation, performance monitoring, evaluation, and continuous improvement approaches, and has linked all of these more closely to international benchmarking. It is not clear whether the resultant actual curriculum content in Australia is more rigorous than that of the United States or Germany, and it is not possible to correlate federal arrangements with educational outcomes –although it is worth noting the significant improvement of Germany in international rankings over the past decade. Both Germany and the United States would seem to place far greater emphasis than Australia on the conduct of curriculum research through national government action.

The Australian approach, which has produced a rudimentary national curriculum, is still predicated on the states retaining the ‘how’ of curriculum delivery, even if they have ceded a joint role for the federal government in determining the ‘what’ of curriculum content. Also, the classic distinction that still remains is that of splitting ‘core curriculum content’ (now determined by joint federal-state collaboration), from ‘school-based curriculum content and all pedagogy’, (which remains the prerogative of the states and territories and the various school sectors) and which Professor Caldwell has clearly articulated in Figure 6.¹⁶⁰

¹⁶⁰ Caldwell, B 2014, *Realigning the Governance of Schools in Australia: Energising an Experimentalist Approach*, A paper for the Crawford School of Public Policy, Australian National University Workshop on the theme of ‘Twenty-first century public management: the experimentalist alternative. This diagram is reproduced with the permission of Professor Brian Caldwell, Managing Director and Principal Consultant, Educational Transformations Pty Ltd.

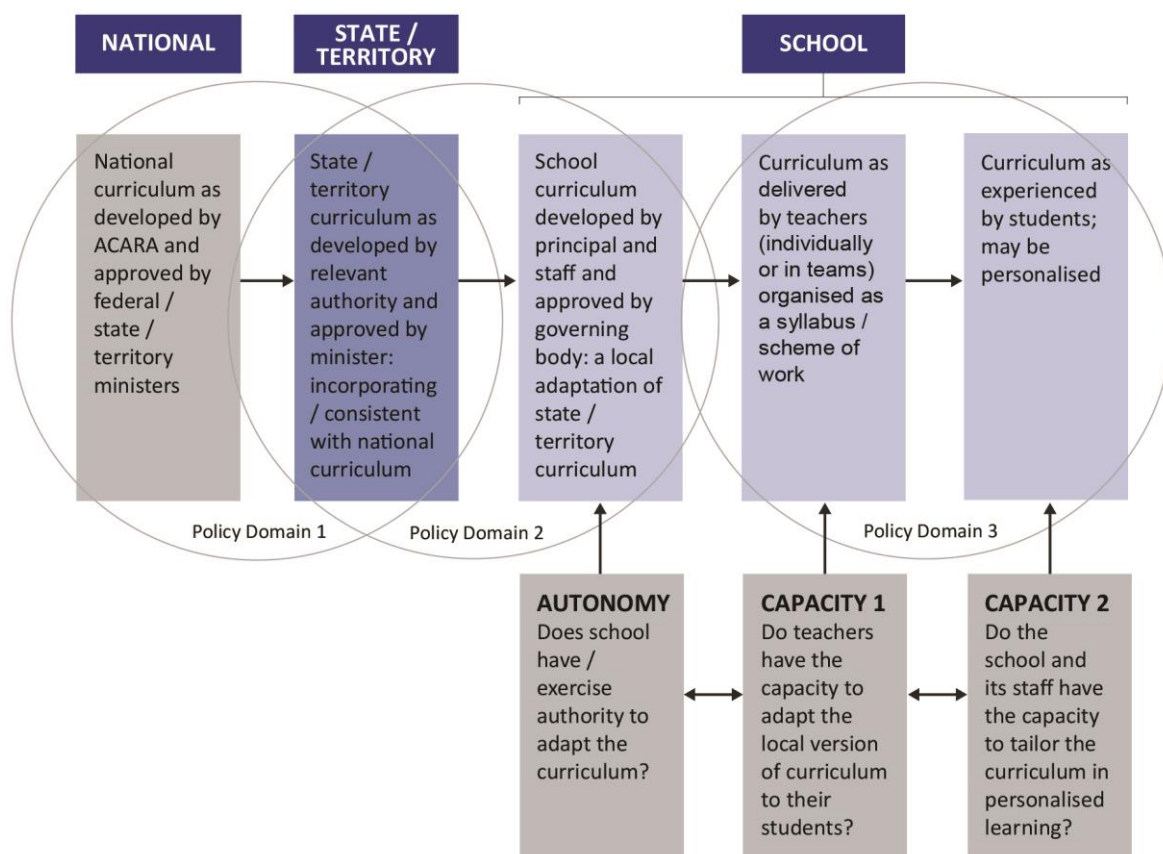


Figure 6: Analysing the flow of policy and practice in curriculum (source: Professor Brian Caldwell)

Conclusions

The ACARA model is unique in that it is an intergovernmental entity operating as a statutory authority but in a corporate style framework under national legislation. This produces substantial complexity and a blurring of accountability between jurisdictions, but it has the advantage of achieving some degree of buy-in on the part of states and territories – especially as they jointly fund the operation – and the voting structure, in practice if not in theory, requires unanimity among all the parties.

The model has managed to produce Australia's first rudimentary national curriculum, which is widely considered to have been a significant achievement. Nonetheless, the resulting curriculum does not conform to the previously outlined curriculum design adopted by top performing countries. In addition, the manner in which the Australian Curriculum has been achieved is the subject of a good deal of criticism as the following section outlines.

Section Two: The evidence

Chapter Five: Development and implementation of the Australian Curriculum

Development of the Australian Curriculum

The process whereby the Australian Curriculum was developed is documented in papers published by ACARA.¹⁶¹ Essentially this involved the following steps:

- the Melbourne Declaration
- establishment of ACARA
- *The Shape of the Australian Curriculum* paper
- the *Curriculum Design Paper* version 3.1 (June 2013)
- the *Curriculum Development Process* paper version 6 (April 2012).

The Melbourne Declaration

The Melbourne Declaration was agreed to by all Australian and state and territory ministers in 2008, and committed all governments to the collaborative development of a national curriculum. The Melbourne Declaration provided a broad outline of the approach and content of the proposed curriculum, including its three-dimensional structure and learning areas.

Establishment of ACARA

ACARA's first board members were appointed by the Minister for Education on 28 May 2009, at which point ACARA effectively became operational.

The Shape of the Australian Curriculum paper

In 2009, following public consultation, *The Shape of the Australian Curriculum* (earlier referred to as the Initial Advice Paper) was published. The paper reflected the position adopted by ministers in the Melbourne Declaration and was to guide the development of the Australian Curriculum. As well as outlining the goals for schooling, the rationale for developing a national curriculum and its broad scope, dimension and content, the paper also established the roles of ACARA and other school authorities in developing and implementing the curriculum.

Guided by *The Shape of the Australian Curriculum*, ACARA consulted on and published the following two additional key documents that outlined the process and specifications for the development of the Australian Curriculum in more detail. Iterations of both documents have been released over the years to reflect the evolving nature of curriculum development.

The Curriculum Design Paper version 3.1 (June 2013)¹⁶²

This paper provided background information, and described each curriculum component and related design specifications.

¹⁶¹ A number of these papers are detailed in Chapter Three of this Report.

¹⁶² ACARA 2013, *Curriculum Design Paper Version 3.1*, ACARA, Sydney, viewed 22 July 2014, can be accessed at: [http://www.acara.edu.au/verve/_resources/07_04_Curriculum_Design_Paper_version_3+1_\(June_2012\).pdf](http://www.acara.edu.au/verve/_resources/07_04_Curriculum_Design_Paper_version_3+1_(June_2012).pdf)

The Curriculum Development Process *paper version 6 (April 2012)*¹⁶³

This paper provides broad direction on the purpose, structure and organisation of the curriculum applicable to all learning areas.

It was agreed by Australian education ministers at the Ministerial Council that the Australian Curriculum would be developed in 'phases'. As part of its initial Charter, ACARA was asked to commence curriculum development for English, mathematics, science and history. A second phase of work was subsequently authorised involving the development of an Australian Curriculum in geography, languages and the arts. Later, Australian education ministers agreed that a third phase of curriculum development would focus on health and physical education, ICT, design and technology, economics and business, and civics and citizenship. Subsequently ICT and design and technology were incorporated into one technologies curriculum, with ICT also included as a general capability in the Australian Curriculum.

ACARA's curriculum development process involved the interrelated processes of curriculum shaping, curriculum writing, preparation for implementation and curriculum evaluation and review.

Curriculum shaping involved the development of a paper for each learning area which set out a broad outline of the proposed curriculum. Expert advice was sought in the development of an initial draft shape paper for each learning area that was released for wide public consultation. Following modification of the draft after consultation and feedback, a final shape paper was published on ACARA's website. Steps in this process are outlined below in 'Shaping the curriculum'.

Curriculum writing involved teams of writers, supported by expert advisory groups and ACARA curriculum staff, who drafted content descriptions and achievement standards. The draft Australian Curriculum for each learning area was released for public consultation and subsequently revised after feedback. Each writing stage culminates in endorsement by the Ministerial Council after which the Australian Curriculum is published for the learning area. Steps in this process are outlined below in 'Writing the curriculum'.

Shaping the curriculum

The curriculum shaping phase for each learning area produced a broad outline of the curriculum from Foundation to Year 12. This outline was known as the Shape of the Australian Curriculum: <Learning Area> and provided advice on curriculum design and guided curriculum writers. It also provided a reference for judging the quality of the final curriculum documents. The shaping phase typically involved the following steps:

- step one – development of a position paper
- step two – preparation of initial advice papers and national forums
- step three – development and publication of draft and final shape papers.

¹⁶³ ACARA 2012, *Curriculum Development Process Version 6*, ACARA, Sydney, viewed 22 July 2014, can be accessed at: http://www.acara.edu.au/verve/_resources/ACARA_Curriculum_Development_Process_Version_6.0_-_04_April_2012_-_FINAL_COPY.pdf

Step one – Development of a position paper

For each learning area, a position paper was developed that identified and responded to key issues that needed to be resolved before the commencement of writing the shape paper.

This step included the following actions:

- A project plan was developed for each learning area.
- An environmental scan and an analysis and review of existing national and international policy and practice were conducted, as well as a collation and consideration of international examples of curriculum for the area.
- An expert group workshop was held to provide advice on options and to develop a preferred position on relevant issues.
- A draft position paper on these key issues was prepared.
- ACARA's Foundation–Year 12 Curriculum Reference Group provided feedback on the draft position paper and ACARA Board provided advice on the issues canvassed in the paper.

Step two – Preparation of initial advice papers and national forums

This step entailed the development of an initial advice paper for each learning area outlining a proposal for the development of curriculum. The purpose of the initial advice paper was to generate discussion, draw out the issues for each learning area and determine where there are agreements and tensions about the proposed ideas at a national forum.

- Lead writer(s) were appointed and commenced drafting the advice paper for each learning area.
- Small advisory groups¹⁶⁴ were appointed to support lead writer(s).
- Feedback on draft initial advice paper for each learning area from the Foundation–Year 12 Reference Group was provided.
- The ACARA Board approved initial advice paper for each national forum.
- A national forum was conducted to review each initial advice paper.
- Feedback from each forum was analysed and key directions for redrafting were established.

Step three – Development and publication of draft and final shape papers

The preparation and publication of the Shape of the Australian Curriculum: <Learning Area> guided the curriculum writing phase. This step involved the following actions:

- A lead writer commenced drafting a shape paper for each learning area.
- The draft shape paper was reviewed by a learning area advisory group, national panel¹⁶⁵ and the Foundation–Year 12 Curriculum Reference Group.
- Following endorsement by the Board, a draft shape paper was published for online consultation.
- The consultation feedback was analysed and a consultation report prepared with proposed actions.
- The draft shape paper was then revised.
- A final shape paper for each learning area and consultation report was published on the ACARA website, following Board approval.

¹⁶⁴ A panel of subject experts, which provides advice on draft materials at key stages in the development process.

¹⁶⁵ National panels are responsible for providing state, territory and professional association feedback to ACARA at key points in the shaping and writing phases of the curriculum development process.

Writing the curriculum

The curriculum writing phase was guided by the shape paper for each learning area, to produce a final curriculum ready for endorsement by ministers and subsequent use by school in all states and territories. This phase typically involved the two-step development of draft and final documents, similar to the curriculum shaping phase:

- step one – broad outline document for curriculum drafted
- step two – detailed materials written for draft curriculum and final curriculum.

Step one – Broad outline document for curriculum drafted

A broad outline for each learning area contained the F–10 rationale, aims, scope and sequence, as well as a senior secondary overview with rationale, aims and content scope. Developing the outline involved the following steps:

- Writers and advisory group members for each learning area were selected.
- A writing work plan and document templates were developed.
- A broad outline was produced and finalised, following feedback from the national panel.

Step two – Detailed materials written for draft curriculum and final curriculum

- Drafting of curriculum content descriptions, elaborations and achievement standards commenced, and feedback was provided by each learning area advisory group and the national panel.
- Following approval by Board, the draft curriculum documents for each learning area were published for consultation.
- Trial school activity was conducted, and work samples collected to illustrate achievement standards.
- Consultation workshops on draft curriculum were conducted.
- Consultation feedback was analysed and a draft consultation report, trial schools report and directions for revision were prepared.
- Following Board approval, the consultation report was published on the ACARA website.
- The draft curriculum was revised in response to the consultation report, and feedback was provided by each learning area advisory group and the national panel.
- The revised draft curriculum was uploaded to the ACARA website for viewing and comment.
- Consultation with state and territory authorities seeking feedback on the revised draft curriculum was undertaken.
- The curriculum was validated, which included two national meetings of teachers as well as online collaboration.
- The final revised curriculum for each learning area was prepared for ACARA Board, and subsequently Ministerial Council, approval.

Analysing the development process

It was a somewhat rocky road towards development of the Australian Curriculum with various jurisdictions threatening to withdraw and demanding higher standards or adaption to suit their contexts and others delaying the starting date. Some have almost rejected phase two.

It is clear that ACARA regarded the Melbourne Declaration as the only foundation for the Australian Curriculum and very speedily began its task, purely on this basis, driven by a ministerial council experiencing the Australian Government's sense of urgency.

This Review explored the degree of satisfaction with the process to shape and develop the Australian Curriculum and sought to identify issues that had been raised but were not addressed by ACARA. We also examined the extent to which the Australian Curriculum has been modified and reshaped when being implemented. This was achieved through analysis of the submissions to this Review and the wide-ranging consultations which were held with key stakeholders across the nation. Research was also conducted to analyse academic literature, media perspectives, and correspondence to ministers during the period of curriculum development.

It is generally agreed that ACARA made a substantial effort to consult widely in developing the curriculum. In fact some groups report consultation fatigue with, for example, the quantum of meetings and consideration of drafts.

Formative influences

From responses to this Review it has become clear that there were several formative factors influencing the attitudes held by many participants in the process of curriculum development.

It would appear that most participants welcomed the arrival of a national curriculum. Smaller jurisdictions such as the Australian Capital Territory and Tasmania and some sectors with limited curriculum development capacity of their own saw a benefit in having a national body performing this task. Jurisdictions which possessed only a rudimentary curriculum, or had experienced past failed attempts with outcomes based education inspired approaches, welcomed the opportunity to acquire a more structured and rigorous one. Many jurisdictions, both small and large, had not had syllabuses or achievement standards. For them it filled a vacuum. Larger jurisdictions, such as New South Wales and Victoria, while somewhat reluctant starters, became content to see a national curriculum emerge provided it could be accommodated within their own structure and implementation mechanisms. Believers in the dominance of a purely school-based curriculum accepted the possibility of a national curriculum – provided it did not occupy too much space or prescribe content and pedagogy – and they were comforted by assuming that this was going to be the intention. Parents and teachers welcomed the prospect of greater facilitation of mobility across the nation especially related to pursuit of work opportunities.

However, the development process would come to be dogged by the quite different perceptions which participants held of the very concept of a national curriculum. Our consultations have revealed very wide ranging notions in this regard. Words which have been used to define and describe a national curriculum range from a strict 'syllabus', to just a 'guideline' or 'outline', 'road map', or 'a bit of a framework'. Some appear to have seen it as just a list of competencies with some content thrown in for good measure – one respondent went so far as to say that only the capabilities were important and the content 'stuff' could be used where appropriate.

One very important element of these perceptions was the difference in understanding of what would be the mandatory nature of any new national curriculum. To this day there are disturbing differences in this regard. Some appear to see it as black letter law; for others it is something of a smorgasbord which offers various dishes which can be chosen to taste; still others regard it as

something in between. A number of people saw the Australian Curriculum as the first step towards a comprehensive national assessment and reporting regime leading ultimately to externally set and marked Year 12 examinations across Australia.

Public and independent sectors followed the lead of their state or territory governments as to the compulsory nature of the national curriculum and it has become clear that different jurisdictions have had different views on this. It is not helped by the ambiguity with which jurisdictions are interpreting the Commonwealth *Australian Education Act 2013*, which stipulates that regimes which receive national school funding must implement the Australian Curriculum. Jurisdictions seem to simply sign off on this condition but there is very little monitoring as to whether it happens in practice. Even within those jurisdictions which consider it mandatory, their own government schools appear to be taking licence in their approaches, and the independent and Catholic sectors reserve the right to adapt and adopt. We comment on this in more detail below.

So the perceptions of how the Australian Curriculum would be implemented have also varied substantially. It seems fair to say that most participants approached the development process believing little would change and they would be able to continue much as before, albeit with some new content. They expected flexibility in what would happen at school and classroom level. Independent and Catholic schools had become accustomed to being given government fiats on many aspects of education policy and having to adapt it to their contexts, and even government schools would follow their common practice in bending central policy to suit their circumstances, especially in regional and remote areas.

One submission to this Review from active participants in the ACARA process summed it up by saying that development of the Australian Curriculum has faced two significant hurdles:

The term 'curriculum' has been circumscribed to knowledge, content, and achievement standards only, and that is not well aligned with common state definitions and interpretations of what is to be found in a curriculum.

And

The absence of any overarching conceptual framework for the Australian Curriculum has meant that there is no guiding policy on how all the pieces would fit together, how time allocations could be accommodated, and how extra-curricular and school curriculum elements, other than those covered by the Australian Curriculum, would be accommodated.¹⁶⁶

This same submission argues for amendment of the Melbourne Declaration and ACARA's Charter, and this is addressed in Chapter Eight of this Report which deals with governance.

Special education experts put it graphically in saying that ACARA's efforts were like trying to fit the pieces of a jigsaw puzzle with no picture for guidance.

¹⁶⁶ National Catholic Education Commission 2014, Submission to the Review of the Australian Curriculum, p. 8.

The Catholic Education Commission of New South Wales summed up the problem in this way:

The Melbourne Declaration sees schooling in terms of its value for the nation and for individuals in the nation. This essentially instrumental view does not describe the benefits of schooling in terms of the holistic growth of each individual student so it is not surprising that the Declaration does not articulate a view of Australian students in terms of their overall development. Curriculum in eight Learning Areas is described in terms of:

- *A solid foundation in knowledge, understanding, skills and value on which further learning and adult life can be built.*
- *Deep knowledge, understanding, skills and values which 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.*

For Catholic educators, this view of curriculum has always been seen, at best, as a partial description of the desirable outcomes of schooling and, at worst, as a depiction of a lack of understanding of human dignity.¹⁶⁷

Views of the process

All of these aspects coloured the manner in which participants entered the ACARA consultation process, enthusiastic about the prospect of a national curriculum, but believing either that little would change in their lives or that their view of the exercise could be accommodated. In retrospect, it seems evident that ACARA did little to clarify most of these aspects – particularly the concept and nature of a national curriculum and the extent to which it would be compulsory; instead ACARA tried to accommodate the various viewpoints and perceptions. It endeavoured to be all things to all people which, it is generally agreed, led to a number of consequences including too much compromise and resultant overcrowding. Many of our respondents have also stated that the whole process was too rushed with deadlines which were too tight and restrictive, and did not allow for proper consideration. Some key sectors have said that they were not properly consulted at all which is outlined below.

Many of the submissions from individuals and groups expressed satisfaction with the consultation process, especially where they had been personally involved. However, submissions from peak sector bodies and some subject associations were more critical. The submission from BOSTES NSW gives a critical general overview by stating that there is a general view in New South Wales that consultative processes conducted by ACARA were uneven, often unresponsive to concerns, focused on deadlines at the expense of collaboration, and the rationale for decisions on curriculum material was not transparent.

During consultations, a number of professional educators have criticised aspects of the curriculum development process. These include the international benchmarking exercise which ACARA undertook and that it has not been explained how this exercise informed the development of the Australian Curriculum; in particular, how it was introduced into the consultation process.

¹⁶⁷ Catholic Education Commission New South Wales 2014, Submission to the Review of the Australian Curriculum, p. 6.

It is not clear to many how the shaping papers were developed or how particular depth studies, such as in the history curriculum, were chosen. When changes were made to content during the development phases no explanation was given to consultative groups for these changes. In other words, no explanation was given as to how the curriculum writers made decisions or how achievement standards were determined. They seemed to have been constructed on a relative rather than an absolute basis.

Others closely involved in the curriculum development process have observed that the shaping papers were of varying quality depending on the speed with which they were prepared. Some believed that they were too superficial in terms of defining what students should know and they should have been given greater attention by ACARA in relation to the time allowed for their preparation, scope, boundaries, principles, values, and theory of the discipline. In this regard the geography curriculum is singled out as an example with a claim that there was little in-depth attempt to reconcile the traditional emphasis on physical geography with a more contemporary preoccupation with sustainable development and environmental approaches; all of this not helped by the virtual disappearance of geography departments in universities. Our Review also prompted quite a number of responses dissatisfied with the way humanities and social sciences had been separated in the primary years, thus leading to more overloading and favouring some disciplines over others.

There was considerable concern that in ACARA's process 'general capabilities' were developed separately from the content of learning areas. The observation has also been made that the general capabilities were not evidenced-based and the achievement standards were never validated properly against the actual content of the proposed national curriculum. Instead of the achievement standards being validated against a comprehensive range of student work samples generated from the Australian Curriculum, they are based on a limited range of student work samples drawing on curriculum that pre-dated the intended national curriculum content. In particular, the meaning of the A to E classification in assessment has still not been clarified to this day. Others point out that no attempt was made to align NAPLAN testing and other areas of the NAP with the content of the learning areas of the Australian Curriculum, which is still true to this day. As one leading professional observed, 'If you don't have consistent assessment you don't have a national curriculum'. This is also particularly important if one of the key advantages of having a national curriculum – mobility for students and teachers – is to be realised.

According to a number of analysts of the national curriculum development, a key fault in the process which explains much of this criticism is the fact that there were two expert groups involved in construction of the curriculum – advisers and writers. In some cases the two groups never met. Moreover, it was believed that ministers saw all the drafts, but not the outsiders, and this led to a lot of misconception. The history curriculum is mentioned as a case in point when ACARA seems to have changed, without reasons being given, the depth studies for 'Movements that Caused Change' and this immediately raised issues of selection. So the process was not transparent to the majority of teachers and hence caused a lot of frustration and suspicion regarding personal biases in the writing process. A serious conflict of opinion is reported to have occurred regarding special education with educators in this field threatening ACARA with litigation regarding discrimination. This is reported to have resulted in ACARA simply dropping suggested approaches rather than proceeding with further research and trials as key expert groups had advocated.

The missing step

Quite a number of those making submissions and/or engaged in our consultations, as well as some education professionals, have identified a regrettable missing step in the ACARA curriculum development process. The common observation is that in the rush to implement under intense pressures from ministers and policy makers, ACARA jumped straight from the Melbourne Declaration and ministerial council directives into commencement of curriculum design. As one former ACARA Board member told us, ministers gave direction to ACARA to add more and more learning areas – a letter of expectation came from ministerial council at the same time as My School and NAPLAN directives requiring a big implementation effort. There should have been a philosophical statement to underpin the curriculum but there was none.

Some have observed that there was a poor debate about the rationale for a national curriculum, e.g. its ‘basis on the nation’s soul, values, and beliefs’. The consultation process was said to be ‘more about items rather than educational approaches’.

It is argued that there should have been a pause to ensure that the work would be underpinned by educational foundations and not just policy directives. Reflection should have occurred, perhaps aided by a forum of key educators and community representatives, on the purposes, aims, values, and goals of education and how best to orient the curriculum to the objective of developing well-rounded students. The nature and purpose of a national curriculum could also have been discussed to achieve some common understanding. The point is that the Melbourne Declaration alone is not a sufficient base for curriculum development. Indeed there are clearly quite differing views on the nature and significance of the Melbourne Declaration. Some have called it just a vision statement which has never been properly discussed and debated. It was also referred to as just a ‘touchstone’. Others believed it was outdated and not appropriate for the ACARA task; still others saw it as just a political or policy statement with little or no educational foundation. Some respondents believed that the Melbourne Declaration needed to be amended or replaced by a new vision for education focused on the student, and acknowledgement of the role of parents as first educators of children. (Then again it was also claimed by some leading educators that most schools had never heard of it!)

Moreover, others during our consultations have argued that even those values which are espoused in the Melbourne Declaration are not made explicit in the Australian Curriculum as underpinning the whole curriculum and its design, other than selective values which occur in some specific learning area papers. In this respect it is also worth noting that the Australian Curriculum does not follow the example of leading nations in outlining, from the beginning, its educational and national values base; the fostering of a ‘love of learning’ does not rate a mention either.

There are also many who claim that the Australian Curriculum is not actually true to the Melbourne Declaration in some respects – particularly regarding the Declaration’s emphasis on spiritual as well as moral values. A number of Catholic educators told us that when they repeatedly raised this with ACARA they were ‘fobbed off’ and told that it was considered that the Catholic sector would be able to live with the national curriculum. Indeed the whole question of spiritual values and religion seems to have been regarded as too much of a hot potato, with ACARA largely ignoring this element and most participants assuming it away as being confined to the particular learning area of religious education, or assuming it would just form part of a school-only curriculum. (ACARA has recently

belatedly developed a statement outlining how the Australian Curriculum deals with religions, spiritualities and ethical beliefs.

The independent sector made the observation to this Review that the Melbourne Declaration is only a vision statement and there has never really been a discussion on this vision. ACARA focused too much on its remit and should have begun with an educational vision, principles and values of education. They note that high performing countries have a base of aims and principles and have achieved it; e.g. Singapore, where everyone knows what the goals of education should be.

Design faults

Some have taken this ‘missing step’ argument further and observed that there was never an overall curriculum framework document constructed at the beginning of the process so as to capture, for example, values, aims, as well as the total quantum of curriculum, load factors at various phases of schooling, time allocation by learning area and by classroom practice, potential for flexibility including for integration across learning areas. This point is best captured by the submission from BOSTES NSW:

The Australian Curriculum was not conceived originally through an overall curriculum blueprint. This meant that a ‘total curriculum’, including time allocations for each subject, was not conceptualised at the beginning of the curriculum development process. This was partly a result of the original remit limiting national curriculum to English, Mathematics, Science and History. In some cases ACARA’s curriculum writers produced a volume of content that required continuous adjustment in relation to structure and design as implications for other curriculum areas were subsequently considered. New South Wales stakeholders have frequently put the view that the lack of a blueprint early in the process has resulted in some lack of cohesion across the entire curriculum, despite ACARA publishing overarching framework documents and guidance for writers. There is a general view among NSW stakeholders that the strict timelines for the development of curriculum have resulted in a limited capacity for ACARA to assure consistency and coherence across all the material produced. In particular there is a view that there has been inadequate regard to the amount of time required to achieve the learning described. Australian Curriculum for some subjects is still considered to include excessive content and has insufficient regard for indicative time allocations. It is possible to reasonably interpret that curriculum documents were designed for more teaching hours in total than was available within the school teaching year. Explanations offered by ACARA that curriculum can be achieved within available time through effective integrated programming have not been convincing to NSW stakeholders.¹⁶⁸

Instead, it was suggested, a purely iterative development process was followed, learning area by learning area, so that the final total product was bound to be overcrowded and create confusion as to how content could be delivered. The fragmentation which occurred through the subject specific approach in the absence of an holistic design statement was exacerbated by unrealistic timeframes, detachment of ACARA staff from pre-existing and continuing education Acts, and the unclear role of ACARA officers, committees, reference groups and experts. Feedback to ACARA was ignored in favour of other advice; but it proved impossible to determine the origin of the advice or the locus of

¹⁶⁸ BOSTES NSW 2014, Submission to the Review of the Australian Curriculum, pp. 9–10.

decision-making. ACARA officers were reluctant to accept fundamental criticism of draft documents due to timeline constraints.

The argument is essentially that the design process was too much top-down and should have begun from the point of what was achievable in schools. Some say this is a reflection of the fact that ACARA's consultative process featured too few practising teachers – especially from primary schools – and the curriculum writers did not start from the point of view of classroom practice, which in primary schools is not usually segmented into learning areas but taught in more of an integrated manner. The indicative time allocations ACARA gave its writers did not reflect the situation of hours available for teaching, particularly in secondary schools, and acknowledgement that each state and territory applies timelines differently. The independent school representatives observed that ACARA always thinks systemically and is not prepared to recognise or even acknowledge the differing contexts of individual independent schools.

APPA believe that the consultation process was top heavy with academics and so ACARA was not concerned enough about the teaching of the discipline, but rather just the discipline itself – they say that there should have been more primary school teachers in the writing teams. An overall framework paper based on more representative inclusion of practitioners could have foreseen these issues.

Some learning area experts believe that the ACARA writers were mainly not qualified in discipline areas but rather were generalist educators endeavouring to write specialist curriculum.

The early years: a special case

Consultations for this review with early learning experts, combined with research into international experience, confirm the vital importance of the early years of schooling in terms of a student's educational development. Curriculum content clearly plays a key role in this and there is convincing evidence to suggest that the early years should be regarded as quite distinct, and treated differently from the rest of the learning spectrum. This is especially so in terms of the teaching of reading. In simplified terms the first two or three years are about 'learning to read'; then comes 'reading to learn'. We pursue these aspects later in this report in terms of the English curriculum, but in the designing of the Australian Curriculum there seems to be no evidence to suggest that ACARA treated the early years (i.e. Foundation to Year 2) in a special way. We are told by early childhood teachers and academic experts in the early years of education, and those with expertise in reading and the early years, that F-2 should have been focused on literacy and numeracy – not the hard and fast introduction of discipline-based content. In fact, the teaching of literacy and numeracy can easily be integrated pedagogically with other content by using examples relevant to the lives of students of these ages. Since literacy is the main foundation for the whole school curriculum there seems to be convincing evidence that Foundation to Year 2 should be separated both conceptually and organisationally in the whole curriculum. The current Australian Curriculum, in each of the F-2 years, is too broad in its scope, yet too shallow in its treatment of the fundamental aspects of literacy development.

It is worth noting the comments of the Republic of Korea's curriculum in this respect:

Pre-school (kindergarten)/early childhood education focuses on providing an appropriate environment and services for nurturing children and ensuring that they achieve their full potential through a range of enjoyable activities. A focus on diversified content and methods of instruction is an important component.

The curriculum covers five life areas: health, society, expression, language, and enquiry/exploration in daily life.

Also supportive of this view was the observations of a very experienced curriculum developer who believes that the Australian Curriculum has too much content in the early years, particularly to Year 3. He blames, in part, the tendency of ACARA to look in the first instance simply at the starting point of disciplines and then to go on to develop too many areas or topics. Speaking more generally of the primary years, he says that the curriculum writers pursued too much breadth rather than depth for the primary curriculum. He believes that over 50 per cent of each day should be spent on literacy and numeracy, and the focus in each learning area in these early years should have been on only certain elements of each discipline. There is no need to turn a discipline into a primary school subject. Instead, in each domain, ACARA should have focused on the way of thinking and approach of that discipline. In other words, the primary school years should address the generic aspects, with some in-depth studies in preparation for the significant content which is addressed in later years. In his view the Australian Curriculum overall should be half its current size, particularly in the primary years.

Cross-curriculum priorities

Design aspects also arise in relation to the cross-curriculum priorities. Many of our respondents with professional curriculum development expertise say that it was a mistake to endeavour to embed each of the three themes across the whole curriculum. They added a layer of complexity which was not needed, yet because they were included in content elaborations, and tagged but not included in learning area content descriptors, they are voluntary and so their impact is weakened. If they were to have educational validity they should have been included in specific learning areas but only where they were relevant. Apparently this was the approach being considered by ACARA but was changed to the preparation of a broad curriculum matrix, which may have been to stakeholder pressure or fears about yet more content overload. One respondent with considerable curriculum expertise argues that ACARA's actual interpretation of this directive regarding cross-curriculum priorities was 'wishy-washy', that they should have simply introduced them through the learning area content, and this is how all such future 'priorities' of this nature should be handled. This seemed to fit with his general observation that over its time span of existence ACARA had behaved 'strongly politically but weak intellectually'.

This aspect of the Australian Curriculum has attracted considerable ridicule, especially in the media. It has severely dented the credibility of the Australian Curriculum. ACARA's belated response was that the cross-curriculum priorities matrix was not compulsory but only indicative of where schools might locate the three themes of Aboriginal and Torres Strait Islander histories and cultures, Asia and Australia's engagement with Asia, and sustainability. However, by then the damage had been

done because the popular perception, including that among very many teachers, was that these areas were compulsory.

Others have observed that many of the learning areas already heavily featured these themes – for example, sustainable development in the geography curriculum, Indigenous history in the history curriculum, and Asia in many subject areas. Throughout all of our consultations there has been widespread agreement that students need to be aware of these three themes, but mainly on the basis that they form part of the contemporary landscape in Australia; however, few have advanced any educational foundations for them or the way they have been designed by cross-learning area embedding. And once again, those who regard the Australian Curriculum as non-compulsory are not fazed at all since they believe they can pick and choose from the whole content that the curriculum offers, including the cross-curriculum priorities. One senior Indigenous leader, Warren Mundine, has offered the opinion that rather than attempt to use cross-curriculum themes, there should have been a separate subject on Indigenous history to be delivered by teachers qualified to teach in this domain.

This whole issue also raises a question for the future as to whether it is sound educational practice for politicians and policy makers to be continually ordering contemporary themes into a national curriculum. Apparently there was some thought given by ACARA to calling them ‘current’ or ‘contemporary’ cross-curriculum priorities, which would have made the point. Some of our respondents with curriculum development expertise believed that the concept of cross-curriculum priorities have no place in the curriculum at all because they believe that a curriculum should be knowledge based and organised as such. In contrast, those at the head of educational sectors seemed to be comfortable with the concept, as long as there was an educational justification and foundation to them.

Consultation and the development process

There is a unanimous view, even amongst the strongest supporters of the curriculum development process, that the whole exercise was one of compromise, and particularly rushed compromise. While many accept that compromise is inherent in the nature of school curriculum and that it will be impossible to please everybody and every viewpoint, there were widespread concerns over how the compromises were handled. It is claimed that ACARA made no effort on educational grounds to reduce curriculum content because of pressure groups, and so kept adding material, ‘filling silos to overfull’ and proliferating subjects.

Subject Associations spoke of a ‘deeply flawed’ ACARA process with curriculum being ‘cobbled together to meet a political deadline’. A former ACARA Board member told this Review that ministers gave directions to ACARA to add more and more learning areas – a Letter of Expectation would come from Ministerial Council at the same time as My School and NAPLAN directives, requiring a big implementation effort. He added that while there should have been a philosophical statement to underpin the curriculum, there was none. One leading academic told us that the flaw lay in the governance model of ACARA. ‘A curriculum makes choices’, they observed, ‘and must be done by experts – educators first then academics then politicians’. The view was that governance needs to be at a distance – content should be educationally based. ACARA had tried to do two tasks – speak to the public and politicians and try to be accountable, and give practical advice to teachers; the balance was not achieved, and at any event the reporting function dominated the rest.

In contrast, some groups believe their viewpoint was not even properly sought. The three groups who fell most into this category are parents, Indigenous educators, and special education educators. Some parent groups claim that they were not invited at all to be part of the consultation process and they blame ACARA, but some also blame their own state or territory jurisdictions who, they say, have never engaged properly with parents. Those parents who did have a place on some ACARA related committees complained of emails coming out of the blue with little time for the gathering of viewpoints within their own groups. Indeed this Review has revealed that historically parents have been very poorly involved by state and territory governments in curriculum matters across most of Australia; or where they are involved it is largely token involvement. The same is apparently true in the independent sector, as evidenced by a leader from the independent sector in one state who told us that 'curriculum is solely for teachers and any parent interested in curriculum is a fanatic'.

No wonder that we have discovered that parents, by and large, regard the Australian Curriculum as not parent-friendly. The Australian Curriculum website is considered big and too complex for parents, and the whole picture is confused with NAPLAN and My School web pages as well. Also, as we were reminded, not every household has a computer or computer-literate parents. ACARA had talked about brochures for parents but this never happened.

However, other parents told us that there is often a disparaging view among educators that parents cannot expect special treatment relating to the curriculum. They are told they can simply speak to their school if they have any questions about the Australian Curriculum. Some do this where they have complete trust in the school, but many want to be able to see how their school is implementing the Australian Curriculum. In many jurisdictions they are simply told to access the Australian Curriculum website, which is not much help since they find the ACARA website to be 'edu-babble' and undecipherable. One parent group observed that 'you would need a curriculum dictionary to understand it'.

On the other hand, we have discovered that some schools are making an effort to convey the Australian Curriculum to their parents, and we have seen some good examples of reports on students to parents which also convey accompanying information about the curriculum. ACARA seems to have been fairly silent on how schools should relate to parents on Australian Curriculum content, and its own material is far too technical and complex for this audience. Parent groups in many parts of Australia said that they had made submissions to ACARA on these and other aspects but their views were not taken seriously. While many jurisdictions told us that they would just refer parents to the Australian Curriculum website if they had queries, there were many others who said they would never do so because not even teachers could relate to it, including the subject content descriptions.

Some Indigenous educators have complained that there was 'inappropriate engagement with Indigenous educators' and were worried about the effect this could have on the content of the curriculum. Others told us fairly forcefully that ACARA had not properly consulted with them and, where this did happen, it was only late in the consultation process when ACARA seemed to discover that they did not have an Indigenous viewpoint. Then timelines were imposed that were impossibly tight and the Indigenous educators did not have time for full consultation with their colleagues. Many of their suggestions were not even considered or were rejected after their advice had been sought, including their serious concern that the curriculum was so overcrowded, Indigenous

students in many parts of the country would not engage without professional support, which has not been forthcoming from most jurisdictions. Consequently, they said they did not feel valued by ACARA and observed that ACARA was the most frustrating body with which they had ever been involved.

Their broader concerns also included the inordinate choice offered in the curriculum relating to Indigenous history, which would allow teachers to avoid key content. They argue that Australians will not engage with Indigenous history in any deep and meaningful way if this approach is taken.

A major group of special education educators pressed ACARA to engage in deeper thought regarding the curriculum design for students with disabilities and special needs, but report that their efforts were met with conflicting viewpoints. After some members threatened litigation against ACARA, all work in this area was stopped and ACARA refused to give further consideration to the issues and suggestions which had been raised.

Many more respondents to this Review, including even those who were satisfied with the quantum and frequency of consultation, considered that their views fell on deaf ears in the scramble to meet deadlines. They believed that the fault lay in the process. Some said that there was a lack of transparency because while ministers were listened to, this was not the case for other stakeholders who were not given access to the ministerial views conveyed to ACARA. Subject specialists claimed that they never even met curriculum writers face to face. Indeed, the curriculum writers come in for considerable criticism as they were seen to be more interested in just meeting deadlines and filling silos, rather than ACARA engaging in proper full consultation. Some respondents perceived that New South Wales and Victoria dominated the consultation process and other state and territory jurisdictions were largely ignored. One other jurisdiction said that it was very aggrieved that repeated submissions to ACARA on various issues were repeatedly ignored.

Issues not addressed by ACARA

Submissions to this Review and the consultation process have identified issues or viewpoints that were conveyed to ACARA, but are claimed to have been ignored, or not addressed, or given no feedback at all. Many of these respondents have claimed that the typical mode for ACARA was to 'note' a concern or issue but either give no feedback or not address the matter at all. Occasionally it would be shunted back to schools as a possible component of their 20 per cent notional weighting of the curriculum initiated and developed at the school level.

The topics of concern included many of the issues mentioned above which were repeatedly put to ACARA with no satisfactory response. These included the impossible deadlines that prevailed throughout the whole process preventing proper discussion and attention to concerns which were raised; failure to proceed from the Melbourne Declaration to a vision statement on education and curriculum before commencing development of the curriculum; overcrowding in all its dimensions including failure to keep aware of the big picture and quantum of content as each learning area was rolled out, with no overall framework document; and failure to begin with classroom considerations.

How the shaping papers were developed seems to have been a mystery to most of those engaged in ACARA's constituency and there is widespread agreement that the shaping process did not take account of all the contextual issues of which a teacher would be aware. This was symptomatic of a

lack of attention to implementation aspects. APPA has been the most vocal on this score as part of their advocacy for a slimming down of the content, pointing out that primary teachers have traditionally taught in an integrated fashion – especially in the early years – rather than by discrete learning area. They also pointed out to ACARA that some subject matter was being introduced at too early a level; economics and business was often mentioned in this respect. Financial literacy was considered too complex for the level of its introduction. Their voice was joined by others who disputed the placement of various subject matter, with some claiming that the first two to three years of school should focus entirely on literacy and numeracy. The difficulty of shortages of certain teachers, particularly for languages in regional areas, was repeatedly mentioned but ignored.

APPA took this whole argument a step further in saying that ACARA should also have addressed pedagogy, as well as content, by means of guidance, resource material, and ideas regarding an holistic approach to teaching combining integration, balance and skills. They would have welcomed a spectrum and a repertoire of pedagogic skills. They even advocate syllabus material that would clearly indicate which elements were compulsory and which were not. Their point is that the Australian Curriculum may allow these aspects but it does not facilitate them. Moreover, they believe that the Australian Curriculum website is too hard to navigate for teachers and is not teacher-friendly. Since there is no consistent frame that exists over all subjects, primary teachers cannot see the link, and also there is no consistency in the structure of subjects to help primary teachers perform the integration.

The lockstep nature of the sequencing within learning areas was considered inappropriate for many regions and groups including regions with small schools characterised by multi-level classes, classes with children with special needs, Indigenous communities, and other socioeconomically disadvantaged groups. Their pleas to ACARA seem not to have been heard or acknowledged.

Parents and teachers of students with special needs reported frustration with ACARA over their concerns that the linear progression of content and associated standards was not appropriate. They claim that ACARA said that the general capabilities were easier for this group, but this was not so. Where some concession was made, it was to only the lowest level of disability in terms of the general capabilities and so were not fully accessible for a teacher. ACARA is reported to have almost adopted the Victorian flexible approach but the composition of the consultation group changed, with no reason given, and this move fell through. These parents state quite clearly that the Australian Curriculum is not what was promised to them.

Likewise jurisdictions with large Indigenous populations in regional and remote locations argued that there was too much content, that the lockstep design of the content was inappropriate, and that the levels of content and attainment expectations were too high, and required more flexibility. Rural schools, while probably more supportive of a national curriculum than urban ones, believed that there was too much content and not enough professional development provided by educational authorities to enable them to cope. It is claimed that all these points were not addressed.

The reverse situation seems to have occurred regarding civics education. Complaints were made that the civics curriculum had been confined to certain years and that this was one area where there was a demand for more rather than less content. But the complaints went unheeded.

Time allocations to learning areas often figured in responses, and although it is generally accepted that ACARA's indicative time allocations were meant to be notional, these were considered to be out of step with classroom practice and, of course were related to the broader question of overload in general. The 80:20 split between the Australian Curriculum and curriculum, including extracurricular activities, developed at the school level also came under fire – some claiming the Australian Curriculum itself occupied 120 per cent of the school week. Sectors and schools with their own culture, specialist programs, and extracurricular activities argued that the notional 20 per cent did not allow them enough time or space to continue to focus on aspects in which they had traditionally offered a distinctive approach to schooling.

Some business representatives have claimed that the whole Australian education system has historically been biased against business, and in the school curriculum the contribution of industry to the nation has been neglected; they say this has continued in the Australian Curriculum. The importance of entrepreneurial endeavour rates barely a mention across the learning areas. A national peak business body also offered the opinion that Australian students are being forced to choose too early in terms of curriculum offerings. In this broad context it is pertinent to note that the Australian Association of Mathematics Teachers (AAMT) was particularly aggrieved that ACARA summarily dismissed their request for development of a specific mathematics subject to lead into the vocational educational pathway in schools. And various submissions argue that they received no adequate response as to how vocational education and training programs would be incorporated into the Australian Curriculum.

Implementing the Australian Curriculum

This Review has endeavoured to analyse the implementation of the Australian Curriculum and to ascertain, in particular, the extent to which it has been modified and reshaped when being implemented.

If the definition of a national curriculum includes that it must be implemented comprehensively, with certainty, and consistently, then Australia does not currently have a national school curriculum.

We became very aware of this when our consultations began to produce responses from key education authorities and teachers, both government and non-government, in describing how they and their schools had introduced the Australian Curriculum into their current curriculums. They used words and phrases such as:

- 'adopted' and 'adapted as necessary'
- 'map' and 'gap'
- 'dumped' it into the existing curriculum
- 'placed our own skin over it'
- 'selectively adopted it'
- 'since parts of it are still contested decided to wait and see what to adopt'
- 'incorporated'
- 'integrated'
- 'paring back Phase One to Core and Elective, even though we have accepted Phase One'
- 'AusVELS allows teachers to modify content'
- 'cross-curriculum priorities are mandatory'

- ‘cross-curriculum priorities are optional’.

The formal situation

This pattern of response is not surprising given the extremely fragmented and loose arrangements which prevail across the nation within a federal system of governance.

Needless to say we understand that curriculum implementation, like many aspects of public policy, will encounter key challenges which face all such endeavours in the Australian context. One is the sheer complexity of operating in a large continent which often results in interpretations, perceptions, and even meanings, being given to the policy at the point of delivery, which are different from those which were intended at the centre.

This may arise because of the nature of the local context and the belief of service deliverers that the policy as stated is unworkable in their situation. Or it may be simply be a different meaning being attributed to the wording of the policy, or it may arise from a realisation that local deviance from expectations is unlikely to be detected.

Secondly, Australia’s federal system requires that any policy which requires collaboration between national, state and territory jurisdictions will be characterised by tension over strict adoption and enforcement, especially in an arena like school education, over which the states and territories have functional sovereignty under the Constitution.

Thirdly, all policies have to go through various ‘filters’ in their implementation, but this is far more pronounced in the case of school education which, in terms of national policy and associated funding, cascades through Commonwealth Government – ministerial councils – the Australian Education, Early Childhood Development and Youth Affairs Senior Official Committee (AEEYSOC) – ACARA – state and territory governments and their associated or adjunct curriculum authorities – government, independent, and Catholic sectors – schools – and classrooms.

Fourthly, the process is made even more complex if any sector practices an approach of subsidiarity whereby key decisions are devolved to the level closest to the point of delivery. This is true of some school sectors which have emphasised a school-based curriculum, and may well increase under the current trend towards greater school autonomy.

Nonetheless, the implementation picture is extremely confusing and provides little assurance that the Australian Curriculum is being implemented, as intended, across the nation. The situation would appear to be the following:

- The Commonwealth *Australian Education Act 2013* has a requirement that jurisdiction receiving national school funding are required to certify that they are implementing the Australian Curriculum. There appears to be little follow-up on this – jurisdictions simply sign an agreement. This seems to be quite a serious defect since billions of taxpayers’ dollars are being given without due implementation and accountability checks. We address this in the chapter on governance.
- The issue is complicated by the previously existing National Plan for School Improvement where some states (known as participating states), signed a new National Education Reform Agreement with the previous federal government. These agreements required implementation of all the

Australian Curriculum for Foundation–Year 10 by 2016, and Year 11 and 12 by 2018. Jurisdictions signing up to the National Education Reform Agreement developed action plans against which they would have to report; the implementation of the Australian Curriculum was included in these action plans. Given that no further F-10 curriculum has yet been agreed to beyond those already broadly implemented for English, mathematics, science and history, and geography which is yet to commence broad implementation, these deadlines are now moot.

- To date no methodology has been finalised for ensuring compliance with the requirements of the Australian Education Act. Some amendments to the Act have been flagged for this term of government.
- ACARA does not have the remit to report on the implementation of the Australian Curriculum. In the past, states and territories have provided ACARA with their implementation schedules in order to show their progress and timelines for implementing, but ACARA does not monitor or report on them. ACARA did perform an exercise of establishing the implementation of the first four curriculum areas to see how states and territories were progressing towards ‘substantial implementation by 2013’. This was done by seeking advice from each jurisdiction on their implementation and then creating a table. However, jurisdictions did not like ACARA doing this, so ACARA then only linked to each jurisdiction’s website which outlined their own implementation progress. There has been a strident argument from states and territories that implementation is their domain and ACARA is not an accountable body for implementation.
- There is no data on how each state and territory ensures that the Australian Curriculum is implemented other than requiring sectors to sign off and then operating through the school accreditation process of each jurisdiction. Curriculum requirements cannot be set by the Commonwealth or states and territories separate from the school registration process, although state and territories could presumably do so for their own government schools.
- Independent and Catholic sectors do not have a systemic approach to curriculum implementation. No comprehensive data is available on implementation in these sectors. Most state and territory government jurisdictions have a cross-sectoral implementation committee that supports implementation on which the non-government sector is represented. However, as representatives of independent schools pointed out, independent schools are by their nature independent and school authorities make their own decisions on implementation – although they would be tied to the timeframe of the registering body (i.e. the state or territory education authority). Systemic Catholic education schools are supported by state Catholic Education Commissions and/or Diocesan Education Office that impose a degree of oversight.
- A pertinent critique regarding implementation is offered by BOSTES NSW in their submission to this Review where they observe that the wording in the ACARA Act says that the organisation’s function is to ‘develop’ and ‘administer’ a national curriculum, but this has produced a lack of clarity. Moreover, ACARA’s curriculum development process was not designed to complement the necessary role of BOSTES NSW and was therefore not as efficient or effective as it could have been. As a national body without authority under New South Wales legislation, ACARA does not have a direct relationship with schools, and communication by ACARA directly to schools creates significant confusion with regard to the status of the Australian Curriculum in New South Wales.

The following section gives an overview of the current status of the rollout of the Australian Curriculum, despite the decision of some jurisdictions to delay the rollout of some content.

Australian Capital Territory

The Australian Capital Territory has not developed syllabuses in addition to Australian Curriculum documents. Using the Australian Curriculum as a basis, teachers develop teaching and learning programs to respond to the needs of their students. Other learning areas still being developed in the Australian Curriculum continue to be taught from the Australian Capital Territory Curriculum Framework, *Every Chance to Learn*.

New South Wales

BOSTES NSW has developed syllabuses for the Australian Curriculum so that it is underpinned by detailed content. The syllabuses are developed for government and non-government schools, as specified in the *Education Act 1990* (NSW).

In the process of integrating the Australian Curriculum for use in New South Wales schools, a number of key changes were made. These included presenting the syllabuses in a two-year stage structure, and not a single-year structure as developed by ACARA. The new New South Wales K–10 syllabuses also supplement the mandatory Australian Curriculum content descriptions with additional explication for teachers, as well as additional content direction.

Northern Territory

The Northern Territory has not developed syllabuses in addition to Australian Curriculum documents. The jurisdiction has, however, put the Australian Curriculum into a scope and sequence document, by developing the Northern Territory and Multiple Year Level Scope in English and Maths and Sequences to inform the whole school, year level and classroom plans. Using the Australian Curriculum as a basis, teachers develop teaching and learning programs to respond to the needs of their students. Other learning areas still being developed in the Australian Curriculum will continue to be taught from the Northern Territory Curriculum Framework.

Queensland

Queensland has not developed syllabuses in addition to Australian Curriculum documents. Education Queensland does, however, support teachers to implement the Australian Curriculum through the development of the Curriculum into the Classroom (C2C) resource, which delivers a comprehensive set of whole-school and classroom planning materials for single-level and multi-level classes, students with disability, and for students who study through the schools of distance education. The resource has been designed as a starting point for school curriculum planning, and can be adopted or adapted as necessary. Using the C2C and the Australian Curriculum as a basis, teachers develop programs to respond to the needs of their students. Other learning areas still being developed in the Australian Curriculum continue to be taught from the Queensland Curriculum.

South Australia

South Australia has not developed syllabuses in addition to Australian Curriculum documents. Using the Australian Curriculum as a basis, teachers develop teaching and learning programs to respond to the needs of their students. Other learning areas still being developed in the Australian Curriculum will continue to be taught from the South Australian Curriculum Standards and Accountability Framework.

Tasmania

Tasmania has not developed syllabuses in addition to Australian Curriculum documents. Using the Australian Curriculum as a basis, teachers develop teaching and learning programs to respond to the needs of their students. Other learning areas still being developed in the Australian Curriculum will continue to be taught from the Tasmanian Curriculum.

Victoria

The curriculum framework for Victoria is known as the AusVELs for Foundation to Year 10. The Victorian model incorporates the F-10 Australian Curriculum for English, mathematics, history, and science within the curriculum framework first developed for the Victorian Essential Learning Standards (VELS). AusVELS currently uses an 11-level structure – rather than a year structure – to reflect the design of the new Australian Curriculum while retaining Victorian priorities to teaching and learning. The VELS framework continues to be the conceptual basis of the curriculum; however, specific content related to each domain is gradually being replaced with Australian Curriculum content.

In a further elaboration provided to the Review, the Secretary of the Victorian Department of Education and Early Childhood Development and the Chief Executive Officer of the Victorian Curriculum and Assessment Authority (VCAA) say:

The Australian Curriculum has been incorporated into the Essential Learning Standards to ensure that Victorian schools have a single source of authority for the whole curriculum and don't have to move between the Australian Curriculum and the VELS. In adapting the curriculum for AusVELS the large majority of content and achievement standards in the first four areas have been incorporated without change. Victorian schools have been implementing this in good faith since the beginning of 2013. There has been very little negative feedback – most schools have been proceeding with implementation. This has been supported by the development of Curriculum and Reporting Guidelines, published in February 2014 and examples of school curriculum planning resources. Victorian schools understand that AusVELS is the framework within which they develop their own specific teaching and learning programs.

The changes we made were to incorporate more active use of technology and be clearer about mathematical thinking in Maths, to raise the standard a little in middle years' science, to set out the English area in the currently reported modes of reading, writing, speaking, and listening. At a structural level, the AusVELS downplays ACARA's so called 'three dimensional model' of the curriculum. The cross-curriculum priorities are simply included in the learning areas where they most appropriately fit – they are not a fundamental construct of the curriculum and are not reported on separately.

In our view the ages and stages of learning are much more important in a curriculum model and our reporting requirement reflect this. ie the F–4 years focus on fewer domains for reporting to reflect the priority on literacy, numeracy, inter-personal development, physical development, and artistic expressions in the early years. In Years 5–8 the curriculum broadens and more specific areas are introduced for reporting and in Years 9–10 more

*specialisation and choices becomes available. The Australian Curriculum model promoted by ACARA is too monolithic in its requirements for everyone to cover everything at all levels.*¹⁶⁹

Western Australia

Western Australia has incorporated the Australian Curriculum into the framework known as the Western Australian Curriculum and Assessment Outline. For English, mathematics, science, and history the curriculum content and achievement standards within the Australian Curriculum and Assessment Outline are the same as the Australian Curriculum.

It is worth noting that submissions and comments provided to this Review have emphasised the considerable assistance which is given regarding implementation of the Australian Curriculum by those jurisdictions who make good use of the Scootle website so that resource material and approaches and ideas can be shared, provide syllabus or other documentation that helps teachers translate the Australian Curriculum into their school context, and professional development for teachers on the Australian Curriculum. It is widely recognised that today's teachers often do not have curriculum building skills, and this kind of support is crucial for successful implementation of the Australian Curriculum in the classroom. There would appear to be considerable scope for leadership from ACARA and inter-jurisdictional collaboration in this endeavour.

However, we remain concerned regarding the wide range of perceptions which seem to exist across the nation about the significance of the Australian Curriculum and the intention of all state/territory jurisdictions to implement it. We have encountered school principals and teachers, and even heads of school sectors, who believe it is their prerogative to pick and choose which elements of the content they choose to adopt in their schools. While it is accepted that pedagogy and even flexible structuring and delivery aspects are the prerogative of each school setting, our understanding is that this was never intended for actual content. One response we heard was that the state jurisdiction had sent advice to schools that a tolerance of 10–15 per cent from content in the Australian Curriculum was acceptable. In another jurisdiction we heard from that state's studies authority that they had no power to, and no way of, monitoring the implementation of the Australian Curriculum at school level despite the fact that the state had signed off that it was committed. The same body pointed out that in relation to the senior secondary Australian Curriculum the relation of content to achievement standards was too imprecise so they have done their own adaption – they would have preferred ACARA to have done this.

There is considerable confusion across Australia as to the consistency, or even the meaning of, the notional A to E achievement standards associated with the Australian Curriculum. This is an aspect vital for parents and teachers anxious to ensure each individual student's progress, as well as facilitating mobility of families and teachers around the nation, which is meant to be one of the key advantages of having a national curriculum.

We are also not convinced that all state accreditation bodies are making rigorous attempts to ensure compliance of all accredited schools with the delivery of the content of the Australian Curriculum. Regime practices vary across the nation in a spectrum which ranges from what seems to be just a loose sign-off from each school, to some examination of the systems in the school, to a formal

¹⁶⁹ Bolt, R, & Firth, J 2014, Letter to the Review of the Australian Curriculum, pers. comm.

inspection of the school's curriculum delivery including classroom observations and occasionally interviews with parents.

Conclusions

Despite some doubts and resistance there was, and still is, reasonably widespread support for a national curriculum, the factors most often mentioned being mobility, consistency, lifting aspirations, creating equity, and filling gaps and lack of rigour in some current curriculums, and the potential provision of improved resource and teaching material. However, it transpires that there were widely varying concepts of the nature of a national curriculum or the very concept of curriculum itself. Some saw it as a quasi-syllabus, others a road map or guide or a 'bit of a framework'; others described the content material as just the 'stuff' which gets used as capabilities are addressed.

In retrospect, it is evident that there were a number of formative influences which shaped attitudes to the development of the Australian Curriculum. Support came from many smaller jurisdictions and those who had possessed only sketchy curriculum, or no syllabuses, or with memories of bad experiences such as Outcomes Based Education inspired curriculum. The main resistance came from New South Wales and Victoria who believed they already had rigorous curriculum. The former advocates of purely school-based curriculum were not too concerned because they believed the national curriculum would not occupy much space and be optional. Parents welcomed the prospect of consistency, mobility, and more resource material.

There were very different perceptions as to whether it would be mandatory – most seem to have believed not.

The vast majority of those involved in ACARA's development process agree that the organisation made a significant magnitude of effort to consult; indeed many felt burnt out by the process but the quality of the consultation was often criticised.

The most fundamental criticism related to the absence of an educational foundation for the curriculum. Those who hold this view believe either that the Melbourne Declaration was inadequate or was not properly followed, especially as to the emphasis on values which should underpin a curriculum. Some point to a missing step which should have occurred whereby ACARA, if it were to be a truly educational body, should have paused to consider the aims and values of the curriculum and the purpose of education, with the aid of a forum of educators, rather than just rushing to develop the curriculum with the Melbourne Declaration as the sole basis.

This criticism is related to another widely held view – that the development process proceeded without an overall framework to show how the various components and learning areas, space and notional allocations, and potential for pedagogy would all fit together. It was, in the opinion of some expert teachers like trying to fit the pieces of a jigsaw together without having the picture in front of you.

Even the supporters of the development process agree that it was too rushed and relied too much on compromise, which was not always based on educational grounds. Most agree that this led to overcrowding of the curriculum, which was exacerbated by the fact that the curriculum was designed in a top-down approach rather than starting from the place and challenge of the teacher in

the classroom in the typical school day or week. This also meant a lack of consideration of the way primary teachers actually teach, the inappropriateness of lockstep design, complexity of multi-level classes, student diversity, and regional and remote locations with difficulties of attracting and retaining teachers.

Some groups reported that they were not properly consulted and two jurisdictions reported that repeated requests fell on deaf ears or were simply 'noted'.

The process of developing the cross-curriculum priorities has been singled out for significant criticism. While most are happy with the three topics there is concern among educators that they seem to have been designed as 'add-ons' rather than being properly integrated into disciplinary learning areas but only where appropriate. According to many subject matter specialists, they have crowded out other vital aspects which should be in the content of the Australian Curriculum – particularly aspects of the nation's Western cultural, social and economic heritage. Much of the confusion and even ridicule which has followed the curriculum has been owing to the failure of ACARA to clarify the question of whether the cross-curriculum priorities were mandatory. As one experienced curriculum expert put it – it was a 'wishy-washy approach'.

Governance and processes of operation have come under some fire as well, especially the lack of external and internal transparency with ministerial directives and intervention not shared with all participants, and lack of interaction between consultative committees and writers. The reasons for key decisions as to content have not been given. Also, it has never been made clear how the international benchmarking exercise has been used.

There is widespread variation in the implementation of the Australian Curriculum across the nation. Indeed, in the process of introducing the curriculum, jurisdictions, sectors, and schools, often seem to be adopting a selective approach to content. This seems to flow from confusion as to whether the Australian Curriculum is mandatory, and this in turn results from very loose oversight from the Australian Government and its funding approval process, through state and territory authorities and their school certification procedures, through sector peak bodies and to individual schools who are adopting while adapting.

In short, under current arrangements, it is not possible to be sure that the content of the Australian Curriculum, as intended, is being delivered in all Australian schools. There is confusion regarding the mandatory nature of the content and some significant modification is occurring. It leads to the question of whether we really have a national curriculum if we cannot be confident that it is being implemented as intended.

All of these factors need to become lessons for the next round of curriculum development. We have outlined the results of our research on sound curriculum design principles in Chapter Eight on governance.

Chapter Six: The structure of the Australian Curriculum

This chapter of the report provides a summary of the key themes and issues that have arisen from the submissions to the Review, the consultations undertaken, and the results of extensive research. These themes and issues arise directly from the terms of reference for this Review, but we have also signalled other topics that have been conveyed. The material here complements the viewpoints received regarding the curriculum development process and the role of a national curriculum authority, which are addressed in other sections of this Report.

Concepts of curriculum

As outlined in Chapter One of this Report, there are various ways of conceptualising a curriculum. The VCAA defines the curriculum as ‘a statement of the purpose of schooling’ that details ‘what it is that all students have the opportunity to learn as a result of their schooling’.¹⁷⁰

The BOSTES NSW adopts a more expanded definition when it states that the curriculum is understood as:

*statements of what school students are expected to learn and be able to do; content which describes what is to be taught, organized primarily into subject disciplines or key learning areas; standards which identify the level at which students demonstrate that they have acquired knowledge and understanding; and stimulus and support materials to assist teachers and students including with regard to assessment.*¹⁷¹

As such, a curriculum provides a ‘road map’ of what students should encounter when at school, how they should be assessed and what constitutes expected outcomes.

As also noted in Chapter One, when discussing the curriculum it is important to differentiate between official curriculum documents, a school’s co-curricular activities and the ‘hidden’ curriculum that relates to the way a school is organised and managed. It is also important to note the distinction between the intended curriculum as opposed to what is actually implemented in the classroom and the learning outcomes achieved by students.

The research conducted for this Review has shown that the most common way in which curriculum is defined is by the effects of the curriculum. The three main approaches taken are defining the curriculum by ideal effects (what could be taught), mandated effects (the expectation of what will be taught), or realised effects (what is taught or what is learnt). Many authors endeavour to discover the core purposes of curriculums and these focus largely on the distribution of information about teaching aims, content, and practices.

¹⁷⁰ Victorian Curriculum and Assessment Authority 2014, *F–10 curriculum planning and reporting guidelines*, p. 7.

¹⁷¹ Board of Studies, Teaching and Educational Standards 2014, Submission to the Review of the Australian Curriculum, p. 3.

In terms of ideal effects an interesting example is:

*The intended curriculum is an educational policy instrument that defines the learning that is relevant to society and individuals, but by itself is nothing more than a document that sets objectives, contents and expected outcomes. To some extent it represents for the education system what a constitution is for a democracy.*¹⁷²

Those who consider the purpose of a curriculum speak in this kind of vein:

*Curriculum specifies what kind of knowledge, skills and values should be taught to students and why that is so, but it may also specify the desired ways of how students should be taught.*¹⁷³

The same author also observes that curriculum documents tend to reflect the cultural heritage of a society.

Few submissions expressed an opinion on the concept of a curriculum as most were preoccupied with the Australian Curriculum. However, the NCEC defined curriculum as a base document that allows schools and teachers to provide relevant learning programs for students. The NCEC adds a concern that in Australia the term 'curriculum' has been circumscribed to knowledge, content and achievement standards only, and this does not align well with common state definitions and has pigeon holed and restricted the work of ACARA whose curriculum was framed by learning areas rather than broad educational aims.

The BOSTES NSW submission to this Review makes the point that the success of any intended curriculum rests, in a large part, on 'its clarity and utility'. The submission also makes the point that any intended curriculum should be 'explicit' and focus on 'subject content' instead of 'general capabilities and cross-curriculum perspectives'.¹⁷⁴

As noted by the report reviewing the English National Curriculum, 'developmental aspects and basic skills are more crucial for young children, while appropriate understanding of more differentiated subject knowledge, concepts and skills becomes more important for older pupils'.¹⁷⁵

The same report justifies such an approach on the basis, in relation to the primary school years, that high-performing jurisdictions 'focus on fewer things in greater depth'.¹⁷⁶

Professor Yates observes that the role of school curriculum has changed over time, and has moved in most cases from being professional documents aimed at giving some basic guidance to teachers and produced largely by education departments, to outward facing documents, designed for public

¹⁷² Opertti, R, Amadio, M & Tedesco, JC 2013, The Curriculum Debate: Why It Is Important Today, *Ibe Working Papers on Curriculum Issues*, no. 10, UNESCO International Bureau of Education, p. 8.

¹⁷³ Kärkkäinen, K 2012, *Bringing about curriculum innovations: implicit approaches in the OECD area*, OECD Education Working Papers, no. 82, OECD Publishing.

¹⁷⁴ BOSTES NSW 2014, Submission to the Review of the Australian Curriculum.

¹⁷⁵ Department for Education 2011, *The Framework for the National Curriculum, A Report by the Expert Panel for the National Curriculum Review*, Department for Education, London.

¹⁷⁶ *Ibid.*, p. 9.

consumption.¹⁷⁷ For Oates, progression of curriculum content ought to be dictated by our understanding of cognitive development.¹⁷⁸

The concept of a national curriculum

Many viewpoints on this topic were also covered in the section of this Report on the development process of the Australian Curriculum. We have observed that there was:

- Widespread acceptance of the need for a national curriculum. Even those who had originally opposed such a move had mostly now accepted the initiative.
- Advantages which were cited included:
 - lifting aspirations of all students
 - expressing a national identity and unity
 - maintaining high, rigorous common national standards
 - achieving equality of opportunity and entitlement for all students
 - facilitating mobility of students and teachers to continue with school education across the nation as well as through consistency in curriculum content
 - economic benefits of pooling resources and creating consistency across state borders. Bruce Wilson has stated that a national curriculum would 'give us the chance to put an appropriate level of resources into developing the best curriculum we can, rather than scattering our efforts'.¹⁷⁹
- Disadvantages which were mentioned largely revolved around fears that a national curriculum would stifle local choice and flexibility for schools in designing their own curriculum. The Institute of Public Affairs (IPA) strongly argued that school-based curriculum development would be preferable to a national curriculum, primarily because they believed that it was not possible to have a government-endorsed curriculum that was not politicised, stating 'any National Curriculum ... is likely to be both contentious and unstable for as long as it continues to exist'.¹⁸⁰

However, there is a very large discrepancy in what our respondents see as the concept of a national curriculum. As has been mentioned earlier, some see it as a mandatory core or almost a quasi-syllabus, some regard it as a road map, and yet others see it as an à la carte menu or even a smorgasbord where you can choose what is to your taste or takes your fancy.

Some of the key conceptual aspects raised with us included:

- The need for an overarching big picture document or framework with broad guidelines that is not too prescriptive.
- The cultivation of perspectives, values, and attitudes. Others add 'all aspects of a child's development including spirituality'.
- A distinction between a curriculum, syllabus, and program – though there is a division of opinion as to which of these best describes the current Australian Curriculum.

¹⁷⁷ Yates, L, University of Melbourne, 2014, Submission to the Review of the Australian Curriculum

¹⁷⁸ Oates, T 2010, *Could Do Better: using international comparisons to refine the national curriculum in England*, Cambridge Assessment.

¹⁷⁹ Wilson, B 2006, *The Curriculum for Public Confidence*, Centre for Policy Development, viewed 30 July 2014, can be accessed at: <http://cpd.org.au/2006/12/the-curriculum-for-public-confidence/>

¹⁸⁰ Institute of Public Affairs 2014, Submission to the Review of the Australian Curriculum.

Others see a national curriculum as content plus achievement of objectives. Many want it to be future looking. Some say it needs to distinguish between ‘vocational practicality’ and ‘Renaissance idealism’. The Australian Professional Teachers Association (APTA) believes that a quality curriculum should:

- have clear aims
- have relevance to students’ current and future lives, environments and aspirations
- develop the skills and knowledge necessary for a socially and economically prosperous future while respecting the cultural history and traditions of the past
- be equitable and inclusive, by taking into account the diversity of learners and learners needs
- be learner-centred and learner-friendly, by being meaningful, well sequenced and contributing to personal development and life skills
- be open and flexible so that it can address new challenges and opportunities
- be coherent and consistent across the different stages of schooling and areas of learning.¹⁸¹

The Review also received opinion from a number of respondents who pointed out that a national curriculum that is not mandatory and not fully implemented is not really a national curriculum at all, and they place the Australian Curriculum in this category.

Professor Yates points to the confusion which has arisen from two differing purposes that have been conflated by the press:

- having common standards in order to improve the overall quality of learning and capability of students
- selecting elements of content in order to make some deliberate choices about what young people should know about, and to develop strong citizens and confident young Australians in the 21st century.¹⁸²

As for curriculum content, there are some agreed opinions on structural aspects for example what has been described severally as ‘core, compulsory, and consistent’, or ‘core-plus’, or ‘core’ to provide equity and so be ‘an entitlement curriculum’. A core is what all children should know and be able to do, and should be based on research and an educational framework. As a leading academic explained during our consultations, ‘Politics should play no part in development of a national curriculum’; professionalism in learning areas should be trusted to develop the best curriculum – the alternative would be to let educators do it, then it would be reviewed by academics, and then endorsed by politicians.

Most respondents acknowledged the differentiation between content and pedagogy and the majority opinion is that a national curriculum should address content; pedagogy is a matter for schools.¹⁸³

However, there are differences of opinion on the balance between core and elective, some favouring a maximum of 50 per cent of space for the core, others simply saying that the core should

¹⁸¹ Australian Professional Teachers’ Association 2014, Submission to the Review of the Australian Curriculum, p. 2.

¹⁸² Yates, L 2014, Submission to the Review of the Australian Curriculum.

¹⁸³ However, as noted later in this Report, the Australian Curriculum, on closer examination, does privilege a particular style of pedagogy associated with constructivism.

not be overcrowded. There is general agreement that this aspect needs urgent attention and clarification.

Research has uncovered some international comparisons that show that in countries which adopt a centralised approach, some prescribe curriculum content exclusively while others prescribe both content and pedagogy. But even then both schools and teachers are involved. No OECD member education system relies on a purely central or school-based approach in bringing about curriculum innovations. According to Kärkkäinen, 13 out of 26 OECD systems appear to rely more on schools than on a central authority to bring about curriculum innovations. Yet several – 8 out of 26 – appear to implicitly expect curriculum innovations to originate more from centrally driven processes. At the same time, five OECD countries have a mixed approach meaning that most innovations on what is taught to students are expected to originate from the central level, but schools are allowed autonomy to innovate on how students are taught.

Central curriculum can direct to various extents only what should be taught in schools or both what should be taught and how. On the one hand central curriculum can describe only general objectives and educational principles leaving significant room for curriculum decision-making by schools and teachers. On the other hand central authorities can be extensively engaged in defining the content of education by indicating aims, content areas, and minimum attainment targets with guidelines and examples of interpretation – sometimes in great detail.¹⁸⁴

As for specific items, this Review received a very large number of submissions from individuals and groups who advocated numerous individual topics or themes that should be included in core curriculum content, and they are revealed in the submissions which will be published separately. These submissions had a strong emphasis on the inclusion of moral and spiritual values and religions and belief systems, especially Christianity.

A more general suggestion was the view that only English, mathematics, and science should be core and other subjects, secondary ones.

With the exception of a number of subject associations, there is a fairly widespread agreement that the Australian Curriculum is not teacher-friendly or parent-friendly in its content or layout. Some jurisdictions and sectors have produced their own modifications or presentations to address this. Many of our respondents also expressed concerns regarding the uneven implementation of the Australian Curriculum in the various jurisdictions, leading to a lack of national consistency and commonality.

¹⁸⁴ Kärkkäinen, K 2012, Bringing about curriculum innovations: implicit approaches in the OECD area, *OECD Education Working Papers*, no. 82, OECD Publishing, p. 11.

Conclusions

Clearly, there are wildly varying conceptions of curriculum in Australia and abroad but there would seem to be a need to pursue some common capture of perceptions within Australia – especially the basic aims, values and principles, as well as the design and required implementation – before further curriculum is developed with the attendant consultation processes. The results of international benchmarking, outlined in Chapter Two should serve as a guide.

Robustness

In the context of the Review ‘robustness’ is defined as academic rigour, structure, sequencing, detail, clarity, succinctness and evidence of a foundation of aims, values and principles.

As noted in Chapter Two, nations and education systems around the world are benchmarking local curriculum against those enacted by stronger performing education systems, as measured by international tests, to ensure academic rigour. In relation to the Australian Curriculum, ACARA argues that it ‘reflects best practice nationally and internationally’ and that it sets expectations that are ‘comparable with those of the highest performing nations’.

Evidence supporting such claims rests primarily on a benchmarking project commissioned by ACARA titled *Curriculum Mapping Project Phase 4a Comparing International Curricula against the Australian Curriculum*.¹⁸⁵ The project benchmarked the Australian English curriculum against that of Ontario (Canada) and New Zealand, the mathematics curriculum against Singapore and Finland, and the science curriculum against Ontario and Finland.

While extensive and useful, the ACARA-commissioned benchmarking project is flawed in a number of areas. No mention is made of previous Australian benchmarking projects; nor is there evidence that the authors attempted to identify and learn from overseas examples when identifying the relevant methodology to evaluate what constitutes a rigorous, robust curriculum.

When analysing and comparing the various curriculum documents no attempt was made to identify or evaluate the implicit and explicit assumptions related to the epistemology and pedagogy associated with the chosen curriculum.

As detailed later in this Report under the heading ‘Pedagogical approaches’, it is generally accepted that the Australia Curriculum, and most state and territory curriculums, either implicitly or explicitly, embrace a constructivist model involving a child-centred, process- and inquiry-driven approach. Based on identifying the characteristics of stronger performing education systems it would be good to know whether this is a strength or weakness and what other systems emphasise in terms of theories related to effective teaching and learning.

The central focus of the ACARA-commissioned study is to identify the extent to which Australian Curriculum documents are aligned to those of other education systems. Areas covered include comparing content (knowledge base and topics), what is described as cognitive demand and what students are expected to do with particular knowledge.

¹⁸⁵ Jane, G, Wilson, B, & Zbar, V 2011, *Curriculum Mapping Project Phase 4a, Comparing International Curricula against the Australian Curriculum*, ACARA.

Judging whether curriculum documents are aligned, while a worthwhile exercise, is of limited value if judgments are not made about the quality of the curriculum. The authors note that, 'higher or lower levels of alignment are not in themselves measure of quality'.¹⁸⁶

The criteria used to select overseas systems included mandatory and desirable characteristics. Mandatory characteristics included being written in English, mandatory or near mandatory primary and secondary education, comparable years of schooling and the chosen system being willing to assist in the benchmarking project. Desirable characteristics included having similar starting ages to Australia, preferably having a national curriculum, having a mainstream curricula catering for a wide range of normal performance divided in year levels, having 'a degree of success' in international tests and being written in a 'comparable style'.

Excluding curriculum frameworks or syllabuses because they are not written in English ignores those developed by many top performing jurisdictions such as Japan, the Republic of Korea and Shanghai (China). When benchmarking intended curriculum syllabuses and frameworks it is in many ways irrelevant whether countries chose to participate or not, and success in international tests should be mandatory, not desirable.

Doubts about ACARA's claim that the Australian Curriculum is world class are mirrored in an article by Dr Michael Watt published in the journal *Principal Matters*. As a result of his analysis, he concludes:

*The findings of this review show that lack of data existing at the present time concerning the rigour of the content and achievement standards against international benchmarks makes it difficult for school leaders and educators to judge whether the Australian Curriculum is world-class.*¹⁸⁷

Notwithstanding criticisms of the benchmarking project commissioned by ACARA, it should be noted that many submissions stated that the Australian Curriculum, as currently being implemented, is robust and rigorous. Professor Murray Print from the University of Sydney states:

*In summary, the process employed by ACARA in developing the Australian Curriculum could be described as world's best practice in constructing a school curriculum for the 21st century. The development of the subject-based curricula was comprehensive, rigorous, inclusive and balanced consolidated through an extensive, multiple consultation process.*¹⁸⁸

The submission from the Tasmanian Department of Education is also positive when it writes:

We have been supportive of the extent of the consultation processes initiated by ACARA. They encompassed the education sector, but also key stakeholders in the community, business and professional associations. The breadth of consultation and the responsiveness of ACARA to feedback have led to a robust and independent curriculum.

¹⁸⁶ Jane, G, Wilson, B, & Zbar, V 2011, *Curriculum Mapping Project Phase 4a, Comparing International Curricula against the Australian Curriculum*, ACARA, p. 15.

¹⁸⁷ Watt, M 2013, 'How can we ensure that the Australian Curriculum is world-class?', *Principal Matters*, vol. Spring 2013, Victorian Association of Secondary School Principals, p. 4.

¹⁸⁸ Print, M, 2014, Submission to the Review of the Australian Curriculum, p. 1.

The submission from the Australian Council of State School Organisations (ACSSO), in relation to the quality of the Australian Curriculum, mirrors the positive nature of the two submissions previously referred to when it states:

*ACSSO is positive about the Australian Curriculum in its current format. We are of the belief that the curriculum is well balanced, relatively independent and a rigorous discipline-based 21st century curriculum.*¹⁸⁹

When looking at the analysis undertaken by the subject matter specialists commissioned as part of this Review to evaluate the Australian Curriculum and to compare it against overseas curriculums it is also true that the reports, generally speaking, are positive. Notwithstanding this generally favourable view, as noted in Chapter Seven of this Report and as will be mentioned below, there are a number of concerns related to particular subjects.

The English curriculum is criticised for not adapting a robust and evidenced-based view of teaching reading in the early years and a number of concerns are expressed about how literature is dealt with; especially poetry. Professor Barry Spurr argues that the English curriculum is ‘insufficiently robust, particularly in the areas of academic rigour, structure and sequencing, detail, clarity and foundational aims, and the values and principles of the discipline ...’.¹⁹⁰

The evaluation of the mathematics curriculum by Dr Max Stephens, while generally positive in relation to the curriculum’s robustness, balance and flexibility, also raises a number of concerns. The content elaborations, at times, suffer from lack of clarity and are considered uneven in their quality. Balanced against this is Dr Stephens’s observation that the general capabilities and achievement standards are worthwhile and an essential aspect of the mathematics curriculum.¹⁹¹

In relation to the arts curriculum, one of the subject matter specialists, Dr John Vallance, leaves no-one in any doubt when he writes ‘What I have seen of the Australian Curriculum suggests that it is characterised in general by a tendency towards the elimination of rigour’.¹⁹² The other subject matter specialist analysing the arts is more positive when she notes that the Australian arts curriculum has been internationally recognised as exemplary.

The analysis undertaken by the John Monash Science School (JMSS), while noting a number of areas for improvement, concludes that the science curriculum, generally speaking, is robust, balanced and flexible.¹⁹³ Professor Igor Bray, the second subject matter specialist, while noting some structural issues related to overcrowding, believes that the primary science curriculum is sound.¹⁹⁴

¹⁸⁹ Australian Council of State School Organisations 2014, Submission to the Review of the Australian Curriculum, p. 2.

¹⁹⁰ Spurr, B 2014, Subject matter specialist report on the Australian Curriculum: English, with particular attention to Literature, prepared for the Review of the Australian Curriculum.

¹⁹¹ Stephens, M 2014, Subject matter specialist report on the Australian Curriculum: Mathematics (Foundation to Year 6), prepared for the Review of the Australian Curriculum.

¹⁹² Vallance, J 2014, Subject matter specialist report on the Australian Curriculum: The Arts, prepared for the Review of the Australian Curriculum.

¹⁹³ John Monash Science School (JMSS) 2014, Subject matter specialists report on the Australian Curriculum: Science (Years 7 to 10 and Senior Secondary Biology, Chemistry and Earth and Environmental Science), prepared for the Review of the Australian Curriculum.

¹⁹⁴ Bray, I 2014, Subject matter specialist report on the Australian Curriculum: Science (Foundation to Year 6 and Senior Secondary Physics), prepared for the Review of the Australian Curriculum.

Mr Clive Logan, after his analysis of the Australian Curriculum: History concludes that ‘it is robust’ and writes that:

*There is a structure to the whole Foundation to Year 12 curriculum, a logical progression in skills and achievement levels and the organisation of the historical content and skills reflects the developmental stages of students. There is a breadth of information that gives a breadth of understanding, is not narrow in scope but exposes students to the world at large and Australia’s role in it.*¹⁹⁵

The second subject matter specialist evaluating the history curriculum, Associate Professor Greg Melleuish, suggests that the curriculum is not as robust as it might be, when noting that it fails to adequately deal with world history. Associate Professor Melleuish also argues that there needs to be more conceptual rigour in the curriculum – not enough emphasis is given the significance of Western civilisation and the failure to include liberalism as a progressive doctrine represents an imbalance.¹⁹⁶

Balance

In the context of the Review ‘balance’ is defined as a comprehensive inclusion of key core and basic knowledge, facts, concepts and themes, without bias regarding selectiveness of content and emphasis. A submission by Associate Professor Alaric Maude¹⁹⁷, when addressing the question of balance, differentiates between balance as (1) covering the major branches of a subject, (2) whether topics are dominated by a particular political ideology, and (3) whether the curriculum takes only one side in contentious issues.

As evidenced by the following, while a number of submissions argue that the Australian Curriculum is balanced, there are also a number that express concerns in key areas and aspects of the curriculum.

On the positive side, APPA conclude that ACARA and those writing the curriculum and managing the process ‘have done an excellent job of providing a balanced, measured and inclusive representation of the curriculum for Australian schools’.¹⁹⁸

The Australian Association for the Teaching of English (AATE)¹⁹⁹, in relation to how English as a subject is presented, argues that the curriculum is balanced and that it provides a sound and rigorous coverage of important knowledge and skills. The AEU is in no doubt about the benefits of the Australian Curriculum when it states, ‘Perhaps at no time in Australia’s education history has such “robustness, independence and balance” been manifest’.²⁰⁰

The Catholic Education Diocese of Parramatta, in relation to the Australian Curriculum’s implementation in New South Wales, also argues that the process has been ‘robust, independent

¹⁹⁵ Logan, C 2014, Subject matter specialist report on the Australian Curriculum: History, prepared for the Review of the Australian Curriculum.

¹⁹⁶ Melleuish, G 2014, Subject matter specialist report on the Australian Curriculum: History, prepared for the Review of the Australian Curriculum.

¹⁹⁷ Maude, A 2014, Submission to the Review of the Australian Curriculum, p. 8.

¹⁹⁸ Australian Primary Principals Association 2014, Submission to the Review of the Australian Curriculum, p. 2.

¹⁹⁹ Australian Association for the Teaching of English 2014, Submission to the Review of the Australian Curriculum.

²⁰⁰ Australian Education Union 2014, Submission to the Review of the Australian Curriculum, p. 5.

and balanced'.²⁰¹ While not referring specifically to balance, the submission from the Tasmanian Department of Education also endorses the Australian Curriculum when it states that 'Our experience has been positive' and the process adopted by ACARA has led to a 'robust and independent curriculum'.²⁰²

Notwithstanding such positives, a number of submissions have raised concerns about the Australian Curriculum being biased towards a one-sided view on particular topics and issues. The following areas of concern are in addition to the view previously noted that religion, especially Australia's Judeo-Christian heritage and values and belief, is not properly dealt with in subjects like history, literature and civics and citizenship.

Western civilisation

A number of submissions and evaluations carried out by the subject matter specialists commissioned by this Review argue that the focus on Asia, Aboriginal and Torres Strait Islanders and sustainability in the cross-curriculum priorities ignores the historical and ongoing significance of Western civilisation; especially in the English and history curricula.

The IPA submission argues that the Australian Curriculum is 'unbalanced, ideologically-biased and systematically hostile to the legacy of Western Civilisation'²⁰³ as it privileges the three cross-curriculum priorities listed above. The history curriculum is especially singled out for criticism on the basis that it over-emphasises the themes of the environment, colonialism, multiculturalism, social history, class and minority groups, and privileges anti-modernism.

In addition, IPA's submission argues that the history curriculum either undervalues or ignores the history of ideas, liberalism, economic growth and technology, political history, Western civilisation and religion.

Professor Spurr, in his analysis of how literature is dealt with in the English national curriculum, also suggests that approach is unbalanced when he notes, under 'Rationale and Aims', that the 'introductory statement makes no reference to the Western tradition of literature in English, while detailing the contribution of Aboriginal and Torres Strait Islander peoples to Australian society and to its contemporary literature and its literary heritage'.

It should also be noted that out of the 413 submissions received arguing that Christianity is not properly dealt with in the Australian Curriculum, 69 include the need to have a greater emphasis on Western culture.

A submission by the Presbyterian Church of Victoria's Church and Nation Committee also argues that the Australian Curriculum is unbalanced when it states, in relation to the history curriculum, that:

students are pre-conditioned towards a negative view of Western society. For example, the negative, rather than the positive, outcomes of Western society are discussed, topics such as:

²⁰¹ Catholic Education Diocese of Parramatta 2014, Submission to the Review of the Australian Curriculum, p. 2.

²⁰² Tasmanian Department of Education 2014, Submission to the Review of the Australian Curriculum, p. 1.

²⁰³ Institute of Public Affairs 2014, Submission to the Review of the Australian Curriculum, p. 3.

*slavery, oppression, promotion of disadvantage, war (conscription), colonization, imperialism, dominance of the Church.*²⁰⁴

While not being as critical as the IPA submission, the submission by The Anglican Education Commission in Sydney also stresses the importance of Western civilisation when it states that there is a need 'to educate students in their primary culture. Conceived of nationally, this is based on the tenets of Western European civilization'.²⁰⁵

A submission on behalf of Sydney's Campion College, while not referring specifically to the Australian Curriculum, also stresses the central importance of a 'classically based liberal education' based on 'the great educators and philosophers of the Western intellectual tradition'.²⁰⁶ The curriculum at Campion embodies subjects associated with Western civilisation and culture and the submission argues that the secondary school curriculum should also adopt a similar approach.

Pedagogical approaches

ACARA argues that the Australian Curriculum is concerned with detailing *what* should be taught and not *how* the curriculum is implemented in the classroom. Such a view appears prevalent across the various state and territory educational jurisdictions on the basis that classroom teachers and schools are in the best position to decide issues related to pedagogy.

In the same way that curriculum, more broadly, can never be value free, it is also true that intended curriculum documents either implicitly or explicitly embrace particular views about what should happen in the classroom in terms of the various approaches to teaching and learning. As noted in Chapter One, the three different curriculum models outlined privilege various approaches to pedagogy ranging from constructivism to explicit teaching (sometimes known as direct instruction).²⁰⁷

Evidence that the Australian Curriculum is not values-free in relation to pedagogy can be found in the statement, when the ACARA advisory groups evaluated responses to various learning areas, that one of the criteria used included establishing a 'strong evidence base, including the implications of the curriculum for learning, pedagogy and what works in professional practice, and has been benchmarked against international curricula'.²⁰⁸

The shaping papers for history and English also refer specifically to pedagogy under the heading 'Pedagogy and assessment: some broad assumptions'. The English shaping paper, for example, suggests, 'In the English curriculum teachers strategically use both explicit teaching and more discovery-based or exploratory approaches'²⁰⁹ and lists seven suggestions about what the research concludes about the characteristics of an effective classroom.

The history shaping paper, in a similar vein, lists a number of pedagogical assumptions about effective teaching, including the statement, 'In the teaching of history there should not be an

²⁰⁴ Presbyterian Church of Victoria's Church and Nation Committee, 2014, Submission to the Review of the Australian Curriculum, p. 3.

²⁰⁵ The Anglican Education Commission 2014, Submission to the Review of the Australian Curriculum, p. 1.

²⁰⁶ Campion College 2014, Submission to the Review of the Australian Curriculum, p. 1.

²⁰⁷ In this Review, whereas direct instruction and explicit teaching share much in common, the description explicit teaching is preferred as it embraces a fuller and more nuanced sense of classroom teaching and learning.

²⁰⁸ ACARA 2014, Submission to the Review of the Australian Curriculum, p. 6.

²⁰⁹ National Curriculum Board 2009, *Shape of the Australian Curriculum: English*, p. 16.

artificial separation of content and process or a focus on historical method at the expense of historical knowledge'.²¹⁰

The Australian Curriculum: History, for example, also touches on the issue of pedagogy when it states that it 'employs a skills and inquiry-based model of teaching'.²¹¹ The science and geography Australian Curriculum documents adopt a similar approach as both state they emphasise 'inquiry-based teaching and learning'.

The APPA submission, in relation to civics and citizenship, also acknowledges there is an emphasis on a particular style of teaching and learning when it states, 'The document takes a positive and explicit approach to the use of inquiry approaches, which APPA supports'. The APPA submission also notes the difference in the time taken to implement between inquiry-based learning and 'direct instruction or equivalents'.²¹²

An inquiry-based model of teaching and learning is often associated with constructivism, a situation where the:

*classroom is no longer a place where the teacher ('expert') pours knowledge into passive students, who wait like empty vessels to be filled. In the constructivist model the students are urged to be actively involved in their own process of learning. The teacher functions more as a facilitator who coaches, mediates, prompts, and helps students develop and assess their understanding ...*²¹³

It should also be noted that constructivism is prevalent across state and territory education systems. An OECD report on the 2008 Teaching and Learning International Survey (TALIS) states, in relation to Australia and five other countries that support for constructivism 'is especially pronounced'.²¹⁴

Dr Ken Rowe, committee chair of the National Inquiry into the Teaching of Literacy, also concludes that the prevailing orthodoxy is one where 'curriculum design, content, teaching preparation seems to be based, at least implicitly, on an educational philosophy of constructivism (an established theory of *knowing* and *learning* rather than a theory of *teaching*)'.²¹⁵

A second Australian researcher, Dr Rhonda Farkota, makes a similar point about the widespread influence of constructivism when, after noting the research supporting a teacher directed model of pedagogy, observes 'yet almost every teacher-education program in Australian universities is based on a student directed approach'.²¹⁶

²¹⁰ National Curriculum Board 2009, *Shape of the Australian Curriculum: History*, p. 16.

²¹¹ ACARA, *The Australian Curriculum: History*, Implications for teaching, assessment and reporting, viewed 30 July 2014, can be accessed at: <http://www.australiancurriculum.edu.au/humanities-and-social-sciences/history/implications-for-teaching-assessment-and-reporting>.

²¹² Australian Primary Principals Association 2014, Submission to the Review of the Australian Curriculum, p. 6.

²¹³ The mistaken idea that a conservative approach to teaching and learning involves filling empty vessels can be traced to the Brazilian Marxist educator Paulo Freire. See: http://www.thirteen.org/edonline/concept2class/constructivism/index_sub1.html, viewed 30 July 2014.

²¹⁴ OECD 2009, *Creating Effective Teaching and Learning Environments: First Results from TALIS*, OECD.

²¹⁵ Committee for the National Inquiry into the Teaching of Literacy 2005, *Teaching Reading: Report and Recommendations*, Department of Education, Science and Training, Canberra.

²¹⁶ Farkota, R 2005, 'Basic maths: the brutal reality', online opinion, can be accessed at: <http://www.onlineopinion.com.au/view.asp?article=3785>

One submission related to the Australian Curriculum: Science also notes the prevalence of constructivism:

*The Australian Curricula for both the junior and the senior sciences adopts a strong 'constructivist' approach to the teaching of science. This is clearly evident in that one whole strand, a third of the curriculum, is devoted to Science Inquiry Skills. It continues a trend in this country where teacher education programs and education curricula promote constructivism over traditional 'direct instruction' pedagogy.*²¹⁷

Constructivism is associated with so-called 21st century, life-long learning where the focus, instead of being on essential knowledge, understanding and skills, is on generic capabilities and skills and the process of learning and where students are described as 'digital natives' and teachers as 'guides by the side'.²¹⁸

Those advocating constructivism also criticise rote learning as 'drill and kill' and argue that making children memorise and recite poems and ballads or making them memorise their times tables is old fashioned and ineffective.

As noted in a submission by John Sweller, an Emeritus Professor of Education at the University of New South Wales, the problem with constructivism is that there is little, if any, evidence that it is the most effective way to manage a classroom. Based on research into how humans best learn Sweller concludes that explicit instruction is the preferred pedagogical approach.

He writes, 'We should be teaching domain-specific knowledge, not generic skills' and 'Initial instruction when dealing with new information should be explicit and direct'.²¹⁹ In his submission Sweller goes on to argue:

*There is little more useless than attempting to teach generic thinking skills and expecting students to be better thinkers or problem solvers as a result. Despite decades of work, there is no body of evidence supporting the teaching of thinking or other generic skills.*²²⁰

Evidence that explicit teaching is more effective than many other theories of teaching and learning is also represented by research associated with the US Project Follow Through. Carried out over an eight-year period from 1968 to 1976 and focused on evaluating nine different approaches to teaching and learning, ranging from direct instruction²²¹ to those based on problem solving and learning how to learn, the results are clear.

As noted by one researcher, when answering the question: what works?

Results of the national evaluation and all subsequent analysis converge on the finding that the highest achievement scores were attained by students in the Direct Instruction model ...

²¹⁷ Submission number RAC1400942 2014, Submission to the Review of the Australian Curriculum, p. 9.

²¹⁸ Of interest, notwithstanding the emphasis on competitive examinations and streaming is that the Singapore education system also refers to 21st century learning when its syllabus states, 'The curriculum must engage the 21st century learners who are digital natives comfortable with the use of technologies and who work and think differently'.

²¹⁹ Sweller, J 2014, Submission to the Review of the Australian Curriculum, p. 1.

²²⁰ Ibid., p. 3.

²²¹ A succinct and useful explanation of Direct Instruction written by Bill Louden, can be accessed at: <http://theconversation.com/direct-instruction-and-the-teaching-of-reading-29157>

*If education is defined as the acquisition of academic skills, the results of the Follow Through experiment provide a clear answer to the question.*²²²

The Australian researcher, Dr Farkota, also stresses the importance of a more teacher directed, explicit approach especially related to the basics when she argues:

*It is generally accepted that a student-directed approach is more suitable when it comes to the employment and cultivation of higher order skills where reasoning and reflection are required. However, for the acquisition of basic mathematical skills, the research clearly shows that teacher-directed learning is better suited. Needless to say, these basic skills must be firmly in place before students can approach problem-solving questions with any degree of competence.*²²³

To point out the shortcomings of a constructivist approach to teaching and learning is not to suggest it has no place in the classroom. As all good teachers understand, there are a variety of approaches to teaching and learning depending on the subject, the abilities and motivation of students, what the learning objectives and expected outcomes are and even the time of day or the day of the week.

As such, while some approaches to pedagogy are more evidence based than others, there is no single model that is suitable for every learning occasion. The problem arises when one particular model, such as constructivism, becomes the orthodoxy and is uncritically promoted without any attempt to recognise the validity and effectiveness of alternatives like explicit teaching and direct instruction.

Independence

The Shorter Oxford English Dictionary defines 'independence' as 'the condition or quality of being independent; the fact of not depending on another; exemption from external control or support; individual liberty of thought or action'.

One of the central issues in any curriculum development and implementation involves defining the balance between centralised and local control, and between freedom and autonomy at the school level, and the right outside organisations – including governments – have to determine what happens in the classroom.

As previously noted, one of the characteristics of a number of education systems across the OECD is the move away from a 'top-down' model of curriculum development and implementation to giving schools greater flexibility and choice at the local level. As argued in the 2010 OECD publication PISA 2009 Results: Overcoming Social Background:

Many of the world's best-performing education systems have moved from bureaucratic 'command and control' environments towards school systems in which the people at the frontline have much more control of the way resources are used, people are deployed, the work is organised and the way in which the work gets done. They provide considerable discretion to school heads and school faculties in determining how resources are allocated, a

²²² Watkins, CL 1995, 'Follow Through: Why Didn't We?', *Effective School Practices*, vol. 15, no. 1, winter 1995–6 can be accessed at <http://darkwing.uoregon.edu/~adiep/ft/watkins.htm>

²²³ Farkota, R 2005, 'Basic maths: the brutal reality', online opinion, can be accessed at: <http://www.onlineopinion.com.au/view.asp?article=3785>

factor which the report shows to be closely related to school performance when combined with effective accountability systems.

Because Australia is a federal system with a number of jurisdictions, sectors and school authorities, as opposed to a binary education system like Singapore or Finland, the question of what constitutes the right balance is made even more difficult to answer.

In Australia, during the 1960s and 1970s, school-based curriculum development (SBCD) prevailed across many states and territories as school inspectors disappeared, external assessment was restricted to Year 12, and schools were free to innovate with minimal, if any, external accountability.

Since that period, the move to external control, monitoring and accountability has increased as governments at the state, territory and Commonwealth level have implemented a range of initiatives and programs to influence what happens in the classroom.

In Victoria, for example, after some years of SBCD, governments over a number of years sought to better determine the curriculum of schools with the development of frameworks and policy guidelines that gradually increased in terms of coverage and what was centrally mandated.

These include the P–12 Curriculum Frameworks, the Curriculum and Standards Framework, Curriculum and Standards Framework, the Victorian Essential Learning Standards and currently what is known as AusVELS.²²⁴ At the same time, schools and teachers become more accountable with the introduction of the Achievement Improvement Monitor (AIM) – a state wide standardised test in English and mathematics at Years 3, 5, 7 and 9²²⁵ – and increased monitoring of teacher performance.

Notwithstanding that it does not have any constitutional control over school education, the Commonwealth has increasingly sought to influence what happens in the nation's classrooms at the same time as state governments have sought to impose greater regulation and control over schools, as detailed in Chapter Three.

Compared to earlier Commonwealth attempts to introduce a national curriculum, such as the Core Curriculum for Australian Schools and the Statements of Learning, the current Australian Curriculum Foundation to Year 12, is the most detailed, comprehensive and influential. Not only does the Australian Curriculum extend across all year levels and include most subjects and areas of learning but implementation is also tied to Commonwealth funding.

A number of the submissions and consultations associated with this Review express the view that the Australian Curriculum compromises the independence of schools, as well as state authorities and school sectors, and their ability to innovate and best reflect the needs and aspirations of their communities.

In a recent conference in Melbourne, the Victorian Secretary of the Department of Education and Early Childhood Development, Richard Bolt, is reported as suggesting that the Commonwealth

²²⁴ AusVELS is based on the original Victorian Essential Learning Standards and incorporates the Australian Curriculum F–10 in English, Mathematics, Science and History.

²²⁵ The Victorian AIM was eventually replaced by the National Assessment Program – Literacy and Numeracy.

should play a less intrusive role in education and the states should take primary responsibility.²²⁶ In correspondence to this Review²²⁷ Richard Bolt and John Firth, the head of the VCAA, state that it is ‘the prime responsibility of jurisdictions to determine how and how much of the material to use in schools’.

Their letter goes on to suggest, in relation to the curriculum, that jurisdictions, systems and schools ‘should be free to interpret and select from the existing material according to the values, judgment and views of the school and its community within the accountability requirements of each jurisdiction’.

In relation to the senior secondary curriculum, similar to the Western Australian authorities, the Victorian belief is the states should manage their own agenda on the basis that there is ‘some risk to standards and innovation in adopting a single, centralised position ...’. The BOSTES NSW, while implementing phase one of the Australian Curriculum, also stresses the importance of New South Wales schools exercising a degree of independence.

Its submission argues that ‘As a national body without any authority under New South Wales legislation, ACARA does not have a direct relationship with schools in New South Wales regarding curriculum content’²²⁸ and that any future work undertaken by ACARA ‘recognise and respect the legislative imperatives within jurisdictions and lessons learned from the Australian Curriculum process’.²²⁹

Professor Caldwell makes the argument that a ‘command and control’ model of educational delivery, represented by an ever-increasing Commonwealth influence, is in danger of restricting innovation and hampering schools in their ability to best meet local demands when he states:

*There is a powerful educational logic to locating a higher level of authority, responsibility and accountability for curriculum, teaching and assessment at the school level. Each school has a unique mix of students in respect to their needs, interests, aptitudes and ambitions; indeed, each classroom has a unique mix. A capacity to adapt a curriculum that meets international standards to this unique mix is essential. The same applies to approaches to teaching (pedagogy). Doing this well assumes a capacity for assessment for learning as well as assessment of learning, and not just testing, and reporting the outcomes.*²³⁰

It should be noted that in consultations associated with this Review the Australian Capital Territory, Tasmania and South Australia expressed strong support for the Australian Curriculum and did not express any concerns about it limiting or adversely impacting on the independence of schools or jurisdictions.

²²⁶ Morton, R 2014, ‘The states should be left to lead schools reform, says Victoria’s education chief’, *The Australian*, 4 July 2014.

²²⁷ Bolt, R & Firth, J 2014, Letter to the Review of the Australian Curriculum, pers. comm.

²²⁸ BOSTES NSW, 2014, Submission to the Australian Government Review of the Australian Curriculum, p. 9.

²²⁹ Ibid., p. 17, In relation to process the statement is made that ACARA’s process ‘was uneven, often unresponsive to concerns and focused on deadlines at the expense of collaboration’, p. 7.

²³⁰ Caldwell, B 2014, ‘Realigning the Governance of Schools in Australia: Energising an Experimentalist Approach’, paper for the Crawford School of Public Policy, Australian National University Workshop on the theme of ‘Twenty-first century public management: the experimentalist alternative’.

In relation to the impact of the Australian Curriculum on classrooms, Professor Lyn Yates, while agreeing that there should be a degree of commonality, writes ‘the processes of recent times are in danger of too highly specifying the work of teachers and schools’. Based on interviews with history and science teachers Yates concludes that significant concerns include ‘too much content’ and having to ‘teach to the test’²³¹ – thus taking time away from engaging students and ensuring a deep knowledge and understanding of what is being taught.

A submission from the Catholic Education Commission of Victoria (CECV), under the heading ‘Informed professionalism’, also suggests the Australian Curriculum is overly prescriptive and inflexible, when it argues:

*The inherent danger in current Australian Curriculum is that it presents ‘uninformed prescription’ affording excessively demanding and prescriptive requirements potentially leading to a narrowing of the curriculum and de-skilling of teachers. This has been evidenced in approaches taken in the US, UK and Germany (OECD 2005). A curriculum structure that balances ‘informed prescription with informed professionalism’ is more likely to deliver high quality, high equity educational outcomes as evidenced in Finland, Sweden and Ontario (Luke, Weir and Woods 2008).*²³²

For schools and teachers to work effectively there needs to be a degree of independence that allows flexibility at the local level. A national curriculum that is overly prescriptive and that takes up the entire school curriculum in terms of time denies teachers and schools that independence.

In relation to faith-based schools the problem is especially acute as the danger is that in fulfilling the demands of the Australian Curriculum, schools lose the independence to reflect their unique character.

As argued in the submission from the NCEC, ‘it is important to recognise that the way curricula are written, adapted and interpreted can allow schools to strengthen and support their mission and education processes’.²³³

Of interest is that a number of the earlier papers published by the National Curriculum Board (the precursor to ACARA) acknowledge the dangers of being overly prescriptive and inflexible. The *National Curriculum Development Paper* argues that any national curriculum should be flexible in relation to time and resources and will be ‘carefully bounded to preserve space and status for subjects or learning areas that are not part of a national curriculum’.²³⁴ The paper goes on to argue that the proposed national curriculum will:

*allow jurisdictions, systems and schools the ability to deliver national curriculum in a way that values teachers’ professional knowledge and reflects local school and regional differences and priorities.*²³⁵

²³¹ Yates, L 2014, Submission to the Review of the Australian Curriculum, p. 2.

²³² Catholic Education Commission Victoria 2014, Submission to the Australian Government Review of the Australian Curriculum, p. 9.

²³³ National Catholic Education Council 2014, Submission to the Review of the Australian Curriculum, p. 14.

²³⁴ National Curriculum Board 2008, *National Curriculum Development Paper*, p. 7.

²³⁵ National Curriculum Board 2008, *National Curriculum Development Paper*, p. 3.

As noted in Chapter Three, the ACARA publication *The Shape of the National Curriculum: A Proposal for Discussion* also signals that a national curriculum will not be all consuming and inflexible when it states that any curriculum should be feasible in terms of time and, 'Allow jurisdictions, systems and schools to implement it in a way that values teachers professional knowledge and reflects local contexts'.

The Shape of the Australian Curriculum also stresses that, when detailing the assumptions underlying a national curriculum, it should involve core content, not overcrowd the curriculum and that it should leave 'scope for education authorities and/or schools to offer additional learning opportunities beyond those provided by the Australian Curriculum'.²³⁶

The fact that the version of the Australian Curriculum currently being implemented at the primary school level is considered by APPA to be overcrowded and inflexible in terms of time and resources suggests that what was originally argued has not eventuated.

It needs to be admitted, though, that the way ACARA has developed and implemented the Australian Curriculum does allow a degree of independence. Schools with a particular and unique educational philosophy, such as Montessori and Steiner schools, have been able to apply for and been granted what is described as 'alternative curriculum recognition'. To achieve such a status, schools have to meet certain conditions stipulated by ACARA. Criteria for assessment include that the specified version of the curriculum framework:

- aligns with the Melbourne Declaration of the Educational Goals for Young Australians
- assists students to 'become successful learners, confident and creative individuals, and active and informed citizens'
- meets principles and guidelines in *The Shape of the Australian Curriculum 2012*
- provides for students to learn the curriculum content and achieve standards described in Australian Curriculum documents.

These procedures and templates provide organisations with a framework of questions to be addressed with supportive documentation so that the review panel, reporting to the ACARA Recognition Committee, can make this assessment.

It also needs to be acknowledged that many Australian Curriculum subjects, such as history and geography, involve electives at particular stages where students and schools are presented with alternatives that allow local choice and flexibility.

Counterpoised against this is the reality that those schools that have achieved alternative recognition are in a minority and the concerns expressed about the impact of a national curriculum, related to de-skilling teachers and compromising independence, will only increase as phases two and three are implemented.

²³⁶ ACARA 2012, *The Shape of the Australian Curriculum*, version 4, ACARA, p. 26.

General capabilities

ACARA defines general capabilities as:

*an integrated and interconnected set of knowledge, skills, behaviours and dispositions that can be developed and applied across the curriculum to help students become successful learners, confident and creative individuals and active and informed citizens.*²³⁷

The seven capabilities are listed as literacy, numeracy, ICT capability, critical and creative thinking, personal and social capability, ethical understanding, and intercultural understanding.

When justifying inclusion of the capabilities in the Australian Curriculum ACARA refers to the Melbourne Declaration and the need to identify ‘essential skills for twenty-first century learners’. Of interest, when detailing general capabilities, is that the Melbourne Declaration’s list is different to what ACARA stipulates. The Melbourne Declaration, when discussing general capabilities, states:

*The curriculum will support young people to develop a range of generic and employability skills that have particular application to the world of work and further education and training, such as planning and organizing, the ability to think flexibly, to communicate well and to work in teams. Young people also need to develop the capacity to think creatively, innovate, solve problems and engage with new disciplines.*²³⁸

As to why ACARA’s general capabilities are different to those detailed in the Melbourne Declaration, the supposed touchstone on which the Australian Curriculum is based, is unclear, as is the educational justification for the manner in which the capabilities are treated from a cross-curricular perspective.

It should also be noted that an information sheet distributed by ACARA²³⁹, dated March 2010, lists 10 general capabilities instead of the seven currently linked to the curriculum.

One attempt to justify the importance of capabilities, in opposition to a discipline-based curriculum model, is Professor Reid’s *Rethinking National Curriculum Collaboration: Towards an Australian Curriculum*. Notably, many of the capabilities Professor Reid refers to, such as ethics and values, intercultural understandings, understanding self and communication and multi-literacies mirror those advocated by ACARA.

The majority of submissions to the Review, as do those individuals and organisations involved in consultations, support the inclusion of general capabilities as an essential part of the Australian Curriculum. There is widespread agreement that the cross-curricular capabilities meet the needs of 21st century learning and that the way in which they are identified as icons in learning area content descriptions and elaborations is successful.

²³⁷ Australian Curriculum, Assessment and Reporting Authority, 2013, General Capabilities in the Australian Curriculum, Australian Curriculum, Assessment and Reporting Authority, p. 4.

²³⁸ Ministerial Council for Education, Employment, Training and Youth Affairs 2008, *Melbourne Declaration on Educational Goals for Young Australians*, Curriculum Corporation, p. 13.

²³⁹ ACARA 2010, ‘What makes the Australian Curriculum a world-class curriculum?’ *Australian Curriculum Information Sheet March 2010*, ACARA

The Australian Secondary Principals Association (ASPA) argues that the ‘general capabilities must be reinforced’²⁴⁰ and the South Australian Department of Education and Child Development views the capabilities as equipping ‘students with the knowledge, skills and understandings they require for their future in a rapidly changing world’.²⁴¹

The APC’s submission states ‘We fully support the seven general capabilities that are designed to assist students to live and work successfully in the twenty-first century’²⁴² and ACSO argue that the ‘curriculum is greatly enhanced by ACARA’s cross-curriculum priorities and general capabilities features within the curriculum’.²⁴³

The AATE is also very supportive when it argues that the capabilities ‘provide the basis for productive dialogue amongst teachers of different subjects and they promote effective whole-school approaches to teaching and learning’.²⁴⁴

Notwithstanding the support for the general capabilities, a number of concerns have also been raised. The Australian Special Education Principals’ Association (ASEPA) argues that using the capabilities as a framework for supporting students with disability is unacceptable.²⁴⁵

APPA also expresses concern, stating the way in which the capabilities are signposted is considered excessive: ‘The symbols should be used where there is a distinctive opportunity to emphasise the capabilities, rather than wherever they could be conceivably used. Excessive references diminish the value of each reference’.²⁴⁶

The BOSTES NSW also signals that it does not fully endorse the way on which the Australian Curriculum deals with the capabilities. The Board’s submission, apart from literacy and numeracy, states that general capabilities like creativity and intercultural understanding ‘have no status as an alternative organisation frame to the subject disciplines’.²⁴⁷

The submission goes on to state: ‘Rather than being available as an alternative organisation or prism through which learning can be presented, the general capabilities are embedded where appropriate within the New South Wales content’.²⁴⁸

The Western Australia School Curriculum and Standards Authority, in addition to stating ‘that it cannot and will not accept the Australian Curriculum in its current form’ is also critical of the general capabilities. In relation to Years 11 and 12, the Authority argues that the capabilities are not applicable to all syllabuses and it is concerned that they might become a ‘de facto curriculum at the expense of specific content knowledge’.²⁴⁹

²⁴⁰ Australian Secondary Principals Association 2014, Submission to the Review of the Australian Curriculum

²⁴¹ South Australian Department of Education and Child Development 2014, Submission to the Review of the Australian Curriculum

²⁴² Australian Parents Council 2014, Submission to the Review of the Australian Curriculum

²⁴³ Australian Council of State School Organisations 2014, Submission to the Review of the Australian Curriculum

²⁴⁴ Australian Association for the Teaching of English 2014, Submission to the Review of the Australian Curriculum

²⁴⁵ Australian Secondary Principals Association, 2014, Submission to the Review of the Australian Curriculum

²⁴⁶ Australian Primary Principals Association 2014, Submission to the Review of the Australian Curriculum, p. 13.

²⁴⁷ BOSTES NSW 2014, Submission to the Review of the Australian Curriculum

²⁴⁸ Ibid., p. 13.

²⁴⁹ School Curriculum and Standards Authority 2014, Submission to the Review of the Australian Curriculum

While accepting that the capabilities are a 'critical aspect of the school curriculum' the VCAA also signals that it will continue to use its method of dealing with the capabilities instead of adopting ACARA's method. As a result, 'the "filtering" mechanism that is available on the Australian Curriculum website will not be included in the AusVELS website'.

The Victorian Association for the Teaching of English is more direct in its submission, which states: 'The general capabilities have not yet been adopted by Victoria. Time is needed to best see how these could be adopted in implementation'.²⁵⁰

Dr Fiona Mueller, in her paper evaluating the Australian Curriculum: English, also makes the point that while it is commendable that literacy is listed as a capability, there is some doubt as to whether the Australian Curriculum gives teachers enough guidance demonstrating how literacy capabilities when mentioned in particular subjects can be enacted in the classroom.

After examining a number of examples related to literacy capabilities linked to the history curriculum, Dr Mueller concludes, 'To be effective, the curriculum must provide clear instructions regarding the teaching of literacy across the curriculum'.²⁵¹

As the Australian Curriculum was developed during the period the Australian Labor Party (ALP) was in power at the Commonwealth level it is also relevant to note that ALP's campaign policy taken to the 2007 election²⁵², in relation to what are described as cross-disciplinary studies, states:

But these studies depend on students having already gained a foundation in each discipline. A student cannot take part effectively in cross-disciplinary studies until they have foundation knowledge and skills in different disciplines on which to draw.

Based on research in cognitive psychology, an added concern about cross-curricular general capabilities is that such an approach fails to recognise how students best learn. As noted in a submission by Emeritus Professor John Sweller, generic skills like problem solving and critical and creative thinking are best taught in the context of particular subjects or domains of learning. Professor Sweller argues:

*It is a waste of students' time placing these skills in a curriculum because we have evolved to acquire them without tuition. While they are too important for us not to have evolved to acquire them, insufficient domain-specific knowledge will prevent us from using them. We cannot plan a solution to a mathematics problem if we are unfamiliar with the relevant mathematics. Once we know enough mathematics, then we can plan problem solutions. Attempting to teach us how to plan or how to solve generic problems will not teach us mathematics. It will waste our time.*²⁵³

The argument that capabilities like creative thinking and learning how to learn can be applied across a range of subjects or that they are generic in nature ignores the reality that they are domain

²⁵⁰ Victorian Association for the Teaching of English 2014, Submission to the Review of the Australian Curriculum

²⁵¹ Mueller, F 2014, Subject matter specialist report on the Australian Curriculum: English, prepared for the Review of the Australian Curriculum

²⁵² ALP 2007, *New Direction for Our Schools: Establishing a National Curriculum to improve our children's educational outcomes*, p. 18.

²⁵³ Sweller, J 2014, Submission to the National Curriculum Review, p. 2.

specific. Experts are able to be creative and to conceptualise abstract ideas and to think rationally, so the argument goes, because they have mastered a particular subject.

*The new science of learning does not deny that facts are important for thinking and problem solving. Research on expertise in areas such chess, history, science and mathematics demonstrate that experts' abilities to think and solve problems depend strongly on a rich body of knowledge about subject matter.*²⁵⁴

It is also the case that being able to transfer knowledge and understanding to a new situation relies on a deep knowledge and understanding of particular subjects. As noted in the book *How People Learn*, 'A key finding in the learning and transfer literature is that organizing information into a conceptual framework allows for greater "transfer"'.²⁵⁵

The American educationalist ED Hirsch makes a similar point when he writes:

*While it is true that proficient reading and critical thinking are all-purpose abilities, they are not content-independent, formal skills at all but are always based on concrete, relevant knowledge and cannot be exercised apart from what psychologists call 'domain specific knowledge'.*²⁵⁶

Such arguments represent a counter-case to those arguing that 'the development of such (general) capabilities are as important as learning area knowledge'.²⁵⁷

Cross-curriculum priorities

The development process

We have already examined viewpoints on the cross-curriculum priorities in the context of the development process in an earlier section of this Report. It has emerged as possibly the most complex, controversial, and confusing aspect of the Australian Curriculum.

In essence, while there was strong support to include them and the three topics chosen, this support was mainly on the basis of them being contemporary issues for Australia. However, there was also considerable concern about the way they had been instigated as policy or political directives, the poor and confusing way they had been incorporated into the design of the curriculum, and the lack of an educational justification or foundation for them. There was also a very disturbing level of confusion about whether they were mandatory and how they should be taught; perceptions vary considerably on this aspect and ACARA has been remiss in not clarifying this aspect early in the process.

The greatest concern was about how the cross-curriculum priorities had been 'embedded', or 'not embedded' into the curriculum. For those who regarded them as voluntary there was, of course, no problem and indeed some schools are ignoring them. The same is true for any sectors and schools who regard the whole Australian Curriculum as not mandatory in all its content. But for the majority

²⁵⁴ Bransford, JD, Brown, AL & Cocking, RR 2000, *How People Learn. Brain, Mind, Experience and School*, National Academy Press, p. 16.

²⁵⁵ Ibid., p. 17.

²⁵⁶ Hirsch, Jr (ed.) 2006, *The Knowledge Deficit: Closing the Shocking Education Gap for American Children*, Houghton Mifflin, p. 12.

²⁵⁷ Catholic Education Office of Western Australia 2014, Submission to the Review of the Australian Curriculum.

there is reasonable agreement that it was a mistake to try to include all of them in every learning area. While ACARA never intended that they be mandatory, this was only belatedly communicated. Opinion is divided as to whether they should be add-ons making the curriculum even more complex and overcrowded, and the majority of opinion is that they should simply have been included in the basic structure and content of learning areas, but only where relevant. As we have noted this is the most contentious arena for debate about the Australian Curriculum and has been the subject of much ridicule, especially in the media.

Current views

A broader consideration of all the submissions and consultations associated with this Review confirm these points emanating from observations relating to the curriculum development process.

Most respondents want to keep the three priority topics, but a reasonable number want to abolish them altogether or absorb them into learning areas where relevant. Yet a few others have suggested the addition of further topics. There is reasonable agreement that any exercise of this kind needs an educational or knowledge foundation, and must not be just the subject of political, social or economic whims.

The concept

There is no other country in the world that has introduced such a concept into its curriculum. Research reveals that some other countries do embed related values or skills-acquisition across learning areas, but not content. Other countries include content relating to these particular three themes but always as a stand-alone learning area, sustainability being the most evident. Australia's approach to the cross-curriculum priorities as contexts for learning, to be taught across the curriculum, appears to be unique.

Apparently not a lot of thought has been given to the actual concept of cross-curriculum priorities. The topics or themes seem to have been taken by ACARA and its constituency as a given, in the form of policy directives from education ministers and there has been confusion as to how to include them.

No attempt seems to have been made, then or since, to conceptualise the cross-curriculum priorities in educational terms. Perceptions on this are quite interesting. The NCEC expressed the opinion that the cross-curriculum priorities were important in creating a balanced curriculum, allowing ACARA to include them without confronting issues that had been raised about overcrowding already apparent in the curriculum. The Independent Education Union of Australia sees them as providing flexibility – especially in the way teachers address contemporary issues through their teaching and learning programs in a manner that addresses local student needs. This view is echoed in a different way by the Australian Human Rights Commission who say flexibility is provided for teachers to teach none, some, or all of the elaborations depending on what is appropriate for the class – they welcome the fact that the examples represent ‘a flexible approach to teaching content on Aboriginal and Torres Strait Islander histories and culture that has been overlooked in past curricula’.²⁵⁸

²⁵⁸ Australian Human Rights Commission 2014, Submission to the Review of the Australian Curriculum.

The foundation

In the consultations for this Review the cross-curriculum priorities featured prominently. Most seemed to regard them as a 'global mindset', as being 'of the time', or being 'contextual', but when pressed, very few could offer a broad educational or epistemological foundation for them. A number of respondents have observed that the cross-curriculum priorities stem from the Melbourne Declaration but no further view is expressed as to what foundation was involved in the Declaration itself. Indeed those who have commented on the foundations of the three priorities have been fairly critical.

One submission which supported their inclusion nevertheless said that their focus had a 'politically correct', 'flavour of our times' character to them. The IPA, and a range of individuals, argue that they are political and ideological and crowd other important content out of the curriculum. One lead writer observed that when a state curriculum authority insisted that any statement about sustainability had to be contestable, science was replaced by an ideology. The Australian Industry Group (AIG) sees them as a 'policy requirement' and states a quite explicit view that the Asian priority provides the 'essential policy requirement to ensure more schools teach about Asia'. There has been a fairly strong argument expressed that the three priorities are not appropriate for mathematics and science, and one expert in this field observed that if these priorities are not obviously inappropriate for mathematics and science, then mathematics and science must have been defined differently to the general expectations of society. By contrast, the Australian Academy of Science argues that 'the presence of the cross-curriculum priorities in the science curriculum have not distracted from the science discipline orientation'. Others say that the cross-curriculum priorities were never intended to be an enduring feature of the curriculum.

It is noteworthy that of all the submissions to this Review the strongest support for the priorities has come from associations and individuals who were supporting one of the particular themes based on their specialisation or particular interest in Asia, or sustainability, or Indigenous aspects.

The manner of embedding

Although a large number of respondents were happy with the status quo, it is clear that the aspect of 'embedding' has been by far the most controversial aspect of the cross-curriculum priorities. Of the many who are opposed to the concept most say that if such themes are to be adopted they should only be embedded where relevant, but there are also many individual submissions to this Review which state categorically that they should not be embedded at all.

Although much of the criticism reflects a misunderstanding of the concept and intention, there has been a very significant range of criticism of the approach which was taken by ACARA. BOSTES NSW, which supports them as including essential learning for students, notes that the framework was not appropriate for delivery of mandatory curriculum content and outcomes. Independent Schools Queensland believes they have been 'forced' into content descriptions. Other sectors say that the manner of their introduction was simply to appease concerns about an already overcrowded curriculum. The WA School Curriculum and Standards Authority comments that their applicability varies across subject disciplines, and they are not applicable in all Year 11 and Year 12 subjects.

The Isolated Children's Parents' Association of Qld argues that 'cross-curriculum priorities should be embedded in history, science, geography and the arts, where they are contextually relevant and

more likely to engage the student. In an era where literacy and numeracy achievement levels are in serious need of improvement in our education systems, we believe it is pertinent that English and Maths concentrate on these areas intrinsically'.²⁵⁹

Many submissions have argued that the priorities were not embedded in the Australian Curriculum in a balanced way. On this aspect APPA comments:

*Our view is that the cross-curriculum priorities have been incorporated, largely through elaborations, in a balanced way ... We do accept the view that there are occasions on which one or other of the priorities has been represented in a somewhat perfunctory way, or has been included out of a sense of duty rather than reflecting an important aspect of the possible treatment. This is the case in mathematics, where some of the issues have been well publicised. We believe there are other examples in Science and Technologies where the writers have responded to the expectation that the priorities should be reflected across all learning areas, but without a sufficient basis for their inclusion in every case ... Our principal concern is that the inclusion of questionable examples of the cross-curriculum priorities in a relatively small number of cases will expose the curriculum to unjustified accusations of bias or lack of balance. It is important to reflect the priorities strongly in the curriculum where it is appropriate, but to avoid cases where ACARA could be accused of paying lip-service to important issues or engaging in tokenism.*²⁶⁰

Suggestions for change

Many submissions called for the simple abolition of the cross-curriculum priorities either because their selection was biased, or because they had no educational foundation, or they were not appropriate to one or another discipline areas.

A significant number of those who were in favour of the three topics would rather have them included in learning areas, fearing that they were being treated superficially in the manner of attempted cross-curriculum embedding. This was a strong feature of consultations with Warren Mundine, who argued that an appreciation of Indigenous culture and history was far too important to be simply treated as a cross-curriculum theme, and would result in superficial and uneven teaching of subject matter that rightly belonged in relevant disciplines or preferably as a standalone subject taught by a teacher qualified in the area. Other Indigenous educators have said that Indigenous perspectives should not be a cross-curriculum priority but rather should be 'structured, unitised and taught by professionals'.

An interesting argument arguing for abolition came from P&Cs Queensland who argued that:

The CCPs have become the plaything of pressure groups of whatever persuasion, and certainly of the media. We respectfully suggest that they not be tampered with by way of realignment but rather be sublimated or excised. This is not to suggest that P&C Qld does not value the environment, our indigenous past or our engagement with Asia. Quite the

²⁵⁹ Isolated Children's Parents' Association Qld Inc. 2014, Submission to the Review of the Australian Curriculum.

²⁶⁰ Australian Primary Principals Association 2014, Submission to the Australian Government Review of the Australian Curriculum.

*opposite, it is rather that these CCPs have the potential to become stalking horses and distractions from core curriculum development and implementation.*²⁶¹

Additional themes

The Review has also received many suggestions for additional cross-curriculum themes. The strongest support comes in relation to inclusion of a cross-curriculum priority that ensures the continued recognition of Western civilisation and Judeo-Christian influences in our society. Some see this as having merit in its own right and others say it is necessary to ensure that an emphasis on Asia does not obscure the recognition of the current and historical engagement with other parts of the world. Other submissions have called for cross-curriculum themes to stress the British origins of the nation, the positive influence of religion in the shaping of the culture of the nation, and Australia's engagement with the rest of the world.

Consultations for the Review have revealed that the business sector does not believe that the contribution of industry has been properly recognised in the Australian Curriculum and especially the importance of entrepreneurialism and innovation. While this could be the subject of an additional cross-curriculum theme there was a preference for it to be strengthened in relevant learning areas such as history, economics and business, and geography, and also in the current-cross-curriculum theme of sustainability.

The dangers

Some dangers were foreshadowed if Australia continues with using a concept like cross-curriculum priorities in its curriculum development. Educationists fear they will be decided without considering an educational foundation for them. Many say they will become political playthings. Others argue that they will produce instability for teachers and schools if they are continually introduced or dropped. A number of submissions have also pinpointed the gap in design and teacher capability and teacher understanding and called for far more professional development and resource material for teachers in these themes. Cross-curriculum priorities are also a resource issue and the availability of good-quality resources and teacher knowledge to do them well is already affecting successful implementation.

There have also been concerns expressed by specialists in many disciplines that although the three themes are not officially mandatory, they are perceived as such by many sectors and schools, that are consequently downplaying other aspects of what should be core content. The aspect mentioned most often is the importance of Western traditions and knowledge. Another is the Judeo-Christian heritage of Australia. The fear is that to emphasise Asia and Indigenous cultural and knowledge means that the key elements of Australia's foundation and knowledge base are being neglected. Fears in this regard have emerged particularly in English, history, mathematics, the arts, geography and economics and business.

²⁶¹ P&Cs Queensland 2014, Submission to the Australian Curriculum Review.

Conclusions

This aspect of the development of the Australian Curriculum has been very clumsily handled and shows every sign of expediency.

It would seem there is considerable support for inclusion of the current three cross-curriculum themes in the Australian Curriculum although there is also considerable concern about the confusion which they have created. Professional educational opinion is that, if they are to remain, they should be properly embedded in the discipline learning areas, but only where appropriate. The current content in learning areas then needs to be reviewed and revised to offset any imbalance which the three themes have caused to the neglect of other important themes, particularly the influence on Australia of Western knowledge, history, tradition and Judeo-Christian heritage and beliefs.

Overcrowding: the amount of content in the Australian Curriculum

The excessive amount of content in the curriculum has been one of the main issues raised with this Review, more so in the consultations than through the submissions. The issue has been raised by sectors, principals, teachers, and parents, primarily in relation to the primary years. The vast majority of those who have raised the issue believe the curriculum is overcrowded, but a smaller number have dismissed it saying that teachers have always complained about overcrowding in curriculums, the whole matter is related to how teachers deliver the curriculum, the issue is related to the newness of the curriculum, and things that are external to the curriculum like NAPLAN.

We addressed this matter in some depth in Chapter Five of this Report on the development of the Australian Curriculum. A wider analysis of the submissions and consultations confirms that these impressions are still current.

In short, the overcrowding is attributed to a range of factors:

- the lack of an overall framework for the curriculum from the beginning
- the undue haste with which the process occurred
- the constant compromise to appease the many groups pressing for their topics or themes or approaches, plus the expectation that the curriculum content would be rationalised by ACARA once all these inclusions had been made – an eventuality that never happened
- the neglect by ACARA of calls from a number of key stakeholders to reduce the amount of content
- the silo approach adopted for the development of each learning area leading to isolation of learning areas
- the top-down approach adopted that should have begun with school and classroom practice realities, especially in primary school and particularly in the early years.

The nature of the overcrowding

Some viewpoints simply state that there is too much quantum of content throughout the whole curriculum and in all learning areas. Others say that overcrowding occurs because of the monolithic and template-driven design of the curriculum across all learning areas resulting in the disciplines being introduced at too early a stage in all subjects – especially in the foundation years, but throughout primary in general.

There are experts in the early years of learning who advocate that Foundation to Year 2 should be preserved solely for literacy and numeracy, in the sense of following a formal curriculum, though teachers would incorporate other topics into their lessons related to general knowledge and capabilities where appropriate. Naturally the arts would also figure in the pedagogy adopted for early learners, though not necessarily from a formal content specification.

It has been pointed out by several sectors and jurisdictions that there is too much content for primary school teachers – especially Year 5 and 6 teachers, who will be expected to teach, assess, and report on 16 different subjects. This situation is true for the other higher levels as well. A few respondents have raised the notional 80:20 allocation of space between the Australian Curriculum and school curriculums and say that the amount of Australian Curriculum content is, in reality, now so large that it crowds out almost all the notional space for school-based content and co-curricular activities (one respondent said it is 120 per cent). In addition, the amount of time specified for the teaching of the curriculum does not reflect the time required to develop mastery and depth or to include local priorities.

The implications

The main concern has been directed at the primary school years and the perception that the amount of content is not manageable, given the way teaching occurs in schools, and the capacity of the teachers. This is a general observation but it is augmented by those who point to the difficulties of handling so much content in any kind of sequential fashion in remote areas, in multi-year classes, in classes with considerable student diversity, and to address the needs of slow learners or students with disability or the disadvantaged. The combination of too much content with the need for choice in delivery methods is making the school and classroom setting far too complex and often unmanageable.

There is also a general concern that the early focus on disciplines at the lower end of primary schooling is crowding out proper attention to literacy and numeracy which should be the building blocks for the whole curriculum content. Some say that too much content in all learning areas was also reducing the opportunity for in-depth inquiry because of the large number of topics and themes in all learning areas.

Many independent and Catholic sector representatives argued that the excessive content threatened to crowd out their attention to values, unique programs and a range of co-curricular activities. A number of respondents pointed out that the introduction of Phases 2 and 3 would exacerbate this whole problem of overcrowding for schools.

The experience in England

The recent review of the curriculum in England is relevant as it also had to address this issue. Many respondents to that curriculum reform process expressed concerns about overcrowding and too much content richness, and welcomed the reductions which were made. The remit for the Review of the National Curriculum in England made this observation:

As it has developed the National Curriculum has come to cover more subjects, prescribe more outcomes, and take up more school time than originally intended. It is the Government's intention that the National Curriculum be slimmed down so that it properly reflects the body

*of essential knowledge which all children should learn and does not absorb the overwhelming majority of teaching time in schools.*²⁶²

Oates has made the further point that:

*A bloated specification can promote over-assessment – leading either to tests which are excessively long, or are short but suffer from inadequate domain sampling – it is difficult to have reasonable expectation of what is in the tests and they will be an inadequate measure of what learners may have achieved.*²⁶³

The observation was also made that one of the ways in which the national curriculum has had a lasting impact on pupils' achievement was through 'reduced inappropriate repetition of content'.²⁶⁴

Suggested changes

A number of approaches have been suggested to this Review to reduce overcrowding. They include:

- development of an overarching curriculum design framework which would also identify areas of overcrowding
- identifying the real core content knowledge for each learning area
- re-examining the content descriptions and achievement standards for relevance in all subjects other than English and mathematics
- encouraging more integration of content in the primary years
- introducing 'social science and humanities' to subsume history, geography, economics and civics and citizenship
- providing more realistic time allocations
- removing some learning areas from primary schooling altogether.

A comprehensive submission from APPA advocates the following changes for the primary years:

- review the volume of material to be covered in the curriculum for languages
- review the specialist elements of the curriculum for the arts, and remove the mandatory inclusion of five art forms
- review content in the technologies curriculum that overlaps with the social education curriculum
- remove economics and business
- remove the amount of content in civics and citizenship
- remove the history curriculum for the first three years of schooling
- limit the scope of the science curriculum for the first three years of schooling.

²⁶² Full document can be found at:

<http://webarchive.nationalarchives.gov.uk/20130904095427/https://www.education.gov.uk/schools/teachingandlearning/curriculum/nationalcurriculum2014/nationalcurriculum/b0073043/remit-for-review-of-the-national-curriculum-in-england> (viewed 17 July 2014).

²⁶³ Oates, T 2010, *Could Do Better: using international comparisons to refine the national curriculum in England*, Cambridge Assessment, p. 7.

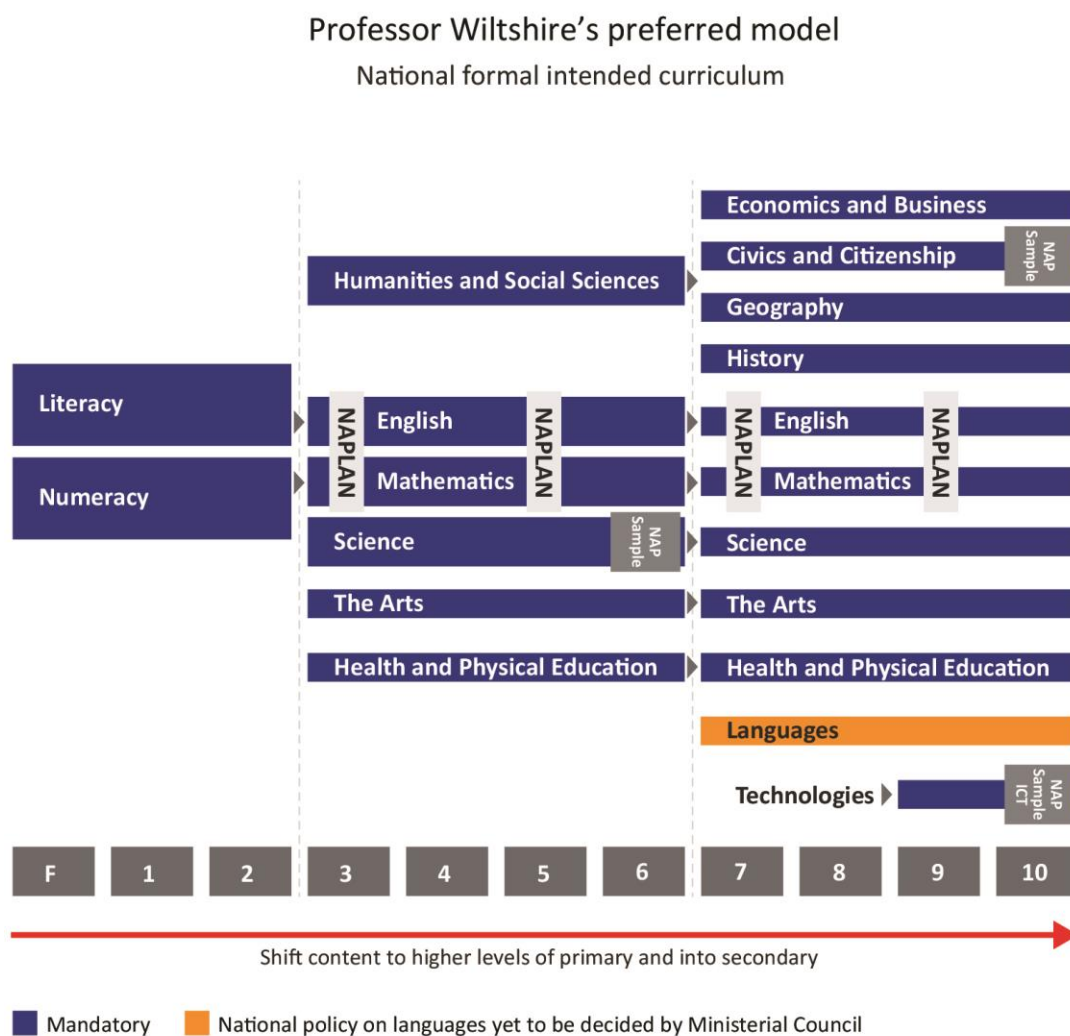
²⁶⁴ Department for Education 2012, 'Review of the National Curriculum in England: What we can learn from the English, Mathematics and science curricula of high-performing jurisdictions', Department for Education, full document can be accessed at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/184064/DFE-RR178.pdf

Conclusions

We have listened to teachers, principals and parents on this topic and explored the evidence, and we agree that the Australian Curriculum is overcrowded in many dimensions. This view is also affirmed by most of the subject matter specialists we have commissioned for the various learning areas. We note that it has been a common experience in many other nations who have had to slim down their formal curriculum. There are several options available to address this, which include, for example:

- Keeping all the learning areas but engaging on a fresh redesign and restructure process to identify essential core content in all learning areas, with the aim of slimming down each learning area by reducing the number of topics and themes covered. This exercise would need to be performed on educational grounds and criteria, not by compromise approaches. It would benefit from the inclusion of independent experts who were not associated with the original development, and drawn from each discipline.
- Declaring the Australian Curriculum to comprise just the learning areas of English, mathematics, science, history, and geography. This could be just for F–10 or for the whole of F–12. These subjects would be core and mandatory. If the other learning areas were to be retained, with or without full curriculum content, they would be declared non-core and elective. This would resemble, in design, the national curriculum in England with its distinction between Core and Foundation subjects.
- Reviewing the level at which all disciplines are introduced into the primary curriculum with a view to their introduction at a level higher than exists at present, paying particular attention to those learning areas which have come under criticism in this aspect as part of this Review.

However, and in addition to the above options, we are individually drawn to two different models [see Figure 7 and Figure 8] that would alleviate the issue of overcrowding currently being experienced.



- Early childhood (F-2) is focused on literacy and numeracy but embraces aspects of other curriculum subjects and areas of child development, including play-based learning, socialisation and movement and coordination.
- Core content from Years 3-6 is narrowed from existing curriculum.
- Economics and Business is not included in primary and commences from Year 7. Financial literacy can be integrated in maths and other relevant areas of the curriculum from Years 3-6.
- History, Geography, and Civics and Citizenship will be integrated into a single Humanities and Social Sciences course.
- In all subjects which are mandatory, states and territories would have some flexibility to adapt sequencing of content and application of general capabilities to particular contexts.

Figure 7: Professor Wiltshire's preferred model for the Australian Curriculum

Under this model, the Australian Curriculum is made less monolithic, symmetrical, and template driven, by:

- focusing the early years of schooling (F–2) on the development of literacy and numeracy while embracing aspects of other curriculum areas in teaching and learning programs where relevant and incorporating important areas of child development such as play-based learning, socialisation and movement and coordination. In these early years, the curriculum would benefit

from resource material which would continue to be produced, and teachers would use relevant content from disciplines as they develop literacy and numeracy content and skills

- making the post-Year 2 structure less monolithic and template driven by:
 - narrowing the mandatory core content of all disciplines in the upper years of primary from the current quantum and then increasing this quantum gradually through secondary schooling
 - reducing the number of disciplines introduced in primary school. For example, economics and business is not included in the primary curriculum but commences from Year 7 with essential elements of financial literacy integrated into the mathematics curriculum and other relevant learning areas. Technologies are introduced from Year 7
 - integrating the reduced history, geography and civics and citizenship content from Year 3 to Year 6 into a single humanities and social sciences curriculum with the individual disciplines being introduced from Year 7. Geography is now mandatory until the end of Year 10
 - shifting the core- school-content balance in certain learning areas, allowing schools to incorporate much of the previous core content into their own school-based curriculum. The balance in such disciplines might approach 50:50 or even 30:70 rather than the notional 80:20 which exists in other learning areas. This approach might suit the curriculum in subjects like health and physical education, and the arts, or design and technology, which are traditionally areas where most schools already have a rich program.
 - maintaining the separate art forms for the arts curriculum with schools expected to opt for two of them, rather than being required to offer the full range of arts
 - integrating the cross-curriculum priorities – renamed ‘curriculum priorities’ – into learning areas, but only where relevant and educationally justifiable, eliminating any suggestion of arbitrary additional content emanating from them.
- While languages other than English were outside the scope of this Review, the study of languages is considered important, particularly in secondary school. It is noted that while there is no national consensus on language learning across Australia, the Australian Government has indicated it will work with the states and territories towards making the study of a foreign language mandatory from Year 5 to Year 10 within a decade. In the interim, it is considered that the study of one language other than English should be mandatory from Year 7 to Year 10.
- Given the uncertainty around the senior secondary Australian Curriculum, this model leaves discretion to states and territories on how they integrate Year 11 and 12 Australian Curriculum into their senior secondary courses.

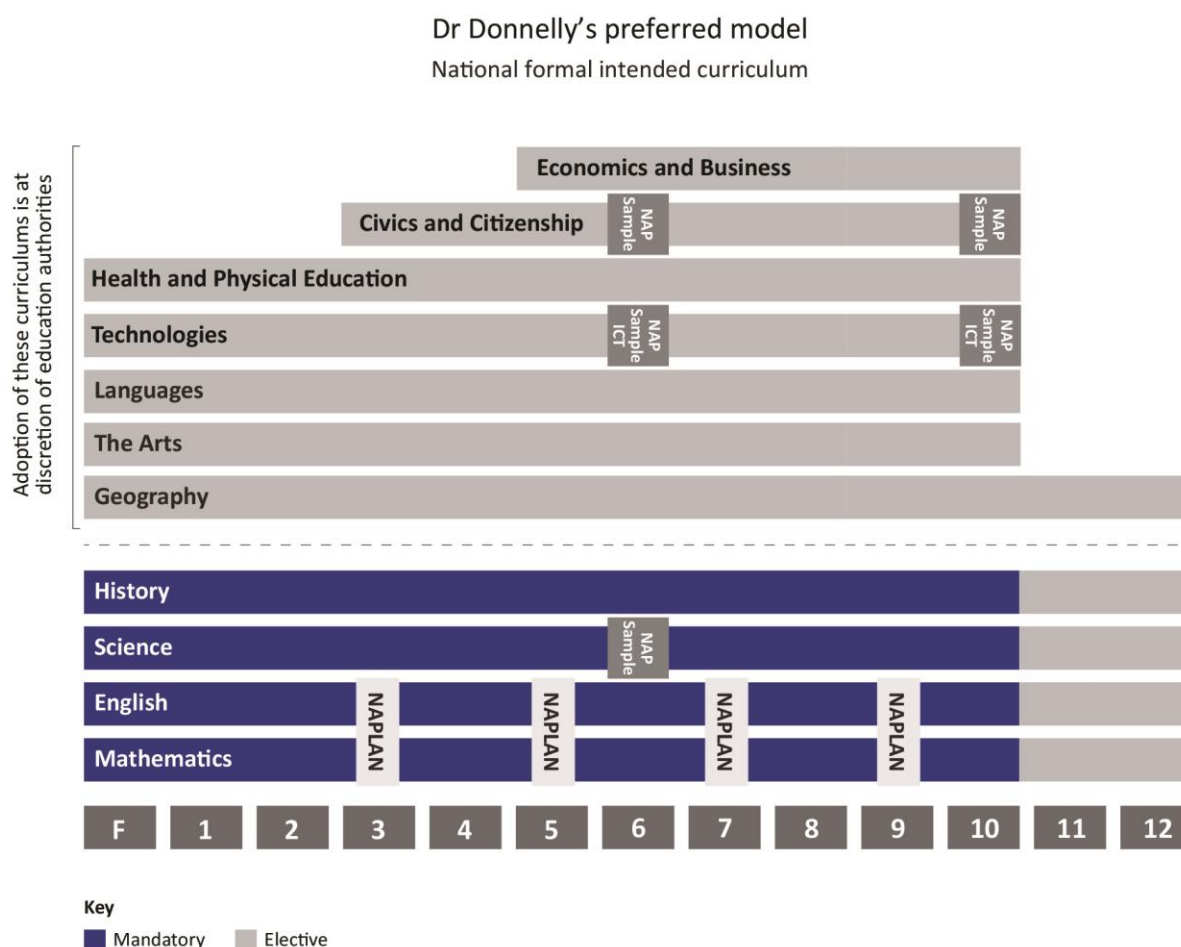


Figure 8: Dr Donnelly's preferred model for the Australian Curriculum

Under this model, a slimmed down version of the Australian Curriculum in the eight learning areas is maintained across F–10. All key learning areas and subjects are revised to reduce content to that which is essential. As is currently the case, state and territory curriculum, assessment and certification authorities will continue to determine how, and to what extent, the Australian Curriculum is integrated into their Year 11 and Year 12 courses.

The existing three cross-curriculum priorities, where relevant and educationally sound, are dealt with in the context of specific subjects or areas of learning in a discrete and more substantial way than currently is the case.

With the exception of literacy, numeracy and ICT, under this model, the remaining general capabilities would no longer be treated in a cross-curricular fashion; instead and similar to the cross-curriculum priorities, they would be embedded in particular subjects or areas of learning where relevant and educationally sound.

Such a model addresses concerns about the overcrowded curriculum and the need to give education authorities, including jurisdictions, sectors and schools, greater flexibility and choice in relation to the intended curriculum.

This revised and reduced Australian Curriculum for English, mathematics, science and history remains mandatory to teach, but states and territories are given the freedom to adopt and adapt its

sequencing as they see fit. Under this model the current arrangements in relation to accrediting alternative curriculum frameworks will be maintained.

While the revised and reduced Australian Curriculum is developed in the other key learning areas, jurisdictions are not required to implement it unless they wish to, and instead may rely on their own, or another state- or territory-developed curriculum.

Accessibility of the curriculum

This Review has endeavoured to assess opinion on whether the Australian Curriculum is currently teacher-friendly and parent-friendly. We cover this aspect as well in Chapter Four on the development process.

By and large it would seem that teachers regard the Australian Curriculum as easy to access and to understand, although we did receive comments that the content with all its templates did seem to be daunting to many teachers, especially new ones. We have already touched on the fact that some sectors and schools have different views on whether it is all mandatory and there is substantial evidence of adopting and adapting occurring across the nation. Some jurisdictions, like Victoria have absorbed it into their own framework (AusVELS), and New South Wales has done something similar with its syllabus approach. Queensland has developed a C2C framework which provides a translation of the Australian Curriculum for local practice and the Northern Territory is also making some use of this resource. Some jurisdictions and sectors are running professional development programs for their teachers. Other jurisdictions are simply using the ACARA website as their sole reference for teacher and parents. One sector is putting its own 'skin' over the Australian Curriculum and adding its own brand.

Teachers and schools have expressed a desire for more helpful resource material, and orientation of content to facilitate pedagogy, and they have generally looked to ACARA to provide this (although jurisdictions in the states and territories see such a matter as being solely their responsibility). This would also facilitate professional development in use of the Australian Curriculum, especially for new teachers. Many teachers have also requested a year-by-year total curriculum document rather than current ones which are available by discipline. In addition, as mentioned previously, many of our respondents have requested that an overall curriculum framework be produced so that the total space and discipline spectrum can be appreciated and used as a guide for time and resource allocation within the school.

In relation to parents, we have discovered that teachers and professional educators regard the Australian Curriculum as essentially a 'teachers' document'. Some see it as a quasi-syllabus. Most have not been concerned about whether parents find it accessible or easy to understand, with many saying parents should simply trust the school and direct all questions in that direction. We have been somewhat shocked at the arrogance of some sector leaders in this respect including their lack of understanding regarding the need for accountability to parents, and the crucial importance of a school having the community support and trust that is so necessary for effective schooling.

Many of the people who lead the parents associations in various sectors and jurisdictions seem to be comfortable with the Australian Curriculum, especially if they were personally involved in the

development process. However, our consultations revealed that this does not seem to be the case for all parents.

We have discovered a vast array of methods with which individual jurisdictions and schools are informing parents about the Australian Curriculum, but many are not doing so at all. The techniques used range from detailed explanations on individual students' reports, to inclusion on the school's website and material, to reference to a state or territory web site, or just to the ACARA website.

The bulk of parents seem to have been unhappy about the token involvement of parents in development of the curriculum, and report frustration in being able to gain independent access to curriculum documents. Many complain about the lack of hard copy, pointing out that not all households have internet access²⁶⁵; nor are all parents computer literate. As in so many other aspects of government service delivery in Australia, purely web-based delivery is not adequate.

Conclusions

The Australian Curriculum is reasonably teacher-friendly but can be improved by simplified language and provision in total year discipline content for teachers. There needs to be considerably more content designed to be pedagogy-enhancing, or providing more resource material. It could also be supplemented by professional development material, whether by ACARA or state and territory jurisdictions. The function of ESA in relation to the Australian Curriculum could be strengthened in this regard.

The Australian Curriculum is not parent-friendly. A new simplified version for parents needs to be produced in both web and hard copy format showing clearly exactly what students should be being taught at each level and in each discipline. A template for schools to use in informing parents about the Australian Curriculum and its content, and for reporting student performance against it, should be produced and accompanied by a requirement by schools to implement it.

Student diversity

The school cohort of every nation is a diverse one, with students of varying capabilities, backgrounds, and contexts. Most curriculum designers endeavour to ensure that the curriculum is inclusive and does not overtly or unintentionally discriminate against any individual. As the submission from The Smith Family observes, various considerations need to be taken into account in developing and implementing a national curriculum in order to maximise the potential of all Australian students, including disadvantaged students. It is generally recognised that this requires a combination of curriculum design and tailored pedagogical approaches. In the case of the Australian Curriculum the approach appears to have been mainly through modification of the general capabilities and assessment requirements, rather than through separate content specifications.

The concept of student diversity encompasses a wide range of aspects relating to disadvantage – whether it be in relation to disability, socioeconomic factors, cultural perspectives, or remoteness, all of which pose a challenge to achievement. Most of the specific submissions to this Review in this domain have related to disability. In the submissions, and through consultations and discussions, a number of concerns have been expressed in this regard. One organisation stated categorically that

²⁶⁵ Australian Bureau of Statistics 2014, *Household Use of Information Technology, Australia, 2012–13*, can be accessed at: <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/8146.0Chapter12012-13>

‘the curriculum does not cater for all students’. It has also been claimed that parents of students with additional needs are saying that the curriculum is not what was promised and the Australian Curriculum has lost credibility with them.

This view is supported by a number of experts from special education schools, who were involved in the curriculum development process and believe that the ACARA process was haphazard and changed direction, particularly through a change of committee composition, and the commissioning of papers from experts that had to be written from a particular standpoint but which were then rejected or never published. One of the key issues was apparently whether there should be a separate pre-Foundation approach, which ACARA supported and then dropped, to the dismay of the experts who had made a number of submissions on this matter, concerned primarily about the need to focus on the progress of students. But their advice was not accepted or simply neglected. Stronger contrary views were put and, once again, compromise ruled the day.

There was also reported to be a threat of litigation against ACARA regarding the design of the curriculum, from the special education sector, on the grounds of discrimination. The matter is reported to have gone to mediation following which all momentum towards trying to resolve the issues and find solutions stopped.

Echoing similar criticism we have reported elsewhere, these experts identify the fundamental problem as being ACARA’s lack of any curriculum framework. In their words, ‘it was like a jigsaw with no picture on the front’, and ACARA was ‘like a cork bobbing around in an ocean’, not prepared to focus the conversation on learning, and not prepared to establish trials and get data on learning in this arena.

A matter of Australian culture

Some submissions to this Review from those with considerable experience in this area have said that attempts to address the aspects of disability are always confronted by a basic and fundamental problem in Australian culture, which also permeated the approach to addressing student diversity in designing the curriculum. This is the way people with an impairment or disability are viewed by the population at large and the education system in particular. Children with Disability Australia (CDA) say that such attitudes are reflected in lower school completion rates and workforce participation rates and a key reason is the deeply entrenched systemic culture of low expectations regarding students living with disability. They point out that just over 90 per cent of students with disability attend mainstream schools and are present in almost every classroom, and so it is vital to teach all students about the value and contribution that all children make to our community including schools – namely inclusion.

However, another aspect of this problem is the perception of special schools. There is a lack of understanding by the population at large that their key focus is learning, and of the remarkable work they achieve as centres of learning. Teachers in special schools are becoming dispirited by these constant misperceptions.

Their schools do not have full details recorded on the My School website. The My School website contains information on all special schools relating to school profile details such as student to teacher numbers and finance information; however, for most special schools there is no NAPLAN information and no Index of Community Socio-Educational Advantage (ICSEA) reported. The feeling

is that they are always regarded as ‘too difficult to handle’. Their plight has not been helped by the fact that the Review of Funding for Schooling on school funding²⁶⁶ admitted that it was unable to come to a conclusion on precise formulae for recognising disability because of the absence of reliable data on relevant school population and the inconsistency of reporting across jurisdictions.

The Review of Funding for Schooling also observes:

*There are multiple ways to address the impact of concentration of disadvantage on educational outcomes. One way to minimise differences in quality between low and high socioeconomic status schools is to adopt a funding model that provides similar resources to all schools and additional funding to schools with high needs. Another way is to ensure that core curriculums and program offerings are relatively similar across all schools.*²⁶⁷

The Down Syndrome Association of Queensland says that:

*any review conducted must include a review into how people with an intellectual impairment are viewed by the education system and how they are currently educated and match that up with best practice research.*²⁶⁸

Dyslexia groups also emphasise that Australians are generally unaware of the impact which dyslexia has on a majority of underperforming students.

Curriculum design

We received related submissions expressing satisfaction with the curriculum consultation process, but among those who were so satisfied there were a number who said their views were not addressed. This includes the Queensland Association of Special Education Leaders (QASEL) claims that they had made constant responses to ACARA that there was an absence of curriculum content for many students with intellectual disability who are not yet demonstrating learnings at Foundation level or any other level beyond Foundation, yet their responses were largely ignored or unheeded by ACARA. In a similar vein, ASEPA stated that students living with disability were not included in the original curriculum scoping and design and that has resulted in a fundamental design flaw. They believe that the term ‘Foundation–10’ does not allow teachers and whole systems to cater fully for the curriculum needs of all students. There is a significant group of students for whom there is no explicit curriculum as they are yet to achieve the Foundation level.

*Currently F–10 implies that any supplementary material for Special Needs and Disabilities is an ‘add-on’. Whilst ASEPA recognises that this is not the intention, it will nevertheless be the inference ... if the curriculum is ‘inclusive’ it must include curriculum for all learners including those at the pre-intentional stage of development, as they too attend our Australian schools ... Despite the significant consultation the current curriculum offer for Special Needs and Disability students sits only within general capabilities.*²⁶⁹

²⁶⁶ Australian Government 2011, *Review of Funding for Schooling—Final Report*, Department of Education, Employment and Workplace Relations

²⁶⁷ Ibid., p. 127.

²⁶⁸ Down Syndrome Association of Queensland Inc. 2014, Submission to the Australian Government Review of the Australian Curriculum, p. 2.

²⁶⁹ Australian Special Education Principals’ Association 2014, Submission to the Australian Government Review of the Australian Curriculum, p. 2.

The QAESL supports this general view and wants a focus on the content, not just general capabilities, particularly for students with intellectual disability. They advocate the 'Towards Level 1' of the VELs and the Abilities Based Learning and Education Support (ABLES) from Victoria be included in the Australian Curriculum and that ACARA acknowledge the differences of intellectual disability and provide appropriate curriculum, strategies and guidelines that will assist teachers deliver curriculum for students with intellectual disability.

The APTA conveyed the concerns of teachers of students with special needs and disabilities for a more inclusive structure for these students. The Association believes that currently the student age determines the starting point for students with special needs and disabilities, rather than a student's level of development. They blame the development process:

*The original curriculum scoping and design by ACARA had not explicitly included students with special needs and disabilities. Accommodations were bolted on rather than designed as an integral part of the curriculum. Any future review of the Australian Curriculum should include students with special needs and disabilities.*²⁷⁰

Many submissions expressed the view that the curriculum is not balanced as it does not adequately meet the needs of students living with disability, disadvantaged students, or early school leavers. Some lay the blame on the lack of ability to include local content noting that this was a particular issue for teachers teaching students for whom English is an additional language or dialect, and for Indigenous students. Still others, like the Albury Wodonga Community College, express concern about both content and general capabilities and want more emphasis placed:

*to widen the curriculum to support all students in choice and diversity particularly when for 15%, the current learning areas and general capabilities of the Australian Curriculum are an enigma to them*²⁷¹... *given the current school level dropout rates nationally in senior secondary level years and the reality that 'alternative' educational approaches are necessary if the COAG targets are to be realised ... Our submission promotes 'choice' where almost none currently exists.*²⁷²

This viewpoint is echoed by the Catholic Education NT (CENT) Diocese of Darwin which expresses this view:

*CENT recognises the tensions in our belief and commitment that all children are entitled to a full curriculum – and that there is adequate time provided for students to master the content and skills. This is a particular tension in Indigenous and other communities where English is not the home language or where low attendance impacts time available. We recognise the significant work schools take to manage these tensions and to provide the optimum learning environment and curriculum in their local context. CENT considers discernment acknowledging local level contexts is essential in determining curriculum implementation for communities and cohorts, with concurrent commitment to provision to a rigorous and relevant curriculum.*²⁷³

²⁷⁰ Australian Professional Teachers Association 2014, Submission to the Review of the Australian Curriculum, p. 4.

²⁷¹ Albury Wodonga Community College 2014, Submission to the Review of the Australian Curriculum, p. 3.

²⁷² *ibid.*, p. 1.

²⁷³ Catholic Education Northern Territory 2014, Submission to Review of the Australian Curriculum, p. 4.

One area which has come in for focused criticism is the lockstep or linear progression of the Australian Curriculum making it difficult for students operating at the Foundation level; as a result the curriculum is not accessible for the students with additional needs. We have already noted the concern from the APTA that currently student age determines the curriculum starting point. This theme is taken up by the Professional Association for Learning Support (PALS) which points out that relevant structures and policies should always focus on the achievement of students on an individual basis. It contends that too many students are allowed to progress without achieving at a level at which they are capable and do not acquire prerequisite skills for courses in their senior years. They have suggested a Response to Intervention framework to ensure that students requiring specialised interventions are identified in their school career and that appropriate instruction or programs are implemented before students proceed any further:

Programs such as NAPLAN whilst they may provide data on school achievement do little for students on an individual basis ... The quality and strength of any curriculum can only be validated if it is the vehicle by which ALL our youth leave school with knowledge, skills and attitudes that maximise their potential as members of our society.²⁷⁴

Suggested changes

Particularly in the field of disability, many special education teachers say that the whole discussion needs to begin with ‘learning’ and the needs of students. They advocate following the Victorian initiative with ‘Towards Level 1 AusVELS’ and also speak highly of the work undertaken by ASDAN²⁷⁵ in the United Kingdom. This work has been developed internationally as a rigorous certification standard with varying levels accompanied by evidenced moderation, and has been used in Western Australia. Most of all they want ACARA to begin trialling experience in schools and obtain data and develop a framework on ‘Settings For Learning’ in this domain. A return to the Salamanca statement²⁷⁶ is needed they claim.

Despite the intense concern expressed in this area by a number of groups, not many suggested specific changes have been forthcoming to this Review:

- removing the lockstep/linear progression requirement is one clear suggestion from many groups
- including Victorian pre-Foundation material in the Australian Curriculum has already been mentioned. So too has the concept of a Response to Intervention framework to focus on the progress of individual students making more productive use of NAPLAN.

The Smith Family believes that a curriculum that maximises every student’s potential should reflect the impact on young people’s educational participation. Its implementation should also seek to support the deep cross-sectoral partnerships that are particularly important in improving educational outcomes for disadvantaged young people, as exemplified by community hubs. They point to their successful programs such as ‘student2student’ which are having a positive impact on children’s reading skills.

²⁷⁴ The Professional Association for Learning Support Inc. 2014, Submission to Review of the Australian Curriculum, p. 1.

²⁷⁵ Information on ASDAN can be found at <http://www.asdan.org.uk/home> (viewed 10 July 2014).

²⁷⁶ The Salamanca statement and framework for action on special needs education can be found at <http://unesdoc.unesco.org/images/0009/000984/098427eo.pdf> (viewed 13 August 2014)

We have been referred by Down Syndrome Association of Queensland to the very worthwhile reading program, 'Reading Our Way'.²⁷⁷ This is an Australian reading program especially designed to teach students with Down syndrome to read. It is based on leading strategies, skills and techniques needed to teach reading to a student with Down syndrome. The Association believes this is an excellent example of what can be used by teachers with the correct knowledge and skills training. The Association points out that an outdated and old fashioned method of educating students with Down syndrome has pervaded our education system for too many years. Research has shown that students with Down syndrome can, and do learn core curriculum skills, albeit at a much slower rate, at an older age and when using the correct techniques.

The Gold Coast Dyslexia Support Group makes a telling point by arguing that:

*I would like the new curriculum to develop teaching resources that focus on multi-sensory learning so that ALL students are better able to learn. I would like the new curriculum to include, with equal weight, avenues where underperforming students can participate and shine (music, dance, drama, science, history, sports, hands-on learning). Reading and mathematics are essential skills and should continue to be valued above all other skills. By including multi-sensory learning in the curriculum from the start we can ensure that the basics of these essential skills are quickly mastered and our students can concentrate on developing new skills.*²⁷⁸

Perhaps the last word should rest with the observation of CDA that 'inclusion' should be part of the Australian Curriculum. They note that it is typical to have one to two students with disability in classrooms across Australia:

*Creating inclusive educational settings that respect the contribution of all students has significant benefits and leads to positive outcomes for children who do and do not experience disability. Actively teaching inclusive practices as part of the national curriculum therefore represents a crucial step to improving the educational and employment outcomes for students with disability.*²⁷⁹

The Salamanca Statement

It has been drawn to our attention by special education educators that the whole discussion of student diversity in Australia seems to have forgotten the fundamental components of the Salamanca Statement and Framework for Action on Special Needs Education 1994, to which Australia was a party:

- *Every child has a fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning.*
- *Every child has unique characteristics, interests, abilities and learning needs.*
- *Education systems should be designed and educational programmes implemented to take into account the wide diversity of these characteristics and needs.*

²⁷⁷ Down Syndrome Association of Queensland Inc. n.d, *Reading Our Way, A Visual Approach to Teaching Literacy*, viewed 10 July 2014, can be accessed at: <http://www.readingourway.com.au>

²⁷⁸ Gold Coast Dyslexia Support Group 2014, Submission to the Review of the Australian Curriculum, p. 1.

²⁷⁹ Children with Disability Australia 2014, Submission to Review of the Australian Curriculum, p. 3.

- *Those with special educational needs must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs.*²⁸⁰

And on curriculum:

- *Curricula should be adapted to children's needs, not vice-versa. Schools should therefore provide curricular opportunities to suit children with different abilities and interests.*
- *Children with special needs should receive additional instructional support in the context of the regular curriculum, not a different curriculum. The guiding principle should be to provide all children with the same education, providing additional assistance and support to children requiring it ...*
- *In order to follow the progress of each child, assessment procedures should be reviewed. Formative evaluation should be incorporated into the regular educational process in order to keep pupils and teachers informed of the learning mastery attained as well as to identify difficulties and assist pupils to overcome them.*²⁸¹

From this statement it is clear that there is a universal that curriculum content should not be varied to address student diversity – rather pedagogy, contexts and settings, and assessment need to be modified to achieve the same learning even if this means proceeding at a different pace or stages and in different ways. Technology is also already offering new options in this regard.

The experience in England

Student diversity was a key element of the recent review of the curriculum in England with various consultation approaches and also the issuance of an 'equalities impact assessment'.²⁸²

The report from the expert panel associated with the Review made this statement:

*The National Curriculum should provide young people with the knowledge they need to move confidently and successfully through their education, taking into account the needs of different groups, including the most able and pupils with special educational needs and disabilities.*²⁸³

The national curriculum in England defines student diversity as encompassing what are termed 'protected characteristics'. Within a school context the most relevant protected characteristics (as defined in the *Equality Act 2010*) are pupil disability, race (including colour, nationality, ethnic or national origin), religion or belief, sex, and sexual orientation.²⁸⁴

Student diversity is taken into account in subject content and a revised inclusion statement makes it clear that in all subjects, including physical education, teachers must take account of individuals or groups of pupils and make provisions to support them where necessary, so that they can participate effectively in the curriculum. The mathematics curriculum is an interesting example where the

²⁸⁰ UNESCO 1994, *Salamanca Statement and Framework for Action on Special Needs Education 1994*, UNESCO, p. viii.

²⁸¹ UNESCO 1994, *Salamanca Statement and Framework for Action on Special Needs Education 1994*, UNESCO, p. 22.

²⁸² Department for Education 2013, *Reform of the National Curriculum in England: Equalities Impact Assessment*, Department for Education.

²⁸³ Department for Education 2011, *The Framework for the National Curriculum. A Report by the Expert Panel for the National Curriculum Review*, Department for Education, p. 6.

²⁸⁴ *The Equality Act 2010*. Full text can be accessed at: <http://www.legislation.gov.uk/ukpga/2010/15/contents>

statement of subject aims sets out the expectation that schools will decide on the pace at which individual pupils progress through each program of study, based on the security of their understanding and readiness to proceed to the next stage. In other subject areas it is made clear that challenging content can be taught in ways that are accessible and engaging.

In order to cater for diverse student backgrounds and different cultural traditions subject content is not focused on a specific culture allowing schools to cater for ethnic and national backgrounds of students without potentially disadvantaging them.

Regarding assessment and grading, research and benchmarking identified only a paucity of useful material, which was not generally considered as adequately addressing student diversity and equalities.²⁸⁵ However, the government did set out its intention to address this factor. A similar situation prevailed relating to the reporting of progress for the lowest attaining students.²⁸⁶

Nevertheless, it was considered that setting high expectations of achievement, regardless of student diversity, would improve standards overall:

*International evidence is also clear that the best performing education systems set the highest standards in core subjects and embrace diversity in pupils' capabilities, interests and social background.*²⁸⁷

The curriculum in England also places stress on catering for high-achieving students (gifted and talented) and identifies subject content to 'stretch' them.

The crucial importance of pedagogical approaches to address student diversity is highlighted strongly in England and a number of successful approaches have been identified.

The Expert Panel to Review the Curriculum in England which conducted extensive international benchmarking summarised the situation this way:

*Specific provision for pupils with learning difficulties is important-with the aim, wherever possible, of enabling them to continue to progress with their cohort and peers. In the Review's call for evidence 38% of respondents mentioned in open responses that reasonable expectations of attainment would vary considerably according to the nature of a pupil's needs and disability ... These representatives thought that there is a need for something more flexible that recognises and assesses individual progress; that assessment should focus on successes rather than being grounded in failure; and a teacher's narrative judgement should be used in assessment of a pupil's progress. These views cohere with our notion of a revised model that focuses on inclusion, mastery, and progress. However, more work needs to be done around these issues, both with respect to children with learning difficulties and those regarded as high attainers.*²⁸⁸

²⁸⁵ Caplan, A & Jackson, J 2013, *Annex 2 – GCSE Reform Equality Analysis: Literature Review*, Office of Qualifications and Examinations Regulation, United Kingdom.

²⁸⁶ Department for Education 2010, *The Importance of Teaching; the Schools White Paper*, Department for Education

²⁸⁷ Department for Education 2013, *Reform of the National Curriculum in England: Equalities Impact Assessment*, Department for Education, p. 6.

²⁸⁸ Department for Education 2011, *The Framework for the National Curriculum, A Report by the Expert Panel for the National Curriculum Review*, Department for Education.

Conclusions

It is apparent that there is insufficient international research or experiential evidence to identify best practice in addressing student diversity. No nation seems to have successfully encompassed all the many aspects of this challenge, which cannot simply be solved by legislation or policy directive.

It does seem clear that relevant teaching approaches and pedagogical adaptation within supportive school environments constitutes the key. Attempting to vary actual curriculum content is not advocated. However, it is also clear that curriculum can assist in various ways through variable approaches to content, flexible capability requirements, tiered or adjusted assessment and reporting, and focussing on individual rather than just group or lockstep progression. Inflexible template-driven frameworks and expectations are not appropriate – by definition, diversity requires diverse approaches. ACARA needs to do far more trialling in this field and take more note of successful approaches occurring in Australian schools. The successful experience with AusVELS ‘Towards Level 1’ and ASDAN in England should be the immediate starting point. After all, ACARA’s Charter requires it to support state and territory authorities to advise the ministerial council on how the national curriculum will address the diverse needs of students with disability and students for whom English is another language or dialect.

For too long in Australia, often in the disguised cause of cost cutting, we have been just placing disadvantaged or students with disability into mainstream schools and classrooms without providing adequate learning support, and at the same time preserving a semblance of special schools, and hoping for the best. Hence we create major challenges for our dedicated teachers. There is much more to be done in this arena in Australia. With some concerted effort we could become international leaders in this important field.

The place of religion, belief systems and values in the Australian Curriculum

One of the more contentious issues related to the Australian Curriculum is the place of values and beliefs, especially moral and spiritual values and how religion is dealt with.

As noted in Chapter One, no curriculum is ever value free as it either implicitly or explicitly embodies or gives voice to a particular set of values and beliefs. It is also true, when defining the purpose of education that along with more practical and utilitarian ends education, by its very nature, deals with the transcendent, including morality and spirituality.

It also needs to be understood, while the major religions of the world deal with the transcendent and emphasise moral and spiritual aspects of existence, many secular beliefs systems also explore and deal with similar matters.

The Melbourne Declaration, the blueprint for Australian schools, recognises this when it refers to ‘moral and spiritual’ when detailing the role schools play in promoting students’ wellbeing. The Declaration also defines active and informed citizens as exhibiting ‘moral and ethical integrity’ and commits itself to a curriculum that will enable students ‘to understand the spiritual, moral and aesthetic dimensions of life’.

Many overseas curriculum documents also refer to ethical and moral values and beliefs when detailing aims and objectives. The Singapore curriculum, under the heading The Desired Outcomes

of Education, states that students should develop a 'sound moral compass' and 'a strong sense of right and wrong'.²⁸⁹

The Finnish curriculum, when detailing learning objectives and core content of education, argues that students must 'learn to evaluate the ethics of their actions and to recognize right from wrong' as well as being taught 'their respective cultural heritages, spiritual and material'.²⁹⁰

The English National Curriculum, similar to the Australian Curriculum, also stipulates that the curriculum must deal with students' spiritual and moral development and goes as far mandating religious education (RE)²⁹¹ for maintained schools on the basis that:

*RE is an important curriculum subject. It is important in its own right and also makes a unique contribution to the spiritual, moral, social and cultural development of pupils and supports wider community cohesion. The Government is keen to ensure all pupils receive high-quality RE.*²⁹²

Based on the argument that state schools are 'free, compulsory and secular', the argument is often put that there is no place for teaching about religion in state schools. Such an argument is bolstered by the fact that the legislation in states like Victoria stipulates, 'education in government schools must be secular and not promote any particular religious practice, denomination or sect'.²⁹³

The Western Australian legislation is similar when it states in the School Education Act, section 68(1a) that the 'curriculum and teaching in government schools is not to promote any particular religious practice, denomination or sect'.

As a result, organisations like the Australian Education Union, argue that:

*As part of the great education settlement in the colonies of the latter part of the nineteenth century it was agreed that public systems of education would eschew instruction of a dogmatic and specific kind. Part of the guarantee of freedom of religion in this country was to be based on freedom from religion in teaching programs. And part of respect for all citizens' belief systems was the guarantee that one religious tradition was not to be privileged by the state over another. This is simply basic to the finely-honed and successful western, liberal tradition of Australia and in particular, its public school system.*²⁹⁴

Ignored is that the existing legislation in many states – contrary to the belief that there is no place for religion in state schools – allows religion to be included. The Western Australian legislation in section 68 qualifies the statement that religion should not be taught, when it states:

(2) Subsection (1) (a) is not to be read as preventing – (a) the inclusion of general religious education in the curriculum of a schools; or (b) prayers, songs and other material based on

²⁸⁹ Ministry of Education, Singapore, *The Desired Outcomes of Education*, Ministry of Education, viewed 30 July 2014, can be accessed at <http://www.moe.gov.sg/education/desired-outcomes/>

²⁹⁰ Finnish National Board of Education 2004, *National Core Curriculum for Basic Education 2004*, Finnish National Board of Education.

²⁹¹ While mandatory for maintained schools, parents are able to withdraw their children from all or part of such lessons.

²⁹² Department for Children, Schools and Families 2010, *Religious education in English schools: Non-statutory guidance 2010*, Department for Children, Schools and Families, p. 4.

²⁹³ *Education and Training Reform Act 2006* (Victoria), s. 2.2.10.

²⁹⁴ Australian Education Union 2014, Submission to the Review of the Australian Curriculum, p. 9.

religious, spiritual or moral values being used in a school activity as part of general religious education.

The New South Wales legislation requires that state schools provide religious education classes when it states, 'in every school, time is to be allowed for the religious education of children of any religious persuasion'.²⁹⁵ The Victorian legislation, in addition to allowing states schools to provide religious instruction, if desired, also allows for the inclusion of what is described as general religious education in the curriculum. The Victorian Act allows students to be taught 'about the major forms of religious thought and expression characteristic of Australian society and other societies in the world'.²⁹⁶

Clearly, the statement that education in government schools, as opposed to faith-based, non-government schools, must be secular does not exclude special religious education classes or including teaching about religion in the curriculum in subjects like history, art, civics and citizenship, music and English (especially literature).

That religion can, and should, be included in the curriculum is acknowledged by ACARA in its draft statement titled 'Learning about religions, spiritualities and ethical beliefs in the Australian Curriculum' which was provided to this Review.²⁹⁷ Based on the Melbourne Declaration's belief that education must deal with moral and spiritual beliefs and issues the ACARA statement argues the Australian Curriculum 'provides opportunities and encourages students to learn about different religions, spiritualities and ethical beliefs ...'.

ACARA's argument that 'religions, spiritualities and ethical beliefs' should be included in the Australian Curriculum is not an argument for proselytising; rather it is an argument that any balanced curriculum should teach what the Victorian legislation refers to as 'the major forms of religious thought and expression characteristic of Australian society and other societies in the world'.

As noted by one submission, important when listing 'the major forms of religious thought and expression characteristic of Australian society' is the reality that Christianity plays a major role, on the basis that 'Historically, Christianity has had a far greater positive influence on Western Society, than any other religion'.²⁹⁸

The ACARA statement goes on to argue that the Australian Curriculum 'provides a platform for teaching about religions, spiritualities and ethical beliefs in a balanced, informed and impartial manner' and that this content is especially evident in the history and civics and citizenship learning areas.

Not all the submissions agree. In opposition to ACARA's argument that the Australian Curriculum adequately and properly deals with religion and ethical and moral values a number of submissions suggest that there is an imbalance, especially related to how Christianity and Western civilisation are presented in the curriculum.

²⁹⁵ *Education Act 1990* (NSW), s. 32.

²⁹⁶ *Education and Training Reform Act 2006* (Victoria), s. 2.2.10.

²⁹⁷ ACARA 2014, Learning about religions, spiritualities and ethical beliefs in the Australian Curriculum (draft).

²⁹⁸ Julatten Family Fellowship 2014, Submission to the Review of the Australian Curriculum, p. 1.

In addition to the submissions received by this Review, further evidence that religion is not adequately dealt with in the Australian Curriculum is found in an analysis of the place of religion in secular education where the statement is made ‘since 2008 the Australian Curriculum Assessment and Reporting Authority (ACARA) has been developing a new national curriculum. However, religion is not a focus area’.²⁹⁹

In terms of the number of submissions received on this topic, it should be noted that the Review received 413 that appeared part of a campaign arguing that the Australian Curriculum needed to be revised to ensure a more balanced and objective treatment of Christianity and the debt owed to Western civilisation.

A further submission arguing that the ‘National Curriculum should address Christianity in a way that is fair and balanced’ contained 1,647 signatures.

A number of individual submissions have also been received in relation to what is perceived as an imbalance in the Australian Curriculum related to the nation’s Judeo-Christian heritage and values and beliefs.

When questioning the rationale and justification for the three cross-curriculum priorities the submission by the Catholic Education Commission of Victoria (CECV) states:

*The CECV is unclear as to why these particular areas of have been privileged at the expense of others. Forgotten, for example, are the foundations of our liberal democracy, shaped by our Judeo-Christian heritage.*³⁰⁰

The Catholic Education Commission of New South Wales also expresses the concern that the Melbourne Declaration and the Australian Curriculum undervalue the ‘the role, both past and present, of faith traditions generally and Christianity specifically in the development of Australia’.³⁰¹

The Presbyterian Church of Victoria’s Church and Nation Committee’s submission also argues, ‘One glaring omission of the curriculum is that it fails to give an understanding of our Judeo-Christian heritage which had, and continues to have, such a great impact on our country’.³⁰²

While acknowledging the importance of the three cross-curriculum priorities the Christian Schools Australia Limited submission raises the concern that the priorities are seen as ‘dominant, almost exclusive’ and suggests that an additional priority be added. This new priority would ensure ‘the continued recognition of the Western/Judeo-Christian influences on our society’.³⁰³

The submission by The Anglican Education Commission in the Anglican Diocese of Sydney also emphasises the importance of religious beliefs and values when it states, in relation to Australia, that, ‘Our justice, government, education, health and general welfare systems are all established on the Judeo-Christian foundation of this civilization’.³⁰⁴

²⁹⁹ Byrne, C 2014, *Religion in Secular Education*, Koninklijke Brill NV, p. 168.

³⁰⁰ Catholic Education Commission of Victoria 2014, Submission to the Review of the Australian Curriculum, p. 7.

³⁰¹ Catholic Education Commission of New South Wales 2014, Submission to the Review of the Australian Curriculum.

³⁰² Presbyterian Church of Victoria’s Church and Nation Committee 2014, Submission to the Review of the Australian Curriculum.

³⁰³ Christian Schools Australia Limited 2014, Submission to the Review of the Australian Curriculum.

³⁰⁴ The Anglican Education Commission 2014, Submission to the Review of the Australian Curriculum.

Not unexpectedly, the Australian Christian Lobby also repeats the criticism that the Australian Curriculum underplays the 'significance of Christianity in both Australia's history and its modern institutions and culture'. While accepting that contemporary Australia includes a 'rich variety of cultures and religions' the submission regrets the fact that the curriculum fails to properly acknowledge 'the very strong Christian influence of Australia's European settlers, particularly those from the United Kingdom and Ireland'.³⁰⁵

The Australian Christian Lobby submission also argues that the Bible's cultural and literary significance should not be ignored in what many submissions consider to be an overly secular curriculum. The Christian Lobby's submission cites the well-known atheist Professor Richard Dawkins' support for the decision in England to provide every school with a copy of the St James version of the Bible in support of its case.³⁰⁶

Professor Dawkins is not alone in arguing that the Bible should be included in the school curriculum. As Prime Minister, Julia Gillard made the same case when she argued in 2011 'It's impossible to understand Western literature without having that key of understanding the Bible stories and how Western literature builds on them and reflects them and deconstructs them and brings them back together'.³⁰⁷

The argument that knowledge of the Bible is vitally important for an appreciation of Western literature is also made by Professor Spurr in his analysis of the national English curriculum for this Review. After citing Northrop Frye's belief that the Bible represents 'the single most important influence in the imaginative tradition of Western literature', Professor Spurr argues the Bible also cultivates an awareness of the literal, metaphorical and allegorical uses of language.³⁰⁸

Professor Spurr also makes the point that if students are expected to 'learn to question stated and unstated cultural beliefs and assumptions', when studying literature, then they need to have a 'mastery of different belief systems'.³⁰⁹

The Hon Tony Abbott MP, when Leader of the Opposition, also argued two years earlier than Ms Gillard that all students should have knowledge of the Bible when he said, 'I think it would be impossible to have a good general education without at least some serious familiarity with the Bible and with the teachings of Christianity'.³¹⁰

It should be noted that not all the submissions received argue that the Australian Curriculum fails to adequately deal with Judeo-Christian values. The Rationalist Society of Australia, for example, 'rejects the notion that Australia owes its foundations to some putative "Judeo-Christian" heritage'

³⁰⁵ Australian Christian Lobby 2014, Submission to the Review of the Australian Curriculum.

³⁰⁶ Professor Dawkins advocacy for including the Bible in the curriculum, can be found at: <http://www.theguardian.com/science/2012/may/19/richard-dawkins-king-james-bible>

³⁰⁷ See <http://www.theaustralian.com.au/national-affairs/julia-gillard-makes-stand-as-a-social-conservative/story-fn59niix-1226025066869>

³⁰⁸ Spurr, B 2014, Subject matter specialist report on the Australian Curriculum: English, with particular attention to Literature, prepared for the Review of the Australian Curriculum.

³⁰⁹ Ibid.

³¹⁰ Langmaid, A 2009, 'All kids must read the Bible, federal Opposition Leader Tony Abbott says', *Herald Sun*, 18 December 2009, viewed 30 July 2014, can be accessed at: <http://www.heraldsun.com.au/archive/news/all-kids-must-read-the-bible-federal-opposition-leader-tony-abbott-says/story-e6frf7l6-1225811885777>

arguing instead for the importance of ancient Greek and Roman influences and the impact of the Enlightenment.³¹¹

In addition to many submissions putting the case that the Australian Curriculum should deal with Christianity in a more balanced and objective way, a number of submissions argue that students should study a range of religions and beliefs systems.

Rabbi Dr Shimon Cowen in his submission³¹², based on the Melbourne Declaration's belief that the curriculum should address students' moral and spiritual development, argues that case for including a subject titled theology. Rabbi Cowen, while acknowledging the special place of the Judeo-Christian ethic in Australian society, argues that students need to also learn about other religions and belief systems such as Islam, Hinduism and Buddhism.

Instead of being taught through the lenses of subjects like sociology or history, often with a secular focus, Rabbi Cowen argues that spirituality needs to be taught as a separate subject over the years of schooling. An argument is also put, that instead of focusing exclusively on what makes each particular religion or faith distinctive, the emphasis should be on what constitutes 'common theological categories and ethical principles'.

A second submission by the Religions, Ethics and Education Network Australia (REENA) also cites the Melbourne Declaration when arguing 'for the inclusion of Education about Religions and Beliefs (ERB) in the National Curriculum'.³¹³ The submission cites overseas examples involving the UK, Quebec and Europe's Office for Democratic Institutions and Human Rights where teaching about various religions, ethics and beliefs is supported.

In particular, the submission refers to the *Toledo Guiding Principles About Religions and Beliefs in Public Schools*³¹⁴ as a useful guide to inform any decision to include teaching ERB in the Australian Curriculum. Various possibilities include developing a distinct subject 'on diverse religions, spirituality and belief systems taught by qualified teachers' or as part of the cross-curriculum priorities. An ERB subject would be in addition to existing Years 11 and 12 subjects dealing with religion and belief systems that are often only taught in a few schools as an elective.

The REENA submission refers to the example of Quebec, where an Ethics and Religious Culture Program was developed to help promote social inclusion and counter terrorism, as one worth considering in any attempt to develop an ERB subject in the Australia Curriculum.

A third submission relating to moral and spiritual education by the Australian Association for Religious Education (AARE) also argues for the place of different beliefs systems and religions in the Australian Curriculum. Whereas a number of submissions to the Review emphasise Christianity, this submission takes a broader view when it:

highlights the importance of a study of religious, spiritual and secular beliefs and worldviews which compose the human world and argues that the Australian Curriculum should recognize

³¹¹ Rationalist Society of Australia 2014, Submission to the Review of the Australian Curriculum, p. 2.

³¹² Institute for Judaism and Civilization 2014, *Theology and the provision of the spiritual development of students*, Submission to the Review of the Australian Curriculum.

³¹³ Religions, Ethics and Education Network Australia 2014, Submission to the Review of the Australian Curriculum.

³¹⁴ For a copy of the Toledo principles see <http://www.osce.org/odihr/29154>

*the important role these different belief systems and worldviews have in the lives of many Australians.*³¹⁵

Drawing on the work of the English educationalist Paul Hirst, and his argument that there are distinct and unique forms or domains of human knowledge, the submission argues that a well-rounded education dealing with the whole person should include the rational, logical, social, ethical, moral, aesthetic, emotional and spiritual (as does the Melbourne Declaration).

In opposition to ACARA's argument that the Australian Curriculum deals with moral and spiritual values and beliefs in a balanced and proper way the AARE submission argues, 'The glaring omission in the selection of subjects for the Australian Curriculum is one that relates to learning about the role and contribution of religions, spiritual and secular belief systems and world views to human society'.³¹⁶

The argument that a study of religions and beliefs systems can be accommodated by general capabilities like intercultural and ethical understanding or various elements of the history or civics and citizenship curriculums is also rejected. The submission states:

*It is argued, here, that such an approach is reductionist and fragmentary, reducing the knowledge of religions to knowledge about some elements of religious history and tradition, religious socialization, religious culture, religious leaders and so on. Such an approach does not recognize that religious and spiritual knowledge, in particular, provide a particular way of knowing which balances and complements other ways of knowing.*³¹⁷

The submission notes the contribution to the theory of knowledge by Jurgen Habermas that differentiates between three different ways of knowing related to each discipline when arguing the vital importance of 'knowing oneself'. While it is important 'to have knowledge and understanding of others, equally as important is knowledge and understanding of self' on the basis that 'If one has a sense of self and a level of security in what one believes and stands for, it is easier to accept and include others'.³¹⁸

When justifying its argument that the curriculum should better include teaching 'religious and spiritual beliefs and practices' the AARE submission notes the impact of increasing globalisation caused by changing technology and media and the increasing multicultural and multi-faith nature of Australian society. Students need to be given a 'firm foundation that will enable them to understand, appreciate and engage with differences in society that relate to religious, spiritual and secular beliefs systems and world views'.

The submission also justifies the need for teaching religious and spiritual beliefs by referring to the dangers of racism and prejudice associated with what is becoming an increasing pluralist society and a post 9/11 world where sectarianism is on the rise.

As to how teaching about religious and spiritual beliefs might be better dealt with in the curriculum the AARE submission suggests either incorporating the study as a part of the civics and citizenship

³¹⁵ Australian Association for Religious Education 2014, Submission to the Review of the Australian Curriculum, p. 3.

³¹⁶ Ibid., p. 5.

³¹⁷ Ibid., p. 5.

³¹⁸ Ibid., p. 5.

learning area or introducing it as a distinct subject. The submission by the Anglican Education Commission in Sydney puts a similar case when it argues that there be a 'central, integrating mandatory subject called Worldview and Ethics'.

The submission from the Pathways Coalition for Diversity Education also argues strongly that all students deserve to be taught about 'a wide range of religions and philosophies and ethical issues within a secular (neutral) pedagogy'.

In relation to how the Australian Curriculum deals with religion, especially Australia's Judeo-Christian heritage, it is interesting to note that ACARA publicly released a revised version of the civics and citizenship Foundation to Year 10 document, dated 18 February 2014, that refers to Judeo-Christian traditions a number of times.³¹⁹

³¹⁹ It should be noted that there was no reference to Judeo-Christian values and beliefs in the earlier drafts of the civics and citizenship curriculum.

Chapter Seven: The learning areas of the Australian Curriculum

It will be recalled that the learning areas of the Australian Curriculum that have been finalised by ACARA comprise:

- phase one: English, mathematics, science and history (these subjects have been endorsed by ministers of education)
- phase two: geography, the arts and languages (geography and the arts have been endorsed by ministers of education. To date, no languages have been endorsed).
- phase three: economics and business, civics and citizenship, technologies and health and physical education (to date, none of these curricula have been endorsed by ministers of education).

The Review has conducted this exercise with the benefit of submissions, consultations, and research. Subject specialists were also commissioned to evaluate each learning area, including benchmarking with other countries. The brief they were given was published in our Preliminary Report.

English

Many of the submissions to the Review and consultations with various individuals and organisations argue that the English curriculum is robust, independent and balanced and that ACARA has consulted widely and collaboratively in designing the new curriculum.

The AATE, for example, argues that the English curriculum, Foundation to Year 10, is ‘definitely robust and so too are the general capabilities and cross-curriculum priorities’.³²⁰ The AATE also argues that the way the English curriculum is structured into three strands – language, literacy and literature – is balanced and that it is ‘teacher-friendly’ and has the right degree of detail.

The Primary English Teaching Association Australia (PETAA) is also supportive – its submission concludes, ‘PETAA states its support for the Australian Curriculum and considers that the curriculum has been developed through an inclusive and extensive consultation process’.³²¹

The PETAA submission goes on to state that ‘Balance is certainly built into the organisational structure of the English curriculum’ and asks ‘that the Federal Government continue to support the national curriculum project’.

In relation to the way the English curriculum is structured, another submission presents a positive view when it states:

The achievement standards and content descriptors support one another very well, with very clear links between assessment and explicit teaching ... The content of the standards is excellent. It highlights the ‘basics’ that all students require to be successful, while maintaining a very clear focus on the discipline of English. The specificity of the content descriptions adds to the standards and the advice around reading these two components of

³²⁰ Australian Association for the Teaching of English 2014, Submission to the Review of the Australian Curriculum.

³²¹ Primary English Teaching Association Australia 2014, Submission to the Review of the Australian Curriculum, p. 5.

*the curriculum holistically is vital to teacher understanding of how to work with the curriculum.*³²²

After surveying staff, the submission from the Catholic Education Diocese of Parramatta, is also positive when it states that 90 per cent of respondents agree or strongly agree that the Australian Curriculum: English is robust.³²³

Two submissions, as an example of robustness, refer to the way the English curriculum embraces multimodal texts alongside more traditional notions of reading and writing.³²⁴

At the same time a number of submissions praise ACARA and welcome the Australian Curriculum: English, a number of other submissions express concerns. The PETAA submission, while endorsing the English curriculum overall, suggests that the achievement standards are ‘somewhat atomistic in nature’ and ‘give a prosaic account of what constitutes being functionally literate at a particular point of schooling’.³²⁵

The English Teachers Association New South Wales (ETA NSW), while generally being positive, qualifies its support by stating, ‘The ETA NSW has not been a strong supporter of the Australian Curriculum: English’, and that the English curriculum ‘sits a little uneasily with the way English is conceived and taught in NSW’.³²⁶

Notwithstanding that the Australian Curriculum: English, compared to earlier state and territory curriculum documents, has a greater focus on spelling, grammar and the more formal aspects of the subject, a number of submissions continue to call for a ‘back to basics’ approach.

Illustrated by the AIG submission, Australia’s standing in international tests is often referred to as evidence that standards are being compromised.³²⁷ The AIG submission argues:

*Australia does not feature favourably in relevant international comparisons of data, showing deteriorating reading literacy of 15 year olds over the past decade in the OECD Programme for International Student Assessment (PISA).*³²⁸

Four other submissions make explicit reference to concerns about falling standards. It should be noted here, as argued by Dr Mueller, one of the subject matter specialists evaluating the English curriculum, that this is not just an issue related to the intended curriculum. Equally as important is the question of teacher knowledge and expertise, the quality and effectiveness of teacher education courses and the extent to which the National Professional Standards for Teachers (developed by the AITSL) ensure that English teachers, and teachers in general, are best able to implement the curriculum in classrooms across Australia.

³²² Submission number RAC1401395 2014, Submission to the Review of the Australian Curriculum, p. 2.

³²³ Catholic Education, Diocese of Parramatta 2014, Submission to the Review of the Australian Curriculum.

³²⁴ It should be noted, especially in the early years, that there is some debate about the relative strengths and weaknesses of children reading print in hard copy versus in digital form.

³²⁵ Primary English Teaching Association Australia 2014, Submission to the Review of the Australian Curriculum.

³²⁶ English Teachers Association New South Wales 2014, Submission to the Review of the Australian Curriculum.

³²⁷ It should also be noted that in the Progress in International Reading Literacy Study, evaluating reading at Year 4, Australia was ranked 24 out of 48 countries. See also Mueller, F 2014, ‘Subject matter specialist report on the Australian Curriculum: English’, prepared for the Review of the Australian Curriculum.

³²⁸ Australian Industry Group 2014, Submission to the Review of the Australian Curriculum, p. 1.

More specifically, the second subject matter specialist in English involved in this Review, Professor Spurr makes the point that no matter how commendable the intended curriculum's emphasis on grammar is, many classroom teachers lack the knowledge and skills to teach the subject:

*This admirable aspiration in the curriculum raises a fundamental issue: how are teachers who may be themselves untrained and unskilled in grammar (having come from a system in their own schooling where it was not taught) to be educated and supported in achieving the projected 'sophisticated understanding of grammar' in Years 3-6 pupils?*³²⁹

Dr Mueller, in her analysis of the English national curriculum, makes the same observation, when she writes:

The reality, however, which cannot be understated, is that generations of Australian teachers have had little or no formal study of foreign languages, an area of the curriculum that demands a focus on the use of metalanguage and knowledge of the language conventions. They are also likely to be the product of decades of English teaching that contained little or no formal focus on grammar and punctuation. Together, these factors make teachers extremely dependent on an academically robust curriculum and on the support materials that accompany it.

The cross-curriculum priorities, while generally supported by many of the submissions and those involved in consultations, are also identified as a concern by a number of submissions responding to the English curriculum. In particular, the emphasis on Aboriginal and Torres Strait Islander literature when discussing Australia's literary heritage is criticised for undervaluing Australian literature and the place of Western literature, especially poetry.

Four individual submissions suggest there should be a greater emphasis on Australian literature while Professor Spurr argues, 'the impact of Aboriginal and Torres Strait Islander peoples on literature in English in Australia has been minimal and is vastly outweighed by the impact of global literature in English, and especially that from Britain, on our literary culture'.³³⁰

Another submission from a teacher-librarian states:

*As a teacher-librarian I feel that the Literature component focused too much on Indigenous stories at the expense of traditional Australian Literature content. This means that students are not going to receive a balanced viewpoint of the history of Australian Children's Literature.*³³¹

The question here relates to balance as none of the submissions received suggest that there is no place for Aboriginal and Torres Strait Islander literature or literature from Asia in the English curriculum. Rather, the focus on cross-curriculum priorities distorts the subject as teachers are often asked to refer to them even when there is scant evidence that they are relevant or when there are other more important considerations.

³²⁹ Spurr, B 2014, 'Subject matter specialist report on the Australian Curriculum: English', with particular attention to literature, prepared for the Review of the Australian Curriculum.

³³⁰ Ibid., p. 9.

³³¹ Gipps, E 2014, Submission to the Review of the Australian Curriculum, p. 1.

As noted by Professor Spurr:

Not for the first time, reference is made to reading texts that will make links to 'students' own lives' and, in this case, between their lives and texts from Aboriginal and Torres Strait Islanders which present children. Why aren't texts mentioned that might establish links between young Australian children's lives and those from Europe or North America? Why must the linkage be confined to Aboriginal and Torres Strait Islander texts? The curriculum is typically reluctant to give examples of texts, except when it is requiring texts with those origins. And, more generally, children should be learning that they do not go to texts to find their own lives reflected, but to have them extended by encountering other, perhaps very different lives.

The IPA submission makes a similar complaint when it argues, 'While there are frequent references to the Dreamtime and Asian literature, there is no mention at all of the texts that have been foundational to western and therefore Australian literature ...'.³³²

One of the issues raised by a number of submissions and in consultations is the need to depoliticise the curriculum and to make sure, as far as possible, that it does not preference one particular ideology over another. Professor Spurr also sees this as a concern in relation to the cross-curriculum priorities when he argues:

The three points on which all curriculum subjects must be focused: Aboriginal and Torres Strait Islanders, the Asian region, and sustainability are inimical to the study of literature in English; would be a disabling distraction from the core work of the curriculum and are driven by imposed socio-political concerns that bear no relation to the educational purposes that the curriculum for English, specifically, should be designed to facilitate and fulfil. They are reminiscent of the much-resented Procrustean bed on which the NSW HSC English curricula have been stretched, with every text having to be related and confined to such as 'Belonging', 'the Journey', 'Change' or, as now, 'Discovery'.

Another area of concern relates to teaching literacy, especially reading, in the early years of primary school. The public and media debate about the most effective way to teach reading is generally couched in terms a 'whole language' versus a 'phonics and phonemic awareness' model of teaching reading.

Professors Max Coltheart and Margot Prior define whole language as a situation where 'children are seen as active, self-governed learners who construct knowledge of reading by themselves with minimal instruction in decoding'.³³³ A phonics and phonemic awareness model, on the other hand, involves an explicit, systematic way of teaching children to read where children are taught the relationship between letters, groups of letters and sounds. Some 11 individual submissions and two from organisations argue for a focus on phonics instead of the existing whole language approach that is prevalent across many schools of education.

³³² Institute of Public Affairs 2014, Submission to the Review of the Australian Curriculum, p. 5.

³³³ Coltheart, M & Prior, M 2007, *Learning to Read in Australia*, occasional paper 1/2007, policy paper no. 6, The Academy of the Social Sciences in Australia.

The issue has been canvassed across the English-speaking world with a series of reviews and evaluations over the last 15 or so years.³³⁴ It is significant that Australia's Rowe Report lists the following six key elements identified as leading to successful literacy outcomes:

1. *A belief that all children can learn to read and write regardless of background*
2. *An early and systematic emphasis on the explicit teaching of phonics*
3. *A subsequent focus on direct teaching*
4. *A rich print environment with many resources, including fiction and non-fiction books, charts and computer programs*
5. *Strong leadership and management practices, involving whole school approaches to the teaching of reading and writing, and*
6. *An expectation that teachers will engage in evidence-based professional learning and learn from one another.*³³⁵

While there is no doubt that the Australian Curriculum: English deals with phonics and phonemic awareness in a more detailed way, compared to earlier state and territory curriculum documents, a number of submissions argue that there is room for improvement. A submission from Learning Difficulties Australia argues, 'the Australian curriculum does not provide sufficient guidance to ensure effective teaching of reading using a phonics approach'.

The submission also suggests that the English curriculum mistakenly adopts a model made up of 'a little bit of phonics and a lot of whole language' and that the curriculum is not explicit or systematic enough in detailing to teachers what constitutes 'a carefully sequenced and detailed phonics program'. Of added concern is the submission's observation that 'few Australian teachers since the 1980s have had any training in the teaching of phonics and have little if any understanding of the role of phonics in learning to read ...'.³³⁶

Discussions with Dr Jennifer Buckingham and Emeritus Professor Kevin Wheldall indicated that such is the unique nature of the early years that Foundation to Year 2 should be separated both conceptually and organisationally in the English curriculum. They also criticise the English curriculum Foundation to Year 2, for being too broad in its scope, yet too shallow in its treatment of the fundamental aspects of literacy development. To improve and strengthen the early years curriculum, they suggest that:

An ideal early years English curriculum would have four strands — speaking and listening (including explicit instruction in phonemic awareness and vocabulary, as well as the use of quality children's literature to develop oral comprehension), word reading (including synthetic phonics), spelling (explicit instruction for encoding as well as common sight words), and writing.

³³⁴ See Dr Ken Rowe 2005, National Inquiry into the Teaching of Literacy (Australia), *Teaching Reading*, House of Commons Education and Skills Committee; and *Let's All Read*, 2001, Report of the Education and Science Committee on the inquiry into the teaching of reading in New Zealand.

³³⁵ Rowe, K 2005, National Inquiry into the Teach of Literacy (Australia), *Teaching Reading – Report and Recommendations*, Australian Government Department of Education, Science and Training, p. 9.

³³⁶ Learning Difficulties Australia 2014, Submission to the Review of the Australian Curriculum.

These strands incorporate the five essential components of reading instruction — phonemic awareness, phonics, fluency, vocabulary, and comprehension.

In relation to teaching literacy in the early years, and contrary to the view put by the AATE and PETAA that the Australian Curriculum: English is robust and balanced, the criticism is also made in one submission:

*To make matters worse, Australia's current (December 2012) national primary English curriculum is ludicrous to the point of being a profound embarrassment: it strategically avoids even mentioning the 3 core literacy basics of alphabetic (or phonic) skills, spelling skills and read-aloud skills.*³³⁷

Again, it should be stated that a number of submissions are very positive about the Australian Curriculum: English. The AATE notes that it:

*believes that a notably robust feature of the F-10 section of the English Curriculum is the way that content descriptions relating to vocabulary, grammar, usage, spelling and punctuation are detailed in the Language strand.*³³⁸

PETAA is also positive when its submission states the association:

*supports the manner in which the Language strand of the F-10 section of the English Curriculum contains content descriptors relating to vocabulary, grammar, usage, spelling and punctuation.*³³⁹

Balanced against such a view is an argument by Dr Mueller that the English curriculum is the least succinct compared to comparable curriculum documents published in England, California and Singapore. Dr Mueller also suggests the Australian Curriculum is more verbose, making it 'daunting in its size and complexity'.

While describing the support material sitting behind the English curriculum as 'impressive in its variety and quantity' and applauding the use of icons and links in the digital version when identifying capabilities and cross-curriculum priorities, Dr Mueller raises concerns about how Standard Australian English is dealt with.

Against the suggestion that there are many varieties of language spoken across Australia and that language is ever-evolving and changing, Dr Mueller argues there needs to be 'a greater focus on Standard Australian English as the linguistic "home" to which the Language and Literacy strands belong'. Dr Mueller also argues that the curriculum needs a greater emphasis on 'explicit learning about Standard Australian English through the selection of high-quality text'; as occurs in Singapore, California and England.

Dr Mueller notes the, 'absence of a consistent and close association between high-quality texts and their explicit use to model the acquisition of Standard (Australian) English is noticeable'.

Professor Spurr, in his analysis of the English curriculum, makes a number of criticisms in addition to those related to the cross-curriculum priorities and the failure to adequately recognise the

³³⁷ Nugent, C 2014, Submission to the Review of the Australian Curriculum.

³³⁸ Australian Association for the Teaching of English 2014, Submission to the Review of the Australian Curriculum, p. 5.

³³⁹ Primary English Teaching Association Australia 2014, Submission to the Review of the Australian Curriculum, p. 7.

importance of the type of literature associated with the Western canon; especially poetry. Too much emphasis on children being 'creative' before they have a firm knowledge and appreciation of exemplary works created by acknowledged authors and writers needs to be checked.

Professor Spurr also warns against the tyranny of relevance, where what students encounter is often restricted to what is immediate, contemporary and local, and ignored is the fact that literature opens up unexpected and strange worlds and experiences that are often foreign and distant in location and time. Professor Spurr also notes that too much emphasis on reading for enjoyment ignores the reality that many texts are 'enlightening without being enjoyable'.

After examining the National Curriculum in England, Professor Spurr makes the observation that the Australian Curriculum, in comparison, undervalues the moral and spiritual dimensions of literature and the important connection between literature, especially poetry, and music.

Conclusion

Many of the submissions, especially those from subject associations and professional bodies, with the exception of the ETA NSW, are positive and supportive of the English curriculum. It also has been noted that the Australian Curriculum, in relation to the more formal aspects of the subject such as teaching grammar, syntax, expression and phonics and phonemic awareness, represents a significant improvement on particular past state- and territory-based intended curriculum documents.

At the same time, a number of concerns are raised by the two subject matter specialists. Professor Spurr argues that the English curriculum is 'insufficiently robust in areas of academic rigour, structure and sequencing, detail, clarity and foundational aims, and the values and principles of the discipline.' Professor Spurr is also concerned about the deleterious impact of the cross-curriculum priorities that leads to a superficial and patchy treatment of the Western literary canon especially poetry.

Dr Fiona Mueller states that the English curriculum, on the whole, is robust and balanced and acknowledges that value and usefulness of the support material that she describes as impressive in its variety and quantity.

Dr Mueller also expresses a number of concerns, including: the lack of emphasis on the importance of Standard (Australian English) compared to the curriculums from England, California and Singapore; the length and complexity of the intended curriculum and the failure to stress the importance of using high-quality literary texts as exemplars of high-quality writing.

While there is no doubt that the Australian Curriculum: English deals with phonics and phonemic awareness in a more detailed and balanced way, compared to earlier curriculum documents, concerns have been expressed about the way the curriculum deals with the early years of reading. One submission argues that spelling is not properly dealt with and taught and another argues there needs to be a greater emphasis on what is known as structured synthetic phonics.

Recommendations

- The Australian Curriculum: English should be revised to place greater emphasis on a more structured and systematic phonics and phonemic awareness approach during the early years of reading.

- There also needs to be a greater emphasis on dealing with and introducing literature from the Western literary canon, especially poetry.
- During the early years to middle years of primary school, there should be less emphasis on children creating their own literature and more on becoming familiar with literary texts – both fiction and non-fiction – as exemplars of high-quality writing. A stronger emphasis on exemplary literary texts will also assist in helping students gain an appreciation and mastery of Standard (Australian) English.

Mathematics

Similar to many of the responses to the Australian English curriculum, the Australian mathematics curriculum is viewed by many as robust, balanced and well suited to students' needs. The Western Australian School Curriculum and Standards Authority states:

*The jurisdiction believes that the strong commitment to engaging practising Western Australian teachers in completing this work has ensured that this state will have in place a curriculum that is balanced and robust and well-suited to the needs of our students, teachers and schools while retaining and reflecting our commitment to a national, Australian Curriculum.*³⁴⁰

Evidence that the AAMT is also supportive is its comment that, 'Given the inclusive and thorough process used, the documentation of the Australian Curriculum Mathematics (Shape Paper, Curriculum itself) is "as good as we could get".' As a result, and given the early stages of implementation and associated difficulty in evaluating the curriculum's robustness, the AAMT also recommends 'that the content of the Australian Curriculum: Mathematics not be adjusted at this time'.³⁴¹

The submission from the Mathematics Education Team at the University of Tasmania notes that the team 'is highly supportive of the Australian Curriculum – Mathematics, recognising that a national approach to mathematics across schools is crucial'. The Tasmanian submission also applauds the cross-curriculum priorities and general capabilities on the basis that 'mathematics should not be perceived as an isolated discipline but taught in ways that emphasise the development of 21st century skills'.

As do a number of other submissions, the submission from the University of Tasmania, while acknowledging the need to carry out periodical reviews, warns against precipitant changes that might undermine 'the good work that has been undertaken to date'.³⁴²

The two reports completed by the subject matter specialists evaluating and analysing the Australian Curriculum and comparing it against overseas examples, generally speaking, are also positive.

Dr Max Stephens notes several features that contribute to the Australian Curriculum's robustness, balance and flexibility, including: clear content descriptions; mathematical proficiencies that 'play an essential role in assisting teachers'; the general capabilities that 'ensure that mathematics is not

³⁴⁰ School Curriculum and Standards Authority Western Australia 2014, Submission to the Review of the Australian Curriculum, p. 8.

³⁴¹ Australian Association of Mathematics Teachers Inc. 2014, Submission to the Review of the Australian Curriculum.

³⁴² Mathematics Education Team, University of Tasmania 2014, Submission to the Review of the Australian Curriculum.

taught in isolation’ and achievement standards that ‘are concise, teacher friendly, and carefully worded to emphasise depth of understanding and progressive development of skills’.³⁴³

The analysis carried out by the Catholic Education Office Melbourne’s (CEOM) mathematics advisory team is also positive when it notes that the Australian Curriculum ‘has a strong organising structure and in most cases the content is carefully sequenced’; the treatment of statistics and probability in Years 7 to 10 is ‘appropriately sequenced and challenging’ and ‘provides a strong basis for Senior Secondary courses’ and the ‘interweaving of the proficiencies through the content descriptors and the achievement standards contributes significantly towards the coherence of the mathematics curriculum’.^{344 345}

The generally positive evaluation of the mathematics curriculum is qualified, though, when the Mathematical Association of New South Wales (MANSW) damns the curriculum with faint praise – its submission states, ‘Despite some deficiencies in the Australian Curriculum F–10, overall MANSW acknowledges this mathematics curriculum provides a reasonably sound foundation for the teaching and learning of mathematics in schools across Australia’. The submission then goes on to state, ‘the Australian Curriculum Mathematics F–10 does not live up to our high expectations’ and notes a number of concerns, including:

- Dividing the curriculum by year level on the assumption that ‘all students learn mathematics at the same rate’. The MANSW submission questions this assumption on the basis that it is ‘not supported by research evidence or the experience of teachers across the country’.
- Based on the way the achievement standards are constructed, an argument is put that the mathematics curriculum fails to provide clear guidance on how underperforming students should be assessed as they move from year to year.
- In relation to the Year 10 content descriptions, specific mention is made of the failure to adequately cater for ‘those Year 10 students who have not fully mastered the mathematical content listed in Year 9’.
- By adopting what is described as a ‘lock-step’ approach to designing the curriculum, the criticism is made that the mathematics curriculum fails to acknowledge that ‘students learn at different rates and in different ways’.
- Unlike the New South Wales Mathematics K–10 syllabus, where ‘communicating’ is treated as a discrete area of study, the Australian Curriculum fails to recognise the ‘importance of students being able to communicate mathematical ideas using mathematical concepts and terminology’.
- The way in which the general capabilities are embedded in the Australian Curriculum: Mathematics is ‘patchy at best’ and the continuum for numeracy ‘is limited in its usefulness since there are few examples of numeracy in real contexts’.³⁴⁶

³⁴³ Stephens, M 2014, ‘Subject matter specialist report on the Australian Curriculum: Mathematics (Foundation to Year 6)’, prepared for the Review of the Australian Curriculum.

³⁴⁴ Catholic Education Office Melbourne 2014, ‘Subject matter specialists report on the Australian Curriculum: Mathematics (Year 7 to Year 12)’ prepared for the Review of the Australian Curriculum.

³⁴⁵ Notwithstanding the overall positive evaluation, both reports from the subject matter specialists detail a number of suggested changes and additions to strengthen the mathematics curriculum.

³⁴⁶ Mathematical Association of New South Wales 2014, Submission to the Review of the Australian Curriculum.

Notwithstanding the AAMT's description of the mathematics curriculum as 'the best that can be achieved in the current context' its submission also notes a number of concerns that should be addressed in any future monitoring and review, including:

- whether the curriculum is too crowded and, as a result, sacrificing depth in favour of breadth
- whether the implied requirements for senior courses 'skew' the emphasis in Foundation–10 away from the needs and aspirations of the majority of students
- how consistent teachers' judgements are against the achievement standards
- whether the existing four senior school courses adequately meet the needs of vocationally-oriented students (the AAMT believes that current courses do not).

The belief that the mathematics curriculum undermines depth [see the first dot point in the previous paragraph] by attempting to cover too much territory is also raised by Steve Thornton when he writes, 'The emphasis on depth in the Shape paper has not transferred across to the content descriptors as well as it should'.³⁴⁷ A second submission from Andrew Chung raises a similar concern when he states, 'Unfortunately the breadth of content descriptors also limits the ability to achieve depth in student learning'. Chung illustrates his concern about lack of depth as follows:

*For example many students by Year 8 continue to struggle in their understanding of fractions, percentages and decimals as well as their abstract thinking yet there is only one content descriptor that encapsulates that topic in Year 8. Beyond Year 8 there are limited opportunities to revisit these concepts yet these ideas are foundational to the other content such as rates, direct proportion, interest and solving algebraic equations. Other areas such as statistics and geometric reasoning are given a significant breadth of coverage each year but these topics arguably are not fundamental to student understanding.*³⁴⁸

In relation to the cross-curriculum priorities, it should be noted that the two reports from the subject matter specialists and a number of submissions question the relevance and usefulness of attempting to embed the priorities in what is seen to be a patchy and ad hoc fashion. While supporting the general capabilities, Dr Stephens argues that the cross-curriculum priorities appear 'arbitrary', 'artificial and forced' and the way they are linked to the content descriptions 'is infrequent, minimal and sometimes questionable'.

The CEOM's analysis notes, unlike the general capabilities, the cross-curriculum priorities 'will not substantially enrich learning in mathematics' and where particular cross-curriculum priorities are mentioned argues that they provide a superficial understanding of what is being dealt with.

Professor Peter Ridd, from James Cook University, argues, 'if these priorities are not obviously inappropriate for Maths and Science, then Maths and Science must have been defined differently to the general expectations of society'.³⁴⁹

A submission by John Ridd also expresses hostility toward the cross-curriculum priorities and recommends that they 'be removed completely' and 'There must be no substituted material that is

³⁴⁷ Thornton, S 2014, Submission to the Review of the Australian Curriculum.

³⁴⁸ Chung, A 2014, Submission to the Review of the Australian Curriculum, p. 2.

³⁴⁹ Ridd, P 2014, Submission to the Review of the Australian Curriculum.

an emphasis on currently fashionable issues, and/or, by one means or another, determines how the (properly defined) Content is to be taught'.³⁵⁰

Similar to the Australian Curriculum: English, a number of submissions related to mathematics argue that standards must be raised and there needs to be a more rigorous approach to the subject. The AIG submission states:

*These foundation skills and core skills are very important for workplaces. There is clearly a concern about the adequacy of literacy and numeracy skills of school leavers. This mirrors the concerns employers have about these skills within the existing workforce. These poor results reinforce the fact that many young school leavers enter the workforce without adequate preparation in essential foundation skills.*³⁵¹

A second submission argues 'we need to be more rigorous in the teaching of literacy and numeracy as we are already falling behind internationally', and a third writes 'May I suggest that our expectations of children's ability in maths and science is generally too low in this country. In the Primary Curriculum I'd like to see many maths and science topics introduced earlier'.³⁵²

While not a panacea, one way to strengthen the Australian Curriculum is by comparing it those being implemented by stronger performing education systems as measured by international tests such as TIMSS and PISA. Dr Stephens, on comparing Japan, Australia and the United States Common Core State Standards, argues that the Japanese curriculum is 'the most robust of the three documents in providing strong foundations for the development of key ideas'.

Dr Stephens also suggests that not all the content descriptors in the Australian Curriculum are equally robust and sound and that an examination of the Japanese and United States curriculums provides suggestions for improvement. He states:

In the benchmarking exercise that follows, there are some suggestions, based on the Japanese COS and the USA CCSS, where the mathematical rigour of some of the Content descriptions and Elaborations in the ACM could be strengthened.

One example relates the early years of primary school:

While the ACM consistently utilises Number and Algebra as a key content descriptor in the primary years, both the USA CCSS and the Japanese COS give more explicit attention to integrating number and algebra from the beginning of the primary years.

A second example relates to number and algebra where the Japanese and the United States curriculums are more explicit and deal with the topic earlier than when it is introduced in the Australian Curriculum. Dr Stephens writes:

While the concept of variables is important in Year 7, it is necessary to provide students with some foundations leading to this key idea in the preceding years. This is done more strategically in the USA CCSS and in the Japanese COS ...

³⁵⁰ Ridd, J 2014, Submission to the Review of the Australian Curriculum, p. 8.

³⁵¹ Australian Industry Group 2014, Submission to the Review of the Australian Curriculum, p. 8.

³⁵² Smart, S 2014, Submission to the Review of the Australian Curriculum, p. 1.

The benchmarking analysis by the CEOM, also involving the Japanese and United States Common Core curriculums, also suggests the Japanese curriculum is the ‘strongest in terms of sequencing, succinctness, timing of introduction of new concepts and clarity of identification of important mathematical concepts to be learned’.

While acknowledging the Australian Curriculum for being coherent, balanced and directed at developing deep learning, the CEOM analysis recommends that it could be strengthened by providing a ‘more consistent expression of the mathematical understanding to be developed in the content descriptors and the elaborations’.

In relation to the four senior secondary Australian courses, the two overseas education systems chosen are Finland and Ontario. The CEOM analysis states that the Australian mathematics subjects compare favourably in that they provide ‘flexibility of courses for student pathways’. The Mathematics Methods and Specialist Mathematics, in particular, are described as having a level of difficulty comparable with the Finland Upper Secondary Advanced courses.

While outside the scope of this Review, one submission argues that the way mathematics curriculums are designed across Australia and the way pre-service mathematics is taught to prospective teachers are controlled by academics within the schools of education. A better alternative is to involve specialist mathematics academics working in university faculties and departments.

A second area outside the scope of this Review – but one that is vitally important – relates to the shortage of qualified mathematics teachers. MANSW argues that having quality teachers is equally as, if not more, important than the quality and rigour of the intended curriculum. Its submission notes ‘thousands of NSW students are learning mathematics from teachers who do not hold formal teaching qualifications in mathematics’.³⁵³

While not a formal submission to this review, an analysis of who is teaching mathematics across Australian schools by the Australian Mathematical Sciences Institute concludes that significant numbers are teaching ‘out of field’.³⁵⁴

A third issue not dealt with in this Review relates to assessment. As detailed in Chapter One of this Report, generally speaking, three models of curriculum can be identified: a syllabus model, an outcomes-based education and a standards model. The more traditional syllabus approach, illustrated by the type of high stakes, competitive testing and examinations in systems like Singapore and Shanghai, employs norm-referenced assessment involving a fine-grained, generally numerical grading system employing a 10 or 100 point scale.

Australian schools, as a result of Commonwealth legislation³⁵⁵, are required to report to parents on a five-point scale – A to E – for students in Years 1 to 10. Australian schools, compared to many in the top performing Asian education systems, also rely heavily on descriptive, criteria-based (otherwise known as criterion-based) assessment.

³⁵³ Mathematical Association of New South Wales 2014, Submission to the Review of the Australian Curriculum.

³⁵⁴ See Discipline Profile of the Mathematical Sciences 2014, Australian Mathematical Sciences Institute, can be accessed at <http://amsi.org.au/publications/discipline-profile-of-the-mathematical-sciences-2014/>

³⁵⁵ *Australian Education Regulation 2013* (Cwlth)

The University of Tasmania describes this as:

Criterion-referenced assessment is the process of evaluating (and grading) the learning of students against a set of pre-specified qualities or criteria, without reference to the achievement of others in the cohort or group. For each of the criteria, standards are described for each level of achievement (UTAS has five: High Distinction, Distinction, Credit, Pass and Fail). When a grade is assigned, it is assigned on the basis of the standard the student has achieved on each of the criteria. Another term often used to mean the same as criterion-referenced assessment is criteria-based assessment, e.g. the Queensland system of assessment in secondary schools uses this term. In some literature however, this latter term is not synonymous with CRA.³⁵⁶

A more traditional norm-referenced assessment previously referred to, ranks students one against the other and commonly involves placing students on a 'bell curve' where a certain number pass and a certain number fail. Instead of a five-point scale, students are often given a numerical grade out of 10 or 100:

Norm-referenced assessment determines student achievement (grades) based on a position within a cohort of students – the norm group. Therefore, depending on the cohort a student is in, they may be awarded a higher or lower grade. Applying NRA usually involves use of standard scores or pre-set grade distributions.

These are essentially formulas that set out the numbers of student that are 'allowed to be awarded each grade', so that a 'normal' distribution results. This takes the form of a bell curve.³⁵⁷

A number of the submissions to the Review argue against an over-reliance on criteria-based assessment, especially in subjects like mathematics and science. One submission by Robert Nelder argues:

It is imperative that we do not go down the path of assessing by using paragraphs of verbal standards and criteria sheets, as has been encouraged in Queensland since the 1990s.

The method is full of subjective judgements. It is not accurate and does not prove the most useful feedback to students and their families. Mathematics (and sciences) are most effectively evaluated using a marking scheme and adding to get totals.³⁵⁸

A second submission related to criteria-based assessment is concerned that it often relies on students' writing ability instead of mathematical knowledge and skill, as noted by Professor Peter Ridd:

Although the curriculum is short of content, it is long on pushing the inquiry approach. The examples of assessment task are dominated by long inquiry tasks rather than focusing on content or on simple calculations. Many of the inquiry tasks require excellent writing ability

³⁵⁶ University of Tasmania 2014, Teaching and Learning Terminology, viewed 6 August 2014, can be accessed at <http://www.teaching-learning.utas.edu.au/assessment/terminology>

³⁵⁷ Ibid.

³⁵⁸ Nelder, R 2014, Submission to the Review of the Australian Curriculum, p. 2.

*in order to do well and thus this curriculum risks becoming a de-facto test of a student's English ability.*³⁵⁹

Conclusion

Similar to the Australian Curriculum: English, a number of subject and professional associations are positive and supportive of the Australian Curriculum: Mathematics and consider it robust, balanced and a noted improvement on some earlier state and territory curriculums. There are a number of concerns, though, raised by MANSW, including failing to recognise that students learn at different rates and in various ways and by dividing the curriculum into years and not stages.

A number of submissions also criticise the Australian Curriculum: Mathematics for favouring breadth over depth and for attempting to introduce cross-curriculum priorities that are considered irrelevant and a distraction for teachers and students. When compared to overseas curriculums the subject matter specialists note that the Japanese curriculum is more rigorous, better sequenced and more explicit and succinct in detailing essential content.

Dr Stephens and the CEOM also make a number of observations and recommendations, which, if adopted, would strengthen the mathematics curriculum. Examples include better integrating number and algebra in the early primary years; introducing probability (chance) later than when it is currently dealt with in the curriculum and ensuring that the content elaborations are more explicit and relevant to the content descriptors they seek to illustrate.

While assessment is not included in this Review's terms of reference, a number of submissions question a marking system based on a criteria-based view of assessment as it fails to properly discriminate levels of ability and as it is often a test of literacy skills as opposed to those related to mathematics as a discipline.

Recommendations

- The Australian Curriculum: Mathematics should be revised to take account of the observations and recommendations expressed by the two subject matter specialists, especially those aspects of the Australian Curriculum seen wanting when compared to the Japanese intended curriculum document.
- The cross-curriculum priorities should not apply to the mathematics curriculum and the curriculum should be revised to ensure the focus is on essential knowledge, understanding and skills associated with deep learning instead of attempting to cover too much content.
- Where relevant, the content descriptors should be made more explicit and the content elaborations need to be more directly related to what they seek to illustrate.

History

A number of submissions to this Review, some of which are referred to in Chapter Six, are critical of the Australian Curriculum for failing to properly acknowledge and include reference to Australia's Judeo-Christian heritage and the debt owed to Western civilisation. In part, the concern is that an undue emphasis on the cross-curriculum priorities – especially the way they are dealt with in the design of the curriculum – leads to an unbalanced approach. A second concern is the lack of a

³⁵⁹ Ridd, P 2014, Submission to the Review of the Australian Curriculum, p. 4.

balanced and comprehensive treatment of the significance of Western civilisation and Christianity in the content descriptions and elaborations.

The Catholic Education Commission New South Wales, for example, argues that the Melbourne Declaration and the Australian Curriculum need to be amended in order to:

*More fully reflect the role, both past and present, of faith traditions generally and Christianity specifically in the development of Australia.*³⁶⁰

Mr Peter Abetz, MLA, when referring to the history curriculum, raises a similar concern when he writes:

This approach suffers from a great lack of balance.

The important contribution made by European Christians needs to be highlighted, just as much as the Aboriginal & Torres Strait Islanders contribution.

This is not a religious remark, prompted by a desire to promote a Christian agenda in our schools. It is simply a reflection of the fact that the large majority of Australian society is from European stock and has adopted European lifestyles, beliefs and practices.

*It is also an acknowledgment that whilst our society is largely secular today, history looks at the past, not the present and, undeniably, our society has a European heritage.*³⁶¹

In his submission, Associate Professor Stuart Piggin, is also critical when he argues, ‘the role of Christianity in world, Australian and Aboriginal history is seriously underplayed in the curriculum as it stands’.³⁶² Piggin also makes a number of suggestions about how the history curriculum might be made more balanced. Included, is acknowledging the role played by Christian missions in the life of Aboriginal and Torres Strait Islander peoples and the failure to include learning about ancient Israel at the Year 7 level (alongside Egypt, Greece and Rome).³⁶³

In relation to how the Australian Curriculum for history deals with Christianity, the submission by the IPA also expresses disquiet when it states:

*The curriculum is extremely silent on the matter of religion – especially Christianity. This is curious, since it neglects that a small majority of Australians (roughly 61%) still identify themselves as Christian, making it – quite apart from its historical importance – by far the most significant religion in the country to this day ...*³⁶⁴

The need to adopt a balanced approach to teaching history is also suggested in a submission by Anna Halafoff and Cathy Byrne when they write that the curriculum should emphasise Indigenous culture and spirituality, and Judaism’s and Christianity’s influences and contribution to Australian society.³⁶⁵

³⁶⁰ Catholic Education Commission New South Wales 2014, Submission to the Review of the Australian Curriculum, p. 5.

³⁶¹ Abetz, P 2014, Submission to the Review of the Australian Curriculum, pp. 4–5.

³⁶² Piggin, S 2014, Submission to the Review of the Australian Curriculum.

³⁶³ Piggin’s submission is of particular interest as he was appointed to an inquiry panel established by ACARA to investigate the place of religion in the history curriculum when it was being designed.

³⁶⁴ Institute of Public Affairs 2014, Submission to the Review of the Australian Curriculum, p. 18. Based on the 2011 Census figures the breakdown of religions is: Christian 61.1%, Buddhism 2.5%, Islam 2.2%, Hinduism 1.3%, Judaism 0.5%.

³⁶⁵ Religious and Ethics Education Network of Australia 2014, Submission to the Review of the Australian Curriculum.

It also needs to be noted that a number of submissions argue a counter case when they argue the Australian Curriculum is balanced and free of bias. The History Teachers' Association of Australia states (HTAA):

*Any suggestion that the curriculum has been skewed towards one political perspective is easily discredited when an independent party reviews the process of consultation that occurred in the development of the curriculum. The curriculum was written by a team of experienced History teachers and reviewed by a range of classroom teachers and stakeholders.*³⁶⁶

The Vice-President of the New South Wales History Teachers Association argues, 'I reject the idea that the syllabus reflects or presents an ideological bias' and suggests there is no need to alter what currently exists when he writes, 'There is an absence of evidence for change at this point in the development and implementation of the Australian curricula'.³⁶⁷

The History Teachers' Association of Victoria is equally as positive when its submission notes there are 'high levels of teacher and student engagement' and 'genuine enthusiasm' as a result of the introduction of the Australian Curriculum: History. While not specifically addressing the question of balance the Victorian submission does note that the curriculum is 'non-controversial' and that it has 'gained bipartisan support'.³⁶⁸

The submission for Catholic Education Diocese of Parramatta, on the basis of carrying out a survey of teachers, concludes that 'there is significant support for the robustness, independence and balance of the current AC' and, in relation to the history curriculum, notes that 85 per cent of respondents agreed or strongly agreed that the history curriculum was independent and balanced.³⁶⁹

While apparently being orchestrated as part of a campaign, it should also be acknowledged that 85 submissions include the line, 'I reject the idea that the syllabus reflects or presents an ideological bias'.

In addition to submissions arguing that the history curriculum is balanced and independent, a number of submissions are positive about the process of curriculum design employed by ACARA and the overall shape and content of the curriculum.

The Australian Association of Christian Schools (AACS) states, 'AACS congratulates ACARA on showing openness to listening and responding to the input it has received. ACARA has sought to implement a "genuine process of continuous improvement and refinement"'.³⁷⁰

In relation to how the history curriculum is structured and its success in detailing a rigorous and conceptually sound view of the subject there are a number of conflicting viewpoints. The various professional teacher associations such as the HTAA argue that the history curriculum is rigorous, well designed and successfully sequenced in relation to content and skills.

³⁶⁶ History Teachers Association of Australia 2014, Submission to the Review of the Australian Curriculum, p. 1.

³⁶⁷ Hurley, T 2014, Submission to the Review of the Australian Curriculum, p. 2.

³⁶⁸ History Teachers' Association of Victoria 2014, Submission to the Review of the Australian Curriculum.

³⁶⁹ Catholic Education, Diocese of Parramatta 2014, Submission to the Review of the Australian Curriculum.

³⁷⁰ Australian Association of Christian Schools 2014, Submission to the Review of the Australian Curriculum, pp. 1–2.

One of the subject matter specialists reviewing the history curriculum, Mr Clive Logan, is also supportive when, in relation to what is termed 'Overview Foundation to Year 10 chronology', he states:

This is not a disjointed curriculum made up of selected 'important bits' promoting an agenda – it is a well-thought out progression, logical in structure and scope and sequence with a determined view to give as wide a breadth of Australian and World history as possible.³⁷¹

Mr Logan also argues that the curriculum development process has been 'a positive one', that that information provided by ACARA on its website successfully promotes 'excellence and equity' and that the achievement standards are clear and succinct. Mr Logan is also supportive of the general capabilities and the cross-curriculum priorities.

While overall being positive, Mr Logan does note a number of concerns. In relation to Years 7 to 10 he writes, 'The major concern is again that there is a lot of content to be covered in these years ...'. On noting the way the curriculum is structured during these years, he also makes the statement:

There is a sophistication in the development of each of the studies and they are all heavy in content – but it does open the challenge that these years may lose the 'grand narrative' as teachers and students may progress without studying and understanding what could be argued are the core principles, beliefs and values that have underpinned the way the world, and Australia, has developed, simply by the choices that are made.

On analysing the English history curriculum, Mr Logan notes that it is less prescriptive than the Australian Curriculum, giving greater flexibility and the ability to tailor what is taught to local needs.

Mr Logan finishes his report by analysing the Singapore curriculum where he notes that, despite some similarities with the Australian Curriculum, it has a narrower focus and emphasises a more nationalistic sense of citizenship and history.

While agreeing that the teaching of Australian history within a world history framework is 'most appropriate', Associate Professor Greg Melleuish, one of the subject matter specialists, presents a less positive view than that presented by the history subject associations.³⁷²

Associate Professor Melleuish suggests that the 'curriculum is not robust in world history because it lacks many things one would expect to find in a world historical approach'. Compared to the Singapore and English curriculums an argument is also put that the Australian history curriculum lacks overall balance and coherence and is guilty of over-emphasising depth studies at the expense of an 'overarching narrative'.

The criticism of depth studies relates to the fact that they are optional, thus allowing students to miss out on essential historical knowledge and understanding depending on the choice they make.

³⁷¹ Logan, C 2014, Subject matter specialist report on the Australian Curriculum: History, prepared for the Review of the Australian Curriculum.

³⁷² Melleuish, G 2014, Subject matter specialist report on the Australian Curriculum: History, prepared for the Review of the Australian Curriculum.

As Associate Professor Melleuish argues, given the freedom of choice in relation to the depth studies it would be possible for students to only have a fragmented and lopsided understanding of history. He writes:

In effect, what students will bring away with them from the study of history will be what they learn in their depth studies. This could mean, for example for an individual student, ancient Egypt, ancient India, the Ottoman Empire, Polynesian expansion, the Black Death, movements of peoples in the nineteenth century, Asia and the world in the nineteenth century, and popular culture. It is difficult to know what students would acquire out of the study of such a collection of topics, unless, of course, one adopts the position that the content of history does not matter, only the acquisition of skills.

While not limited to the history curriculum, a submission by the CECV makes a similar point when it argues:

*the current curriculum incorporates the concept of 'optional study'. CECV contests that if the intent of the Australian Curriculum is to define that which is essential for all students to learn any reference to optional study should be removed from the intended curriculum.*³⁷³

Associate Professor Melleuish goes on to suggest that the history curriculum should be less prescriptive and less bureaucratic, allowing greater flexibility at the school level – as with the English history curriculum – and argues that the cross-curriculum priorities should be removed as they act as a hindrance to achieving a first quality history curriculum.

One of the issues raised by a number of submissions, in consultations and by one of the subject matter specialists relates to how the history and culture of Aboriginal and Torres Strait Islander peoples are dealt with in the curriculum.

Mr Logan suggests the manner in which the general capabilities and cross-curriculum priorities are dealt with is sometimes appears 'contrived'. In relation to Aboriginal and Torres Strait Islander history Mr Logan writes, 'We don't want to be tokenistic – if this issue is to be studied it should be done in the same manner as all the other topics, with depth, empathy and perspective'.

The AACS make the same point when arguing 'Though well-intentioned, the way some Indigenous perspectives have been written in reflect a somewhat contrived and tokenistic approach in far too many instances'.³⁷⁴

It needs to be emphasised that those raising this issue are not opposed to including Indigenous history in the curriculum – rather they believe that it needs to be done in a more coherent and meaningful way.

A related issue raised during the consultation process is to what extent the treatment of Indigenous Australians is blinkered as it fails to fully detail the darker social and cultural challenges and difficulties faced by Indigenous communities. If students are to receive a balanced and objective knowledge and understanding of Australian history the curriculum needs to address both the positive and negative aspects of both European and Indigenous history and culture.

³⁷³ Catholic Education Commission Victoria 2014, Submission to the Review of the Australian Curriculum, p. 7.

³⁷⁴ Australian Association of Christian Schools 2014, Submission to the Review of the Australian Curriculum, p. 7.

Conclusion

Notwithstanding that some submissions argue there is no bias in the Australian Curriculum: History document, others suggest there is a lack of balance as the curriculum, especially as a result of the cross-curriculum priorities, fails to adequately deal with the historical impact and significance of Western civilisation and Australia's Judeo-Christian heritage and values and beliefs. Another criticism is that whereas the history associated with Western civilisation and Australia's development as a nation is often presented in a negative light, ignoring the positives, the opposite is the case when dealing with Indigenous history and culture.

In opposition to the positive comments expressed by many of the subject associations and professional bodies and one of the subject matter specialists, a number of concerns are also raised about the academic rigour of the history curriculum and the way it is structured.

One criticism relates to the fact that there is too much choice in terms of students being able to choose between various electives that results in missing out on significant and foundation historical knowledge, understanding and skills. Another concern is that the way the cross-curriculum priorities are signposted in the digital version; in addition to promoting a superficial checklist mentality, it appears tokenistic. It would be better if priorities like Aboriginal and Torres Strait Islander histories and cultures are taught as essential content related to particular units of work rather than as a cross-curriculum priority scattered across the history curriculum and other various subjects.

One of the subject matter specialists, Professor Melleuish, criticises the history curriculum for failing to provide a more structured historical narrative to underpin what, at times, appears to be disconnected 'things to know about the past'. After evaluating the English and Singapore curriculums, Professor Melleuish also suggests that the Australian Curriculum be revised to make it less bureaucratic and prescriptive in some areas by giving schools greater flexibility and choice. The criticisms are also made that the Australian history curriculum is ideologically motivated; that it fails to adequately deal with world history and that the primary curriculum is too Australia-centric.

Recommendations

- The Australian Curriculum: History should be revised in order to properly recognise the impact and significance of Western civilisation and Australia's Judeo-Christian heritage, values and beliefs.
- Attention should also be given to developing an overall conceptual narrative that underpins what otherwise are disconnected, episodic historical developments, movements, epochs and events.
- A revision of the choice available throughout this curriculum should be conducted to ensure that students are covering all the key periods of Australian history, especially that of the 19th century.
- The curriculum needs to better acknowledge the strengths and weaknesses and the positives and negatives of both Western and Indigenous cultures and histories. Especially during the primary years of schooling, the emphasis should be on imparting historical knowledge and understanding central to the discipline instead of expecting children to be historiographers.

Science

A number of submissions express support for the manner in which the science curriculum was developed by ACARA and argue that the curriculum is challenging and robust. The Australian Science Teachers Association (ASTA), for example, states that the process was ‘exhaustive’ and ‘inclusive and significant’. The Association also describes the curriculum as ‘academically rigorous’ and warns against changes at a time when ‘teachers of science across Australia need more time to become familiar with the current national curriculum ...’.³⁷⁵

The Australian Academy of Science also expresses support in its submission:

*The Academy strongly supports the Australian Science Curriculum. The process for its development was thorough and collaborative, allowing for critical input from all parts of the community including the science community.*³⁷⁶³⁷⁷

The Academy’s submission goes on to say that the ‘basic structure of the science curriculum is sound’, that the curriculum is ‘intellectually rigorous’ and that the ‘presence of the general capabilities and cross-curriculum priorities in the science curriculum have not distracted from the scientific discipline orientation’.

When talking about the Foundation to Year 10 curriculum in general, including science, the submission from the Department of Education, Tasmania is also supportive when it states that Tasmanian teachers view the curriculum in a positive way, considering it ‘challenging’ and ‘aspirational’.

Not surprisingly, given the often conflicting views about education and the fact that the Australian Curriculum seeks to accommodate a diverse range of beliefs about the intended curriculum, a number of submissions also express concerns.

ASTA, while expressing support for the general capabilities and cross-curriculum priorities notes, ‘they should not distort the focus of the science concepts being taught’.³⁷⁸ One of the subject matter specialists, Professor Igor Bray, is also concerned about the place of the cross-curriculum priorities when he writes, ‘Science knows nothing about the nationality or ethnicity of its participants, and this is its great unifying strength’.^{379 380} Professor Bray goes on to argue:

Science can change society, but society cannot change Science. In this context it may be prudent to state explicitly that scientific statements are those that are able to be falsified by empirical evidence, and that scientific facts are not logical truths but those statements that have not yet been falsified despite repeated experiments. There is no room for cultural sensitivity.

³⁷⁵ Australian Science Teachers Association, 2014, Submission to the Review of the Australian Curriculum

³⁷⁶ Australian Academy of Science 2014, Submission to the Review of the Australian Curriculum, p. 2.

³⁷⁷ In opposition to this, one submission criticises ACARA’s consultation process for privileging the views of professional associations over practising teachers and for enforcing pre-determined objectives.

³⁷⁸ Australian Science Teachers Association 2014, Submission to the Review of the Australian Curriculum.

³⁷⁹ Bray, I 2014, ‘Subject matter specialist report on the Australian Curriculum: Science (Foundation to Year 6 and Senior Secondary Physics)’, prepared for the Review of the Australian Curriculum.

³⁸⁰ Bray, while questioning the impact of the cross-curriculum priorities, does suggest that there is a place in science education for learning about the contributions to science of individuals from a range of cultures and including men and women.

The submission by APPA, while supporting the inclusion of the cross-curriculum priorities, notes that:

*there are other examples in Science and Technologies where the writers have responded to the expectation that the priorities should be reflected across all learning areas, but without a sufficient basis for their inclusion in every case.*³⁸¹

The analysis by teachers at the JMSS is somewhat more critical of the cross-curriculum priorities – with the exception of sustainability – when they conclude:

However the other two priorities, Aboriginal and Torres Strait Islander histories and culture and Asia and Australia's engagement with Asia, do not embed well into the science curriculum. The elaborations where these two cross-curriculum priorities are intended seem gratuitous and have tenuous link to the content.

The report goes on to suggest that the two priorities 'would be better placed in human geography, studies of society and environment, history – in other words the humanities field'.

While not referred to in the report by either Professor Bray or the teachers at the science school, an example of a cross-curriculum priority that might be regarded suspiciously is one related to physics where the statement is made:

Through an investigation of contexts that draw on Aboriginal and Torres Strait Islander histories and cultures students can appreciate Aboriginal and Torres Strait Islander Peoples' understanding of physical phenomena, including of the motion of objects, and of astronomical phenomena.

The science curriculum divides the subject into three interrelated strands: science understanding, science as a human endeavour and science inquiry skills. While this division is accepted by a number of submissions, not all are equally supportive. The JMSS report, while fully supporting the three strands, suggests that it is 'not necessary to devote equal time to each strand...'.³⁸²

Professor Bray also expresses concerns when he argues that the division into three strands 'has little value' and that he could not find evidence that other intended curriculum documents from overseas adopted the same approach.

Another concern relates to the amount of content in the curriculum. The Australian Academy of Science, under the heading 'Challenges', warns against attempts to cover too much territory when it suggests:

*The natural response to this increased information [related to the exponential growth in scientific knowledge] is to add more content to the science curriculum. Research and experience globally show that this results in superficial learning by students.*³⁸³

In relation to the primary school curriculum, the APPA is even more strident when it argues:

³⁸¹ Australian Primary Principals Association 2014, Submission to the Review of the Australian Curriculum, p. 12.

³⁸² John Monash Science School (JMSS) 2014, 'Subject matter specialists report on the Australian Curriculum: Science (Years 7 to 10 and Senior Secondary Biology, Chemistry and Earth and Environmental Science)', prepared for the Review of the Australian Curriculum.

³⁸³ Australian Academy of Science 2014, Submission to the Review of the Australian Curriculum, p. 2.

*It is unrealistic to provide a mandatory outline of content that would demonstrably be impossible to deliver in many schools (especially those with a student population many of whom experience multiple factors of disadvantage) and probably impossible in any school.*³⁸⁴

According to APPA the dangers of an overcrowded curriculum relate to teachers being forced to choose breadth instead of depth and the much needed focus on literacy and numeracy being undermined – especially during the early years. As a result, and under the heading of ‘Pedagogy’, the submission concludes that the Australian Curriculum fails to ‘foster and facilitate good teaching’.

APPA argues that one solution to the problem of overcrowding, especially during the early years of primary school, is to narrow the focus of the curriculum. The APPA submission argues that ‘Science should be very limited in scope in the first three years’ and that even in the upper primary years, subjects like science should have a ‘lower priority than English and Mathematics’.

Professor Bray, in his analysis of the science curriculum, argues in a similar fashion when he suggests that science should not be introduced until Year 3 on the basis that:

The F-6 curriculum is considerably overcrowded due to the inappropriate imposition of high-level disciplines to the lower (F-2) years. Instead, the formative years should be dominated by the core literacy, numeracy, social and physical development. The latter years are the appropriate time for engaging in greater breadth of learning, and also increasing the depth of learning undertaken in previous years.

Professor Bray also notes that Singapore and Finland, two of the top performing education systems as measured by the PISA tests, do not introduce science into the curriculum until Year 3 and Year 5 respectively.

While ACARA argues that intended curriculum documents are neutral in relation to pedagogy and it is up to classroom teachers to decide how to teach, as noted in Chapter One, the reality is that any curriculum document, intentionally or unintentionally, privileges a particular approach to teaching and learning.

One submission, mirroring the Queensland experience, argues that the Australian science curriculum can be characterised as adopting ‘post-modern education philosophies of constructivism, inquiry learning, spiralled curricula and the embedding of themes and skills from social sciences’.³⁸⁵

The result, according to the author, will be future generations of Australians with an ‘impoverished understanding of science and the tragedy of unrealised intellectual potential’.

A submission by Professor Peter Ridd mounts a similar critique when it argues:

*The science curriculum’s focus on inquiry-based learning, and the de-emphasis of knowledge would indicate that the curriculum shaping process has been heavily influenced by modern educational fads which are pushed on the community largely by university education faculties.*³⁸⁶

³⁸⁴ Australian Primary Principals Association 2014, Submission to the Review of the Australian Curriculum, p. 5.

³⁸⁵ Submission number RAC1400942 2014, Submission to the Review of the Australian Curriculum,

³⁸⁶ Ridd, P 2014, Submission to the Review of the Australian Curriculum.

As part of this Review, subject matter specialists were asked to compare the Australian Curriculum against overseas intended curriculum documents. In relation to science the JMSS evaluation concludes, on analysing the curriculum documents from Finland and Singapore, 'Generally, it is considered that the courses on offer in both countries go to greater depth in the core sciences of physics, chemistry and biology'.

In relation to a number of science topics the evaluation also notes that they are introduced earlier in the Singapore and Finnish curriculums when compared to the Australian Curriculum. While the report argues that the Years 7 to 10 curriculum is 'generally robust, balanced and flexible' it does identify a number of areas that need strengthening.

In relation to Years 11 and 12 the review suggests that the senior chemistry units are a 'somewhat indecisive set of units that does not have the rigour or depth of either the traditional or modern type of chemistry courses'. The review is more positive when it describes the earth and environmental science course as 'a holistic, exciting course showcasing science as a modern, interdisciplinary study'.

The senior biology course, on the whole, is described as a 'comprehensive and rigorous course' with the exception of concerns about the impact of the general capabilities and the cross-curriculum priorities. The review notes that a number of the capabilities and priorities are poorly detailed and 'do not directly relate to the Senior Biology course and should not be included in the course description' unless clear links are provided.

The Singapore senior biology course, while very similar to the Australian course, is considered stronger as the content descriptors are more detailed. The review notes, 'The benefits are that teachers, students and parents are fully aware of what is expected for any particular topic'.

In addition to what is referred to here it should be noted that the teachers from the JMSS in their evaluation provide a series of comprehensive and detailed suggestions to strengthen and improve the Australian Curriculum: Science.

Professor Bray, when comparing the Australian senior physics course against those from Singapore and Finland makes a number of observations. Compared to the Australian Curriculum, Professor Bray argues that the curriculum in Singapore, notwithstanding that it is more prescriptive, is superior on the basis that:

It does not hide that Senior Physics is a high stakes course, and so the Syllabus begins with a clear presentation of assessment issues. The content is given with great clarity and clear development in fifteen pages. The sectional subdivisions are readily recognizable to any teacher or student of Physics. There are no artificial overarching themes. The mathematics listed is appropriate and consistent. A number of internationally renowned textbooks are listed as supporting material.

Professor Bray describes the Singapore curriculum as robust and rigorous and suggests that any student successfully completing the course would be well prepared for any university in the world.

While many submissions to the Review support the achievement standards, as previously noted when discussing mathematics, some submissions argue that a more robust and rigorous form of assessment is required. Professor Bray, when discussing the achievement standards related to senior

school physics argues that they ‘remain unhelpful and should be discarded’. Professor Bray goes on to argue:

Achievement standards may be listed in the form of what is the goal for every student to attain, but they cannot be practically subdivided into any discrete levels of partial achievement. The reality is that students achieve these goals to varying and unpredictable degrees. So a mark of 100% means all has been achieved, and any lower percentage a partial degree of achievement. This is good enough for all practical purposes.

Another of Professor Bray’s concerns relates to notation, where he argues that those responsible for writing the senior school physics course and certain textbooks are guilty of a significant mistake.

I find it disappointing that some present-day school physics textbooks, and the proposed Australian National Curriculum, write $v=u+at$ as one of the equations of motion (for constant acceleration a). Any textbook using such notation should be excluded from any consideration. The correct form for this equation is $v(t)=v(t_0)+a(t-t_0)$, which is readily derived from $a=dv/dt$ once elementary integration has been learned in mathematics. By the end of Year 12 every physics student should understand such a derivation as it underpins the critically important relationship between mathematics and physics. There is no room in physics for sloppy mathematical notation. The example given is just one of several such failings.

Conclusion

Many of the submissions describe the Australian Curriculum: Science as well-structured, challenging and robust. The observation is also made that ACARA consulted widely and adopted a collaborative approach to curriculum development.

A number of other submissions and evaluations undertaken by the subject matter specialists, on the other hand, note a number of shortcomings and concerns. The relevance and educational value of the cross-curriculum priorities are questioned, as is the weight given to the subdivision ‘Science as a human endeavour’.

As with the Australian Curriculum overall, specific mention is also made of the danger of mandating too much content and, as a result, sacrificing depth for breadth. In relation to the way the science curriculum is structured, Professor Bray notes that in Singapore and Finland – two of the most successful education systems as measured by international mathematics and science tests – science is not taught until Years 3 and 5 respectively. When science is introduced, though, these overseas systems have a more focused and detailed treatment of essential knowledge, understanding and skills.

On comparing the Australian Curriculum against the senior school science curriculums developed in Singapore and Finland, the evaluations carried out by the subject matter specialists lead to mixed results. While Professor Bray and the science teachers from JMSS conclude that the Singapore physics and biology courses are stronger than the Australian, the Australian earth and environmental science course is commended as adopting a holistic, modern and interdisciplinary approach.

In relation to the achievements standards, Professor Bray argues that they represent a coarse method of assessment and he recommends a more finely-graded marking system. In relation to the

science curriculum's underlying approach to teaching and learning, another submission also makes the point that the curriculum privileges a constructivist approach by failing to acknowledge the importance of explicit teaching.

Recommendations

- That ACARA, in the process of reviewing the Australian Curriculum: Science, takes note of the concerns outlined above – especially the need to focus on depth by reducing the content and coverage of the science curriculum for Foundation to Year 10.
- The cross-curriculum priorities should be removed from the science curriculum and not all the interrelated strands should be given equal prominence and weight across the various stages of schooling.
- A better balance should be sought between a constructivist and an explicit teaching pedagogical approach to classroom practice.

Geography

There is a variety of approaches to the inclusion of geography in international curriculums. In some countries geography is taught as part of a broader learning area such as 'humanities' or 'social science'. Other countries have a mixed approach with geography included as part of a broader learning area in the early years of schooling and as an independent learning area in the later years of schooling, or vice versa. In most countries geography is mandatory study in the early years of schooling.

In England, where geography is a foundation subject, the purpose of studying geography is described in the curriculum:

A high quality geography education should inspire in pupils a curiosity and fascination about the world and its people that will remain with them for the rest of their lives. Teaching should equip pupils with knowledge about diverse places, people, resources and natural and human environments, together with a deep understanding of the Earth's key physical and human processes. As pupils progress their growing knowledge about the world should help them deepen their understanding of the interaction between physical and human processes, and of the formation and use of landscapes and environments. Geographical knowledge provides the tools and approaches that explain how the Earth's features at different scales are shaped, interconnected and change over time.³⁸⁷

The curriculum in Finland, where geography is a compulsory core subject during the basic compulsory education for students aged 7 to 16 years, reinforces many of these points and adds:

The objective of instruction is for students to become capable of analysing spatial features for environmental issues and of searching for solutions consistent with sustainable development ... Geography instruction at upper secondary level must help students understand global, regional, and local phenomena and problems, and potential solutions to such problems. The objective is for students to learn to use geographical knowledge to perceive factors influencing the changing world, form justified opinions, take a stance on

³⁸⁷ Department for Education UK 2013, *The National Curriculum in England Framework Document*, Department for Education, p. 198.

*changes occurring in local areas and in the world as a whole and actively contribute to promotion of the well-being of nature and human beings.*³⁸⁸

From the submissions to this Review and our consultations there is no doubt what the key issue is for geographers – they want their subject to have the same status as history and be mandated to Year 10. Apparently this view was put forcefully to ACARA but was not addressed. The theme recurred throughout this Review and was put by a range of professional geography bodies. It is captured well in the submissions from the Royal Geographical Society of Queensland and the Geography Teachers' Association of Queensland:

*A concern which our two organisations have with the Australian Curriculum is the lack of balance across the curricula in Years 9 and 10, with history mandatory in those years and geography less important ... Anecdotal evidence from our members is already showing that this is leading to a devaluing of geography in the middle years of secondary schools.*³⁸⁹

In terms of content there is also no doubt about the main issue – the need to achieve a balance between physical geography and human geography. Views differ on how well the Australian Curriculum meets this criteria but the weight of professional opinion is that although the curriculum draws from both natural and human sciences, it is quite unbalanced and favours human geography. It is also dominated by the theme of sustainable development. A submission from the Australian Meteorological and Oceanographic Society picks up this theme in a particular area:

*It is not clear how students are supposed to understand or appreciate the mechanisms that drive meteorological or oceanographic hazards (e.g. tropical cyclones) without having prior and scaffolded exposure to the geophysical variables (e.g. ocean heat content, wind shear, earth's rotational effects) and the dynamical and thermodynamical principles which drive them.*³⁹⁰

There is some difference of opinion regarding the emphasis on skills. The lead writer of the ACARA geography shape paper comments on the final curriculum in these terms:

*However there is one area in which I think academic quality is lacking, and this is in some of the skills. There is, in my view an overemphasis on low level, time-consuming and sometimes pointless skills, such as construction of maps of all types and describing the location of places by latitude and longitude, and a neglect of interpretive and analytical skills.*³⁹¹

The Heads of Geography Programs, Combined Australian Universities comment:

We have no issues with altering case studies, areas of focus, or the cross-cutting themes; but there is a critical need for some central educational principles of Geography that are required for students:

- *Basic geographical literacy and knowledge in this increasingly connected and spatial world*
- *Skills in critical geographical (spatial) thinking*

³⁸⁸ Finnish National Board of Education 2003, *National Core Curriculum for Upper Secondary Schools 2003*, Finnish National Board of Education, p. 142.

³⁸⁹ Royal Geographical Society of Queensland Inc. and Geography Teachers' Association of Queensland Inc. 2014, Submission to the Review of the Australian Curriculum, p. 1.

³⁹⁰ Australian Meteorological and Oceanographic Society 2014, Submission to the Review of the Australian Curriculum, p. 2.

³⁹¹ Maude, A 2014, Submission to the Review of the Australian Curriculum, p. 7.

- *Geography as a compulsory component of education from Prep to Year 10*
- *Reduced confusion in the curriculum between geography and other programs (such as environmental studies and social studies).*³⁹²

A number of submissions and consultations have stressed that there should be more emphasis on fieldwork in the geography curriculum. It seems that all of these aspects are the only concerns broadly arising regarding the geography curriculum.

Subject specialist

The subject matter specialists commissioned to consider this curriculum, Mr Alan Hill, echoes many of these aspects and elaborates further on them. He weaves his analysis of the Australian Curriculum in with his consideration of the geography curriculums of England and Singapore. In his assessment, the most respected geography courses expose students to two core strands: physical and human. Both the England and Singapore curriculums have a good balance of these strands and have retained traditional terminology. However, he believes that there is an issue of balance in the Australian Curriculum where there needs to be a better representation of the physical strand in the subject and a return to traditional terminology. He provides an example:

*Physical geography makes an appearance in places but the physical processes of aggradation and degradation which create landforms/landscapes and wear them away/shape them appear to be ignored ... until Year 8 with a unit on 'Landforms and Landscapes' Students should be exposed to the forces of volcanism, plate tectonics, weathering, erosion transportation and deposition during their primary years. For example there are several references to 'natural features' (Years 1,3) 'environmental characteristics'(Year 5), even the 'influence of the environment on the human characteristics of a place' (Year 5 Content Descriptions) but precious little space/time is given to the geomorphic/physical processes that create these environments. As a result I express some concerns about the sequence of topics.*³⁹³

He refers to another example where students in Year 7 are required to complete a unit on 'Water in the world' or select a possible case study called 'Inland water' or 'Land' in Year 10, and investigate the 'environmental and economic' factors that 'influence crop yields in Australia' – presumably including the 40 per cent of our food produced in the Murray-Darling Basin, but without a foundational understanding of its physical geography.

Mr Hill also mention what he calls some surprising omissions of themes treated in Years 8–12 but especially from Years 10–12. These are:

- any substantial reference to geopolitics
- food security and population pressure on resources and global, spatial inequalities in development
- the geography of disease.

³⁹² Heads of Geography Programs (at Australian Universities) 2014, Submission to the Review of the Australian Curriculum, p. 1.

³⁹³ Hill, A 2014, Subject matter specialist report on the Australian Curriculum: Geography, prepared for the Review of the Australian Curriculum.

He observes that instead the final unit in Year 12 entitled 'Global transformations' appears to adopt an unnecessarily narrow focus; i.e. economic geography on various strands of globalisation which needs to be much broader. He says 'Studies of global conflict, spatial inequalities in development and food security, or the pressures of population on resources also provide vehicles for students to revisit and improve their mastery of the World Map ... perhaps a fitting end to a course on Geography'.

Mr Hill believes that the expectations for teaching of content in the new Australian Curriculum are far more prescriptive than past documents or those reviewed from overseas. His comment on this is:

The prescriptive format we have adopted may well be the response of our curriculum designers to the growing paucity of student and practising teacher with a deep understanding of the subject In my sphere most are non-specialists and have a background in Social Science (History, SOSE) or Physical Education. If that is the case I support the decision. The detailed prescription of content will, in my estimation, be of significant assistance to teachers in rural schools, many of whom are also non-specialists. Even so it is crucial that teachers are allowed time to explicitly address Geography skills (including vital thinking skills) and not feel overburdened by the sheer weight of expectation in completing the listed content.

He quotes the policy in Singapore of 'teach less, learn more' and calls for a reduction of content in the Australian Curriculum.

The subject matter specialist has some reservations as to robustness as specified in the content descriptions and elaborations. Compared with the current courses operating in his own school there a number of units appearing in the Foundation to Year 7 courses that are covered in his junior and senior secondary offerings; for example:

- zoning (land use) – Year 5 (Years 11,12)
- place and liveability – Year 7 (Years 11,12)
- major climate zones around the world – Year 3 (Years 11,12)
- weather and climate – Year 3 (Year 10)
- studies of development –Year 6 (Years 11, 12).

In terms of balance he is pleased to see the emphasis on locational knowledge and place knowledge throughout the primary years as increasing numbers of students have been reaching Year 8 with significant deficiencies in their grasp of this place-name geography (similar emphases appear in both the England and Singapore cases). However, he is surprised that there appears to be little time devoted to such pursuits in the Year 8–12 courses. He is also pleased to see the earliest years Foundation–Year 3 giving teachers and their students a host of opportunities to explore the various themes associated with places. He comments 'It should become a laudable, indeed pressing, objective given the rampant spread of a "Nature Deficit" in our classrooms (primary and secondary)', but he stresses the importance of fieldwork which should be even more strongly encouraged in the documents – particularly local fieldwork.

While Mr Hill supports sustainability as a cross-curriculum priority, and recognises that a subject like geography offers a more convenient vehicle for such studies than mathematics or English, he

cautions against its overuse as a concept. Students encounter the term on a regular daily basis in the media and he would argue that geography courses are 'saturated' with such language and this only serves to devalue its currency and create barriers – 'I know all about this' attitudes – for teachers to penetrate when broaching the subject (as experienced previously with their over-exposure to the concept of 'climate change').

In relation to general capabilities the reviewer found similarities between those expressed in the new Australian Curriculum and those found in Singapore, and also in England. In relation to the achievement standards he finds that the level of expectation and language (geographical) employed from F–12 reveals increasing layers of sophistication and degrees of challenge. This he finds appropriate but states that his suggestion of more fieldwork should be accompanied by an achievement standard that reflects this.

His comments on the cross-curriculum priorities can be summarised as:

- *Aboriginal and Torres Strait Islander histories and cultures*: He recognises the importance of acknowledging the history and culture of Indigenous populations but this needs to be balanced with a study of other cultures.
- *Asia*: His perception is that the Asia capability appears to be made on political and economic grounds. He expresses concerns that the studies of Papua New Guinea and the Pacific nations are almost excluded and a more balanced approach is needed.
- *Sustainability*: 'Geography appears to have taken the "heavy lifting" to promote this cross-curriculum priority. There is a need to guard against saturation with this concept. Sustainability represents just another component of any worthwhile exploration of an issue. Human geography is well positioned to fully appreciate physical and human interconnections and interrelationships that occur as a result of management of resources and ecosystems'.

Mr Hill is satisfied that there is sufficient flexibility in the curriculum for classroom delivery and use of digital technology in classroom delivery. However, he would like to see greater explicit emphasis on thinking skills in the document and calls for a fervent campaign to convince teachers to teach these critical and creative thinking techniques in a more direct fashion – he offers a number of models which he has used successfully. He also calls for more fieldwork outside the classroom to be accompanied by more guidance for teachers in the basic principles, and suitable lines of geographical inquiry for the conduct of worthwhile fieldwork in both natural (e.g. rivers and catchments, coastlines, forests and parks, volcanic landscapes) and human and cultural spheres (e.g. urban areas, shopping centres, master planned communities, factories) similar to the prescriptive advice of the content elaborations.

He re-emphasises the importance of pedagogy and observes that 'those teacher with a mastery of content and skills develop the confidence to take risks and be a little more adventurous with their pedagogy. Whether lessons are inside classrooms or labs or outside in a natural or urban context, those who know their subject have far greater potential to inspire a "love of learning" or create a sense of awe and wonderment.'

Mr Hill joins the chorus of geographers calling for geography to become a compulsory component from Foundation to Year 10 in the Australian Curriculum.

Conclusion

While it may be contested by submissions from some professional bodies and some of the current cohort of teachers, there is clear evidence from the subject matter specialist and international comparisons that there is a major imbalance in the geography curriculum. This relates to the lack of emphasis on physical geography as compared with human geography – a factor compounded by such a heavy use of content in this learning area related to ‘sustainable development’, which does not lay equal stress on understanding the physical elements of this concept and the debate surrounding it. As the curriculum in England expresses:

*Teaching should equip pupils with knowledge about diverse places, people, resources, and natural and human environments together with a deep understanding of Earth’s key physical and human processes.*³⁹⁴

Or in Finland:

*Geography examines the structures and functions of living and lifeless nature and human made systems. Instruction in geography must guide students to become aware of the interdependencies between nature and human activity and to examine the world as a changing and culturally diversified environment. Geography instruction integrates themes of the natural and social sciences.*³⁹⁵

A major rewrite and restructure of content in the geography curriculum is required to address this imbalance along with the inadequacies in sequencing which the subject matter specialist has identified, including the use of more traditional language. The other omissions he has identified also need to be addressed, along with the skewing that has resulted from the introduction of the cross-curriculum priorities – the neglect of the Pacific Islands being a specific case in point. Greater weighting for fieldwork is also required across all components of the curriculum design.

The most important issue for geographers is clearly whether geography should have ‘equal’ status and be made mandatory to Year 10. It might be observed that the discipline is suffering the consequences of its decision, taken some time ago, to become aligned more with social sciences or humanities rather than its traditional home in the natural sciences in an effort to make it more apparently relevant to tertiary and school students. By so doing it entered a more competitive curriculum space, and the foundations on which the subject was constructed became more challengeable.

Be that as it may, the decision not to make geography mandatory to Year 10, appears to have been made not on educational grounds, but solely in terms of concern about a crowded curriculum. Given this unsatisfactory approach to curriculum design, together with the increasing importance of geographical knowledge in the current and future world contexts, and considering that the vast majority of countries we have analysed have geography as a compulsory subject to at least the

³⁹⁴ Department for Education 2013, *The National Curriculum in England: Geography programmes of study*, can be accessed at <https://www.gov.uk/government/publications/national-curriculum-in-england-geography-programmes-of-study/national-curriculum-in-england-geography-programmes-of-study>

³⁹⁵ Finnish National Board of Education 2003, *National Core Curriculum for Upper Secondary Schools 2003*, Finnish National Board of Education, p. 142.

middle years of secondary schooling, we believe that geography should be a mandatory subject to Year 10.

Recommendations

- Geography should be introduced at Year 3 and in Years 3–6 as part of a combined humanities and social science subject, then should be a separate learning area from Years 7–10.
- It should form part of a composite humanities and social science learning area.
- The curriculum should undergo a fundamental rebalancing to introduce much more content on physical geography, which will involve some reduction of content in human geography as well as linking of these two strands. This should be achieved by incorporating the recommendations of the subject matter specialist and with the assistance of a fresh cohort of geography teachers.
- The use of simpler language is required and some rectification of sequencing as identified by the subject matter specialist.
- The omissions identified by the subject matter specialist should be rectified and his suggestion for a more contemporary overview in the last years should be adopted. Content also needs to be generally shifted to later years than at present, along the lines the subject matter specialist has indicated.
- The prescriptive format of the document needs to be reviewed in three years' time to determine whether teachers have the capacity to allow for more professional discretion in delivering this subject.
- More emphasis needs to be placed on teaching outside the classroom with provision for more excursions and field trips.
- The cross-curriculum priorities need to be reviewed to be sure they rest on educational and not political grounds, content needs to be included on the Pacific Islands, the current heavy emphasis on sustainability in this curriculum needs to be addressed to avoid its overuse as a concept. The three themes need to be integrated where appropriate.

Civics and citizenship

Submissions to the Review were almost entirely highly supportive of including civics and citizenship in the Australian Curriculum, although there were concerns about the level at which certain content was being introduced and suggestions for particular additional content and emphases. There is very strong support for this learning area to be mandatory to Year 10, particularly from the Law Society of Western Australia and the WA Civics and Citizenship Education Reference Group. A number of submissions wanted to make the learning area compulsory to Year 12.

Civics and citizenship is generally considered to have an overarching aim to educate students on what it means to be a citizen and to equip them with the necessary knowledge and skills to participate in society.

A comprehensive definition was provided by the Constitution Education Fund Australia:

*Civics education is the formal and informal teaching about Australia's political and social heritage, our system of government, our democratic processes and values, our public administration and our judicial system.*³⁹⁶

The Executive Council of Australian Jewry comments that civics and citizenship education helps citizens strengthen and sustain their democracy by contributing social cohesion and inclusion, and avoiding the ills of prejudice, discrimination and vilification. The Council would also like to see the words 'religious tolerance' replaced with 'respect for religious difference'.³⁹⁷

Another set of words which were the focus of submissions included 'intercultural understanding' with Mr Peter Abetz, MLA, arguing that the focus here was too narrow, being on cultures and identities of Indigenous Australians at the expense of the pioneers and the important contribution made by European Christians.

Another submission commented that the Australian Curriculum needs to include teaching all students about Australia's political and constitutional history, particularly relating to federation, the Constitution and national leaders.

Many submissions referred to the need for values and principles to be part of this learning area and there was also strong support for acknowledgement of Judeo-Christian principles in this and other parts of the Australian Curriculum. Others argued that other influences should be included as well, such as ancient Greek and Roman ideas and systems, and the Enlightenment. The Australian Human Rights Commission would like to see inclusion of obstacles and barriers facing women.

The structure of this curriculum came in from some criticism especially the lack of a realistic time allocation – namely 20 hours annually or 30 minutes weekly – which denies teachers and schools the opportunity to address the curriculum meaningfully and to achieve its aims. Professor Murray Print believes that given the significance of the subject area, an allocation of 40 hours annually would be both appropriate and realistic. The NCEC wants to see thought given as to how this learning area can be integrated across other subjects – especially history and geography as has been the case in many states.

In our consultations the point was made that even though there was support for the subject, the fact remains that mandating this learning area had contributed to an overcrowded primary curriculum and a suggestion was made to pair it with history content to make it manageable.

International research reveals that not all countries have a separate subject defined as civics and citizenship. Some comparisons of interest include:

- the Netherlands – Man and society
- Finland – History and civics
- France – part of humanities
- the Republic of Korea – moral education/ethics
- Singapore – combined with moral education

³⁹⁶ Constitution Education Fund Australia 2014, Submission to the Review of the Australian Curriculum, p. 5.

³⁹⁷ Executive Council of Australian Jewry Inc. 2014, Submission to the Review of the Australian Curriculum.

- Ontario – combined with geography and history to form social studies
- Massachusetts – combined with studies of government and classified under social science or social studies.

In England citizenship is a separate learning area with an overarching aim ‘to provide pupils with knowledge, skills and understanding to prepare them to play a full and active part in society’.³⁹⁸ The essence of the approach is that students should be educated about the governance and political system of the United Kingdom and their own democratic participation. Human rights are also stressed as is social responsibility and mutual respect and understanding.

A few countries include financial management in this curriculum.

Consequently it can be seen that there is a diverse approach to this learning area around the world. It is notable that moral values and ethics often figure prominently as a foundation for civics, and in some countries national values are also introduced.

Subject specialist

The subject matter specialist reviewing this curriculum, Professor Anne Twomey, found the structure of the knowledge and understanding strand, with its three sub-strands of ‘government and democracy’, ‘laws and citizens’ and ‘citizenship diversity and identity’ provides clarity, although it is also arbitrary in that it requires teachers to jump from topic to topic without any thematic links between them.³⁹⁹ Also, the balance and sequencing seems to be inappropriate. However, Professor Twomey questions their educational validity and is particularly concerned about the third – ‘citizenship diversity and identity’ – as she believes it could be viewed as ideological in nature and therefore open to criticism. She is also concerned about repetition of content here, so she suggests removing the separation between the sub-strands, or at least removing the requirement to address each in equal time and in similar proportions.

Professor Twomey has identified significant gaps in the curriculum ‘with the consequence that no one who had been taught it could graduate with a clear understanding of the system of government’. This is because ‘it leaves out virtually all the discussion of the Executive and Executive power, (such as the Prime Minister, the Cabinet, policy formation and the public service), as well as public finance (the budget, funding of programs, taxes, grants to the States)’. She also says it would have been beneficial to explain to students the hierarchy of laws and the role of accountability agencies including those related to consumer rights. The history of democratic institutions and struggles needs more emphasis and it is not made clear how the system of responsible government works particularly in a Westminster context – ‘there is a notable absence in the proposed curriculum of any history that would explain the source of our system of government’. She includes a number of suggested topics and resource materials to address this deficiency including the history of democracy from ancient times, through revolution in Europe and the pitting of parliament versus monarch in Britain and elsewhere, leading to the Australian experience.

³⁹⁸ Department for Education 2013, *The National Curriculum in England: Citizenship programmes of study for key stages 3 and 4*, can be accessed at <https://www.gov.uk/government/publications/national-curriculum-in-england-citizenship-programmes-of-study/national-curriculum-in-england-citizenship-programmes-of-study-for-key-stages-3-and-4>

³⁹⁹ Twomey, A 2014, ‘Subject matter specialist report on the Australian Curriculum: Civics and Citizenship’, prepared for the Review of the Australian Curriculum.

In principle, Professor Twomey is categorically against the inclusion of the cross-curriculum priorities and says 'as a general principle I object to the national curriculum being skewed to address these, or any, priorities.' She finds that the material on Aboriginal and Torres Strait Islanders histories and cultures arises naturally in the teaching of civics and citizenship anyway, but the inclusion of Asia is strained with some incomprehensible elaboration, and the third priority, sustainability, is most strained and sometimes loaded, with better approaches being available.

An example of this imbalance raised during consultations involves students being 'encouraged to investigate the cultural or religious groups to which Australians of Asian heritage belong' without any similar requirement related to Australians of European heritage.⁴⁰⁰ While the most recent version of the civics and citizenship curriculum refers to Judeo-Christian traditions the criticism is also made that this appears to be tokenistic and superficial.

A second example relates to the fact that the curriculum undervalues the significant contribution to civic life represented by the many community bodies and associations – especially religious – in areas such as health, education and social welfare. Whereas the earlier *Shape of the Australian Curriculum: Civics and Citizenship* document acknowledges the 'contribution of major religions and beliefs and the voluntary, community, interest and religious groups, associations and clubs to civic life and to the development of Australian civic identity'⁴⁰¹ the current version of the curriculum fails to deal with the issue in a comprehensive or detailed fashion.

Professor Twomey reflects the concern, also expressed in the submissions and consultations, about the amount of hours the course is to be taught over a year. The short time available, 20 hours over the course of an academic year will cause issues in the delivery of the content and it may become a 'bludge' subject. She appreciates the brevity and flexibility of this curriculum but observes that for teachers there are parts where it is very difficult to understand the scope of what is intended and where more guidance for teachers, (not to mention parents and students) is needed:

This is a matter of particular concern given that the curriculum is new and will be taught by teachers who have not necessarily been trained in the subject area. This concern may be ameliorated by the development of good text books but in the meantime there may well be a need for further elaboration of the points in the curriculum.

Professor Twomey then provides very detailed suggestions as to how the civics and citizenship curriculum could be refashioned and restructured to meet her concerns. She also provides a glossary to correct inappropriate or misleading definitions in the curriculum as well as contentious propositions.

In comparing the civics and citizenship curriculum in other countries she finds that the curriculum in England lays greater stress on the balancing of competing rights, economic and financial issues, balancing competing and conflicting demands so that in a democracy not everyone gets what they want; a more explicit and sophisticated understanding of 'fairness and justice'; greater consideration of the Executive including the roles of government and opposition and cabinet decision-making; and the rights and responsibilities of consumers. In Finland she finds a more global approach dealing

⁴⁰⁰ ACARA 2014, *Australian Curriculum: Civics and Citizenship*, ACARA, viewed 31 July 2014, can be accessed: at <http://www.australiancurriculum.edu.au/humanities-and-social-sciences/civics-and-citizenship/cross-curriculum-priorities>

⁴⁰¹ ACARA 2012, *The Shape of the Australian Curriculum: Civics and citizenship*, ACARA p. 8.

closely with ethnic culture identity, ethical and moral choices, principles of human rights, tolerance, justice and sustainable development. There is an emphasis also on being a 'good citizen' as a Finn, a European and a citizen of the world. The material on the institutions seems to be presented in an ideological way. The Republic of Korea's curriculum adds a strong measure of national values and personal ethics and etiquette, plus the contribution citizens can make through community service. There is a more nuanced consideration to the need to balance individual freedoms and communitarian values. There is also a much stronger emphasis on developing an understanding of economic matters at national and personal levels, plus consumer rights and the role of the entrepreneur, the labourer and the government

In her conclusion, Professor Twomey expresses concern about the age appropriateness of the subject matter of the curriculum, both the topics and their sequencing. She expresses the hope that civics and citizenship, if taught well, could form the foundation for elective subjects in Years 11 and 12 on economics and politics 'for which they would be well equipped with a strong grounding in the system of government in Australia'. In her report she has observed that the curriculum should also address participation in civic life beyond voting, by opening the eyes of students to other ways to participate. This is only covered in very small part and what is required is to focus on other aspects of civic life and how students can plan to participate in the community – for example, by volunteering, becoming a Justice of the Peace, making submissions to public inquiries, attending meetings, serving on local government bodies and providing voluntary help at schools and nursing homes, and in many other ways.

Conclusion

It is commonly agreed that this learning area is vital for the education of Australian students and there is strong support for its retention as a separating learning area. However, some significant recasting is needed.

The history of democracy, the origins of the Australian system of government, and the role of the founders in creating a democratic nation and a constitution, all need much greater emphasis. There is also a lesson to be learnt from many other countries in having a much more explicit discussion of the values underpinning the Australian political system, including national values which pervade our society and have shaped our history – values like enterprise and equity, as found in the typical Australian expressions of 'have a go' and 'a fair go'. Personal values need a greater focus as well including rights and responsibilities, mutual obligation, respect, tolerance, and the virtue of community participation. A well-balanced emphasis on the virtue of patriotism – pride in being Australian – along with being a citizen of the world is needed. Indeed, this curriculum is a key area to demonstrate and develop the values espoused in the Melbourne Declaration.

Clearly there are serious gaps in the content. The role of all elements of the Executive is a glaring example – it seems inconceivable that a civics curriculum could contain scant reference to the role of the Prime Minister and Cabinet. The same can be said regarding the whole public policymaking process and the actors involved along with the potential to influence policy. The role of the media is also non-existent, a fault also found in most textbooks on politics. The importance of the rule of law and the functioning of the hierarchy of laws needs more material.

There are concerns about the structure of this learning area particularly the age levels at which particular content is introduced, as well as the sequencing, and potential for ideological bias. The introduction of the cross-curriculum priorities is very strained and appears to have inadvertently skewed the content; they should be included only where relevant and educationally justifiable. The serious inaccuracies in definitions and explanation of concepts need to be rectified urgently.

There is clearly a great deal of concern about the notional time allocation given to this learning area, the argument being that it is too important and with too much content for teachers to handle in the time available. A strong case has been put for this learning area to be compulsory to Year 10 and there is also a very strong case for it to be mandatory in some form to Year 12 which is, after all, just prior to the age at which students will be voting. It seems rather remiss to cease learning civics and citizenship two years before the vote. There is not much point in having compulsory voting if we do not make every effort to educate future citizens about our system of government.

Australia has a very proud record in this domain, being one of the longest continuing democracies in the world, with no experience of civil war, a pioneer in universal suffrage, and a nation created with the consultation and approval of the people through referendums. A vibrant civics and citizenship curriculum can preserve and maintain this heritage.

Recommendations

- Civics and citizenship should be introduced at Year 3 and in Years 3–6 as part of a combined humanities and social science subject, then should be a separate learning area from Years 7–10.
- This curriculum should be rewritten and considerably re-sequenced along the lines advocated by the subject matter specialist.
- Serious gaps which have been identified should be filled, including the foundation values of the Australian system of government and the importance of personal values and ethics, the balance between rights and responsibilities, the importance of British and Western influences in the formation of Australia's system of government, the role of the founders and the key features of constitutional development, the historical functioning of the federation, the role of the Prime Minister and Cabinet and the executive arm of government, the hierarchy of laws and the policymaking process, the key elements of public finance, and the importance of community service as a key component of citizenship.
- The civics and citizenship curriculum should better recognise the importance and contribution of the many community, charitable and philanthropic bodies and organisations – especially religious – in areas such as health, education and social welfare.
- Cross curriculum priorities should be reduced in the content of this learning area and properly integrated only where relevant.
- The notional time allocated to this learning area needs to be reviewed and increase as the years progress.
- Civics and citizenship should be mandatory to Year 10.

Economics and business

Australia appears to be the only country which has produced a curriculum combining economics and business as one learning area in this manner. This factor was one of the main themes arising from submissions with concern expressed over the wisdom of the combination, differing perspectives

about which should be given more prominence and some arguing for more emphasis on consumer and financial literacy. In some other countries, these disciplines are also addressed in other learning areas such as mathematics, history and geography.

However, there was very strong support for the inclusion of these disciplines in the Australian Curriculum. International research also supports the importance of including economics and business in the curriculum, based on the contribution of education to the economy, the importance of financial literacy and consumer education for safe and informed choices, including understanding notions of personal exchange, and facilitation of individuals in achieving their economic goals.

Some submissions expressed concern about the curriculum development process arguing that the ACARA consultation process could have been improved with greater teacher engagement. There were also differing views on the extent to which the economics and business curriculum had realised the Melbourne Declaration's Educational Goals for Young Australians, especially Goal 2.

Considerable concern was raised, particularly through our consultations, as well as in submissions, regarding the level at which this curriculum had been introduced. APPA and particularly the Western Australian Primary Principals' Association along with the NCEC, do not believe that this should be a specific learning area at primary level, partly because of overcrowding, compounded by the reality that economics and business is new to primary schools everywhere. This view was also expressed during consultations by a number of primary school representatives arguing for introduction of the learning area to be delayed until later than Year 5. Age-appropriate content was also raised by Economic and Business Educators New South Wales and the Victorian Commercial Teachers Association (VCTA), mentioning the need to ensure that complex concepts are not introduced in years where students will not be able to 'make meaning' of the concepts because they lack relevance to their lives. The WA School Curriculum and Standards Authority believes that history, geography, civics and citizenship, and economics and business, should be incorporated into one learning area.

By contrast, there was strong support for the compulsory curriculum focus for students in Years 5–8 from the Australian Securities and Investments Commission (ASIC), CPA Australia and the Institute of Chartered Accountants. The main focus from ASIC was regarding consumer and financial literacy in the formative years. These organisations and a number of others, including Business SA, gave strong support for its compulsory inclusion in Years 9 and 10 'which are critical years in student's lives when they make real life links and put their learnings into practice ... and are active consumers and workers where the skill sets nurtured through the business and economics curriculum will begin to take on a practical relevance'.⁴⁰²

Generally speaking, apart from these concerns about the appropriate level at which to introduce such a learning area, the main issues raised during our consultations, and in some submissions, related to the inappropriate content, and the inability of teachers to deliver in primary schools with a number of calls for more professional development for teachers in this subject area. Some say there is far too much professional jargon in the curriculum documents. There was also an opinion from many that there needed to be more clarity about the aims, content, and use of content

⁴⁰² CPA Australia & the Institute of Chartered Accountants Australia 2014, Submission to the Review of the Australian Curriculum, p. 2.

elaborations, for this learning area. Many have called for more actual case studies. Inappropriate sequencing and flow of content were mentioned by educators, a theme taken up in the report of the subject matter specialists.

Particular content which required greater emphasis, according to our respondents, includes:

- consumer and financial literacy
- entrepreneurial behaviour and innovation as well as market systems and concepts of return on investment and incentives and profit motives that drive such entrepreneurial behaviour as well as providing a grounding for ethics and corporate social responsibility
- the online and commercial environment
- work and work futures
- Australia's foreign investment history.

Subject specialists

The report from the subject matter specialists, Professor Tony Makin and Dr Alex Robson⁴⁰³, is very critical of the economics and business curriculum. The shortcomings of the curriculum were classified under the headings of:

- omission of key economics and business concepts and material
- inclusion of inappropriate material
- incorrect definitions or inadequate explanations of standard economic concepts.

Omissions

There is not sufficient emphasis and even omission of important topics central to understanding economic behaviour and the business environment. Some examples given are:

- the critical distinction between micro-economics and macro-economics and the extensive coverage – it is necessary to elaborate on each
- no mention of the great economic thinkers or reference to Adam Smith's 'invisible hand', the idea of market equilibrium, or the key role of the price mechanism in providing necessary signals for the allocation of resources and in decentralising information
- an inadequate understanding of economic history and the economic institutions of Western civilisation, the Industrial Revolution, the rise of Europe and the US, and the more recently the phenomenal rise of East Asia, India and other emerging economies, which are not mentioned. Also, no mention that the unprecedented reduction in poverty that has occurred in these emerging economies over recent decades has been a direct result of market liberalisation and increased international trade; and no recognition that within these economies and in the advanced economies, including Australia, the private sector accounts for the bulk of economic activity and is mainly responsible for creating employment and hence raising living standards
- inadequate emphasis on the important role of entrepreneurs in starting and organising new businesses – including reference to well-known entrepreneurs who have literally changed the world through their innovations like Bill Gates (Microsoft), Steve Jobs (Apple), Mark Zuckerberg (Facebook) et. al.

⁴⁰³ Makin, T & Robson, A 2014, 'Subject matter specialist report on the Australian Curriculum: Economics and Business', prepared for the Review of the Australian Curriculum.

- the key international economic institutions, including the World Bank, IMF, ILO, OECD, APEC and the Group of 20. Also, key Australian institutions like the Reserve Bank and how they have evolved, as well as the role of the banking and financial systems in modern economies
- drivers of economic activity since the beginning of human history, including specialisations and the gains from trade, terms of trade, business cycles, exchange rate
- the role of private and public sectors in a mixed economy. Market failure versus government failure
- the importance of property rights and the role that this and other institutions such as rule of law play in facilitating specialisation, trade, saving and investment in physical and human capital
- omission of the concept of transaction costs before students, in Year 8, are expected to look at the advantages and disadvantages of certain business ownership structures
- the difficulty of students understanding the notion of ‘sustainability’ and natural resource depletion without understanding the role played by private property rights, as well as the role that market prices play rationing consumer demand and bringing forth additional supply
- omissions regarding business, including key elements of financial literacy, types of businesses, methods to improve productivity through human resource management and technology, marketing, and familiarity with basic terms in accounting such as profit and loss, income, asset, liability, and rudimentary income statements and balance sheets.

Inclusion of inappropriate material

The subject matter specialists reported that the curriculum lacks educational balance and includes inappropriate material. In particular the cross-curriculum material is arbitrary and haphazard. Some examples given are:

- There is discussion of benefits of government intervention but with no discussion of ‘public goods’ or the costs of intervention, or what can go wrong with government decisions; notions of market failure and government failure (which can be as significant as market failure).
- In Year 10 students are to be taught in great detail about the alternative measures to GDP, as well as measures of inequality. These topics involve advanced concepts and are best left until Years 11 and 12 or tertiary education, where they are currently taught. Also, this topic has been included at the expense of more basic and important topics such as the open economy, sources of productivity growth, the causes of inflation and unemployment, and foreign investment.

Incorrect definitions and inadequate explanations

The subject matter specialists give a list of fundamental concepts that are incorrectly defined, emphasising that “...the main purpose of such precision is to avoid confusion, ambiguity, and errors of logical reasoning and judgement in personal financial decisions, business decisions, and economic policymaking: defining a concept incorrectly or applying it inappropriately can lead to significant negative economic consequences.”⁴⁰⁴

Benchmarking

International benchmarking against the curriculums of Massachusetts in the United States and Ontario in Canada lead the subject matter specialists to produce a list of topics not covered in the Australian Curriculum.

⁴⁰⁴ Makin, T & Robson, A 2014, ‘Subject matter specialist report on the Australian Curriculum: Economics and Business’, prepared for the Review of the Australian Curriculum.

Conclusion

The authors conclude that the curriculum as it stands is grossly deficient and needs rewriting. In terms of the disciplines and with regard to international comparisons it lacks rigour and balance and omits core economic principles and material across a range of topics. The curriculum document is too wordy, poorly expressed, and contains many definitional errors in relation to important economic concepts. They note that combining economics and business in the curriculum is unusual by international standards and a case can be made for separating them.

Their other suggestions relate to introducing descriptive material about the economy in late primary or early secondary years, with more conceptually challenging economic concepts to follow in later years. With respect to business topics to be covered, there could be an emphasis on elementary financial literacy in early secondary; basic accounting, marketing and related business material could be taught subsequently. Mainstream economics topics that warrant inclusion in a new curriculum include an account of Western economic history; the rise of Asia in the 21st century; international economic institutions, and the traditional themes of supply, demand, prices, and the market system; entrepreneurship, and the positive contribution the private sector makes through job creation and income generation; the role of government; the national economy; the role of money, banks and financial markets; and international trade. Business topics that warrant inclusion are basic financial literacy, the various kinds of business, practical ways forms can improve productivity, as well as an appreciation of the importance of marketing and exposure to basic accounting terms. The authors give a number of examples of resource material. Meanwhile they advocate rewriting, restructuring, and correcting the current material along the lines they have suggested.

The current document seems to be unbalanced and even biased in many respects as identified particularly by the subject matter specialists, is not well-sequenced, contains inaccuracies, and appears to have been written by an educational generalist rather than a disciplinary specialist. It is in need of major rewriting, restructuring and sequencing, with more rigour and expertise related to the disciplines themselves. The inaccuracies identified must be corrected immediately. If some of the content is to be kept in the primary years, there is a strong case for more professional development for teachers and the introduction of more resource material including case studies.

It is clear that there is strong support for inclusion of economics and business in the Australian Curriculum. However, there would seem to be common agreement that this learning is currently being introduced too early in the F–12 spectrum and most of the content should be shifted to begin in early secondary, although there does seem to be a case for the introduction of elementary financial literacy in primary school. This should be incorporated across relevant areas of the curriculum from Year 3 onwards, with a particular focus in mathematics. We are aware of ASIC's MoneySmart Teaching classroom resources that have already been developed to assist primary school teachers build the financial literacy of their students.

Recommendations

- The economics and business curriculum should be introduced in Year 7. It should begin with descriptive material with conceptual and challenging concepts left to secondary years.
- The content should be restructured, rewritten and rebalanced to:
 - correct the inaccuracies and incorrect terminology which have been identified

- reduce the amount of core content to be more focused and written in simpler language
- extract elements relating to financial literacy to design a composite module to be inserted into the mathematics curriculum in Years 5–6 using existing material developed by ASIC and several not-for-profit organisations.
- rectify the imbalances along the lines of suggestions made by the subject matter specialists, including the deletion of irrelevant or inaccurate material and the introduction of new material about the contribution of economic development to growth of job creation and living standards; new material outlining an account of Western economic history and thought, the rise of Asia in the 21st century, international economic institutions, and the traditional themes of supply, demand, prices, and the market system, entrepreneurship, property rights and the rule of law, the role of government in the economy, and an understanding of the financial system and international trade. More basic accounting and business terms and practices need to be included as well.
- the cross-curriculum priorities need to be reduced in content and properly integrated but only where educationally relevant.

Health and physical education

Submissions to the review indicated strong support for the inclusion of health and physical education (HPE) in the Australian Curriculum and, with the exception of some particular concerns flagged below, there was general satisfaction with the way this curriculum had been developed and the final result.

Many countries require the study of physical education over all of the school years but generally speaking there is a greater focus on physical activity than health and wellbeing. Sport features strongly in this arena in most countries, including an emphasis on building character, self-confidence, and embedding values such as fairness and respect.

Indeed, Australia is one of only a few countries that combines the strands of health and physical education into one curriculum and this aspect seemed to be regarded positively in the submissions we received.

The case for inclusion of health and physical education is well expressed by the Australian Council for Health, Physical Education and Recreation (ACHPER):

The importance of the strong HPE learning area curriculum, that teaches students to enhance their own and others health safety, wellbeing and physical activity participation would enable students to participate in lifelong active living, health and wellbeing ... HPE is fundamentally about learning and is concerned with the provision of learning experiences that are educationally worthwhile and that seek to develop skills, knowledge, and understanding that will enable young people to live healthy and active lives ... ACHPER strongly acknowledges that the learning area of HPE has an important role to play in the advancement of skills that are variously referred to as essential or life skills, including

*communication and interpersonal skills. HPE also contributes to learning that is traditionally associated with other curriculum areas, including literacy and numeracy.*⁴⁰⁵

Consultations revealed that there was initially some tension in the development of this curriculum, around some issues which also arose in submissions to this Review. These included the need to reduce the amount of content overall.

However, the most controversial area by far was sexuality education. Sex(uality) education is taught in England's basic curriculum in Years 7–11 and in New Zealand (ages 5/6–16.)

Some submissions to this Review sought guidelines for sexuality education which, as Family Planning Victoria point out, is a very challenging area for teachers, with many teachers having little or no undergraduate training in sexuality and being unsure of pedagogical approaches. Family Planning Victoria wants more exploration of topics in relation to sexual and reproductive health and wellbeing. Other submissions supported more emphasis on inclusion of lesbian, gay, bisexual, transgender, and intersex content (LGBTI); but others, including 24 individual submissions, were opposed to any content of this kind. Some submissions were completely opposed to the inclusion of any sexuality education at all in the curriculum, and one jurisdiction said it would refuse to implement the content in sexual education. They were joined by a significant number of individual submissions from people who said that they supported parental rights to withdraw their children from instruction they deemed inappropriate.

A number of submissions suggested that the health and physical education curriculum was politically biased.

A few submissions did not want alcohol and drug education curriculum content in primary schools but there was also very strong support for its inclusion:

*Alcohol and other Drug (AOD) related risk and harm share common causal pathways with other health and social issues such as bullying, youth suicide, social dislocation, mental health, and sexual health problems. Prevention and early intervention along these pathways can make a real difference for young people, and schools provide students with unique opportunities for learning and support ...The ANCD recommends that school based AOD education programs commence early in young people's school careers and be applied incrementally by engaging students meaningfully in a developmentally appropriate way. It should include evidence based and tangible illustrations of the types of education that could be implemented to meet the learning objectives for each development stage while allowing schools to develop approaches that are consistent with their specific needs, cultural influences, socio-economic and geographical considerations.*⁴⁰⁶

Inclusiveness in the broadest sense was advocated by many groups, but particularly for children with disability:

It is highly important for the education system to reflect best practice with regard to education provision for students with disability. An essential component of this is teaching

⁴⁰⁵ Australian Council for Health, Physical Education and Recreation Inc. 2014, Submission to the Review of the Australian Curriculum, p. 2.

⁴⁰⁶ Australian National Council on Drugs 2014, Submission to the Review of the Australian Curriculum, p. 1.

*children about the value and contribution which all children make to our community, including schools, namely inclusion ... currently within the educational system there is a systemic culture of negative attitudes and low expectations towards students with disability. This culture forms a vicious cycle that limits opportunities for students with disability and also influences other students in forming their own cultural preferences and prejudices at a young age about people with disability. Primary School provides a unique opportunity to create generational change in attitudes and understanding of disability.*⁴⁰⁷

There were strong submissions calling for greater recognition of wellbeing in this curriculum. In relation to wellbeing it is significant that increasing numbers of schools, especially at the primary school level, are introducing meditation and mindfulness exercises in an attempt to teach students about the benefits of relaxation and stillness.

There was also quite a lot of support for the inclusion of respectful relationships. ACHPER advocates greater use of emerging research in the health and physical education curriculum:

*ACHPER advocates for the learning area of HPE having stronger reference to emerging research from fields such as cognitive science, neuroscience, neurophysiology, and psychology to support HPE in a future focused curriculum. Clear evidence from schools connects HPE teaching practices that support movement to enhance learning and improve academic, behavioural, and healthy performances in students at all levels.*⁴⁰⁸

In terms of the structure of this curriculum there was strong criticism from Western Australia:

*The health and physical education curriculum in its current form is not suitable for implementation in Western Australian schools. There is a need to reduce the amount of content (to be identified as core and additional) and organised as year by year syllabuses.*⁴⁰⁹

One other jurisdiction reported that during implementation they have amended the structure, such as taking the year-by-year curriculum and putting it into stages, and adding personal development content. One organisation claimed they would not teach it as prescribed as it did not fit in with their religious values.

Subject specialist

The subject matter specialist, Professor Chris Hickey, compared the Australian Curriculum with that of Singapore and New Zealand. He comments that the new Australian Curriculum does not represent a radical reform of what teachers already know and do, but it does have the potential to challenge and refurbish some of the long-held underpinnings of the field. He commends the document for repositioning young people as ‘active shapers of their own health and physical activity biographies’ as it rejects ‘depreciatory views of young people as being at risk’. He is happy with the overall structure of the curriculum but makes some suggestions about positioning focus areas and band levels. He says it remains a challenge for teachers to establish communication patterns to ensure that the transition between band levels 2 and 3 is aided by shared teacher understandings and

⁴⁰⁷ Children with Disability Australia 2014, Submission to the Review of the Australian Curriculum, pp. 1–2.

⁴⁰⁸ Australian Council for Health, Physical Education and Recreation Inc. 2014, Submission to the Review of the Australian Curriculum, p. 2.

⁴⁰⁹ School Curriculum and Standards Authority Western Australia 2014, Submission to the Review of the Australian Curriculum, p. 4.

expectations. Without this, the curriculum runs the risk of being separated according to its primary (bands 1 and 2) and secondary (band 3) components.⁴¹⁰

He believes the cross-curriculum priorities are well integrated but acknowledges that some concern remains as to how well teachers will use the icons within the content descriptions or they may get overlooked. He suggests that more explicit expectations around the use of the cross-curriculum priorities would strengthen their use.

Professor Hickey thinks the curriculum's strength is its 'methodological intention to engage with real teachers and learners in real schools'. This is stronger than is the case with the Singapore curriculum.

However, he notes that the challenge that confronts this curriculum lies in the translation from text to practice. While the non-prescriptive, flexible design of the curriculum is a feature of its commitment to accommodating the contextual and contingent, it places considerable responsibility on teachers and their ability and aptitude to translate the learning goals into purposeful and sequential learning practices. Considerable support, resources, and direction are going to be needed, at both in-service and pre-service levels, to ensure that this is not left to chance.

Professor Hickey follows up on this with a call for more pedagogic resources, collections of case studies, a systemic program of teacher in-service as well as pre-service programs, and designated 'champions in all schools to foster implementation and disseminate up-to-date strategies and resources'.

He believes that the Australian Curriculum places more emphasis on the physical dimension than that of Singapore and is much better positioned to foster student's lifelong engagement with physical activity. While the content and aspirations of the New Zealand and Australian Curriculum are quite complementary, the Australian Curriculum provides a simpler and clearer model which will help with its uptake and implementation. He is complimentary of the way the New Zealand curriculum document has a substantially stronger bi-cultural presence: 'while the Indigenous dimension of the Australian Curriculum is not likely to command the same profile, there is much to leverage from the New Zealand curriculum in the respectful inclusion of Indigenous cultural values'.

Conclusion

This curriculum shows evidence of well-regarded consultation practice and general satisfaction with its content, with a few exceptions. Submissions and consultations and the opinion of the subject matter specialist suggest that it is overcrowded and needs some slimming down and some restructuring of year-level content. Some of the content could well be addressed more in school-based activity.

There is a lot of concern about the capacity of generalist teachers to cope with the often complex and sensitive content in this subject area. A combination of professional development and use of outside expertise seems necessary. This would include emphasis on sport and outdoor excursions, which seem to be feared by many teachers in regard to their organisational ability and threats of possible litigation.

⁴¹⁰ Hickey, C 2014, 'Subject matter specialists report on the Australian Curriculum: Health and Physical Education', prepared for the Review of the Australian Curriculum

We have made extensive efforts to assess opinions on the two most contentious areas in this curriculum – sexuality and drug education. It has been noted that a few schools are implacably opposed to inclusion of such material and some have refused to teach it. Expert medical opinion is clear that, along with the earlier maturation of young people, there is currently a serious crisis – including youth suicides – occurring in Australian society in this domain as a result of a lack of forums and spaces where young people can discuss such issues, including sexuality. The school setting, on the assumption that the curriculum is balanced and objective in dealing with what are sensitive and often controversial issues, offers one of the few neutral places for this to occur.

Other schools, including Christian schools, have advised us that they are comfortable with the inclusion of such content in the health and physical education curriculum, provided there is flexibility so that they are able to teach it at the age level they deem appropriate, and by mature teachers rather than younger ones who may feel challenged in this arena. We think this is the way forward.

It should also be noted that the submission by the NCEC signals that Catholic schools reserve the right to implement the Australian Curriculum according to the uniquely faith-based and religious nature of such schools:

*For example, as usual in all Catholic schools, the new Health and Physical Education Curriculum will need to be taught in the context of a Personal Development program informed by Catholic values on the life and personal issues involved.*⁴¹¹

During this Review, the Minister also asked us to consider in relation to the terms of reference, the Daniel Morcombe Foundation's *Daniel Morcombe Child Safety Curriculum*⁴¹² and the South Australian Government's *Keeping Safe: Child Protection Curriculum*.⁴¹³ In relation to the intended curriculum, we received advice from ACARA about how child safety was incorporated in the Australian Curriculum in the area of health and physical education.

Recommendations

- This learning area should run throughout all the years of schooling but should be formally introduced at Year 3. It can provide a wealth of resource material for the F–2 Years.
- The core content should be reduced and a significant portion should become part of school-based curriculum and activity to complement the rich programs which most schools are offering. There is scope also for linkages of content with other learning areas such as science, English, geography.
- There appears to be little requirement for rewriting of this document. However, some restructuring is required to reduce the very prescriptive lockstep design and to cater in particular for student diversity including for those with disabilities.
- The two controversial content areas of sexuality and drugs education should remain, but schools should be given greater flexibility to determine the level at which these areas are introduced and the modalities in which they will be delivered. There is a considerable need for professional development for teachers on these topics, and in other parts of this learning area.

⁴¹¹ National Catholic Education Commission 2014, Submission to the Review of the Australian Curriculum, p. 15.

⁴¹² Parent resources related to the *Daniel Morcombe Child Safety Curriculum* can be accessed at: <http://education.qld.gov.au/parents/school-life/child-safety-curriculum.html> (viewed 4 August 2014).

⁴¹³ The *Keeping safe – Child Protection Curriculum* can be accessed at <http://www.decd.sa.gov.au/teachingandlearning/pages/pandp/Childprotection/?reFlag=1> (viewed 4 August 2014)

- Greater emphasis needs to be laid on outdoor activity in this learning area.
- Cross-curriculum priorities need to be clarified and integrated on educational grounds where appropriate. Lessons can be learned from New Zealand regarding integration of Indigenous perspectives.
- The strong emphasis on having students actively engaged with their own health and wellbeing should be continued.
- As ACARA has mapped the *Daniel Morcombe Child Safety Curriculum* against the Australian Curriculum, the Reviewers recommend that the resources developed by the Daniel Morcombe Foundation and Queensland Department of Education, Training and Employment be mapped against the Australian Curriculum for health and physical education when this curriculum is endorsed by education ministers.

Technologies

This is a relatively new area to school curriculums and around the world there is a large variety of approaches to its inclusion. Although technology per se now figures prominently in most systems, only a few countries follow Australia's method of designing the content as a standalone and compulsory subject. Elsewhere it appears as an optional subject, is included as part of a subject, is contained or infused in other learning areas as technology concepts, is part of vocational education, is portrayed as design and technology, is labelled simply as computing with an emphasis on programming or coding, is linked with science, or is captured as ICT. There seems to be no international consensus on what the key features of a technologies curriculum should include.

Although many submissions to this Review noted the considerable difficulty in getting agreement on the focus and content of this subject there is a high level of satisfaction with the way the consultation was handled to create the final version. There is also strong support for its inclusion in the Australian Curriculum – particularly from professional bodies associated with computers and technologies – and a belief that it appropriately captured the critical elements of the learning area and provided a sound curriculum foundation which could accommodate future instances of digital technology. The Australian Computer Society (ACS) says:

*The ACS strongly endorses the creation of the digital technologies subject and notes the important distinction of this subject from the role of ICT as a general capability. Both aspects are critically important in the education of students, but the distinction between them is vital for individual students and for Australia as a nation.*⁴¹⁴

Although most submissions wanted to see this curriculum implemented as quickly as possible, there was also a view that it was not appropriate for primary schools and should only be included in secondary schooling:

*There are significant numbers of teachers and system level personnel who believe that the learning technologies curriculum is not relevant for primary students and it is contributing to an over-crowded curriculum.*⁴¹⁵

⁴¹⁴ Australian Computer Society 2014, Submission to the Review of the Australian Curriculum, p. 1.

⁴¹⁵ Catholic Education Office, Archdiocese of Canberra and Goulburn 2014, Submission to the Review of the Australian Curriculum, p. 2.

The Western Australian School Curriculum and Standards Authority expressed the view that the technologies curriculum, along with other learning areas, needed to be reduced and arranged as year-by-year syllabuses before it could be implemented. Also, one jurisdiction said that it already had a good existing course and did not want to replace it fully with the Australian Curriculum.

There was some concern expressed regarding the structure of the subject, including the importance of separating the learning area of technologies from the information, communication and technologies general capability. The complex language bothers some, and the need for professional development for teachers was often stressed.

Subject specialist

The subject matter specialist, Mr Phil Callil, spent some time examining the curriculum-shaping process and praised the openness in publishing the consultation report and findings and making changes where there was much disagreement. He notes however, that there was limited engagement from primary teachers in the process, and he observes that teachers and schools were very concerned about how they would be able to implement the technologies content across Foundation to Year 8. There were also concerns that the language used in the Years 5–6 achievement standards is beyond many teachers without a specialist background.⁴¹⁶

He notices a number of inconsistencies throughout the document with regard to definitions and would like a greater explanation of the difference between ‘design processes’ and ‘technologies processes’; he does not think the name ‘digital technologies’ is suitable, and says it requires changing as it is not recognised across the IT industry. He also notes that in design and technologies:

High disagreement was recorded in the online survey across all band levels for the appropriateness of pitch in the content descriptions. A number of content elaborations are inappropriate for the year level and this is likely reflected in the high disagreement for example, in Years 9–10, a number of content elaborations are pitched low. There is also a difficulty in identifying developmental stages in pitch for each band level’s content descriptions.

In digital technologies he was reasonably happy with the content descriptions and elaborations but he thinks that the writing may be pitched at too high a level for generalist teachers, particularly at primary and junior secondary levels. There was high disagreement for Foundation to Year 2 – especially for digital technologies: these concern clarity, pitch, appropriateness, progression and manageability of content descriptions and elaborations, ‘a number of the content elaborations remain too high for this band’. The same issue arises for Years 7–8 and he gives a number of examples.

Mr Callil expresses a general concern about the aspirational nature of the curriculum – ‘the technologies learning area structure is admirable and may be achievable, sustainable, and robust in Years 7–10 but it is likely that its structure in F–6 will contribute to the “mile wide and inch deep” dimension of the “crowded curriculum”.’ Given the ever-changing technologies he feels that it is important that content is not prescribed and that the curriculum promotes computational thinking

⁴¹⁶ Callil, P 2014, ‘Subject matter specialist report on the Australian Curriculum: Technologies’, prepared for the Review of the Australian Curriculum.

and knowledge – and he thinks the current document allows for this, although all depends on teacher capabilities and the fact that they will need professional development.

He feels that the connection between the technologies learning area and the ICT general capability is not obvious and would like to see the connection made more explicit. Indeed, Mr Callil disputes whether technologies is a ‘natural home’ for the ICT general capability (as ACARA suggests) and goes on to say that ‘ICT should pervade all areas of the Australian Curriculum’. He has no concerns regarding the cross-curriculum priorities.

His comparative exercise was with Finland, Singapore and Ontario. In Singapore he looked at the lower secondary subject of computer applications and found it quite ‘dry’ in content but that it covered a lot of the (incorrectly) assumed knowledge in the Australian Curriculum. The major difference is that the Singapore curriculum does not touch on computational thinking until students are aged 16 (this may now be outdated). The Singapore home economics course is more centred around production at the macro level.

In looking at Finland he notes that schools are left to handle the main studies in ICT – courses are discretionary and localised but still must follow a basic educational framework as the national curriculum contains ‘guiding principles’. He feels that while Australia trails Finland in many broad educational assessments, Australia’s use of ICT for learning at school and at home is higher than Finland.

In Ontario there is no discrete ICT subject in the primary years – ICT appears as a general capability to be incorporated in teaching and learning. Science and technology is where technology is covered in the elementary curriculum. From Year 9 there are a number of elective specialist technical courses and from Years 9–12 there is an impressive menu of computing courses.

Mr Callil’s recommendations include:

- Consideration should be given for renaming ‘digital technologies’. It is a name that is not readily identifiable as a commonly known term in the IT industry, Australian tertiary education or education systems in Canada, Finland, Singapore or the UK.
- Consideration should be given to the integration of design and technologies into other learning areas in the F–6 curriculum and for the commencement of design and technologies as separate subjects (either as compulsory or as electives) in lower secondary rather than primary years.
- If digital technologies is to be studied from F–8 the importance of professional learning for teachers of digital technologies cannot be overestimated. Professional learning for both digital technologies and the ICT capability needs to be ongoing, sequential, systemic and regular.
- To ensure academic rigour and to better prepare and enhance teacher competencies and expertise for secondary teachers of digital technologies, Mr Callil recommends additional training in the understanding of the pedagogy of contemporary learning.

Summary

We note that there is a significant division of opinion, and little common agreement, as to what the curriculum of this subject area should contain. We also note that it is a work in progress in almost every other country we have analysed. By and large it is not mandatory elsewhere, and certainly not in the primary years. We are persuaded by the views of the subject matter specialist that, in primary school, it could be introduced, in part, in other relevant disciplinary areas, with an integration of the two strands of design and technologies.

While there is a clear case for the introduction of the ICT capability itself to run right through the whole Australian Curriculum, we are not convinced that a separate subject of the kind that has been designed needs to be mandatory at any level. However, it definitely should be an elective subject from lower secondary school onwards. Considerable professional development will still need to be provided for teachers.

Similarly to the health and physical education curriculum, during this Review, the Minister also asked us to consider in relation to the terms of reference, the Daniel Morcombe Foundation's *Daniel Morcombe Child Safety Curriculum*⁴¹⁷ and the South Australian Government's *Keeping Safe: Child Protection Curriculum*⁴¹⁸.

In relation to the intended curriculum, we received advice from ACARA about how child safety was incorporated in the Australian Curriculum, which included being in the area of digital technologies.

Recommendations

- This learning area should be introduced from Year 9.
- The connection between the content of the discipline and the ICT capability needs to be made more explicit.
- The two strands of design and technologies should be integrated.
- A number of errors and inconsistencies in describing terminology identified by the subject matter specialist need to be addressed.
- The content needs to be reduced and a clearer sequencing introduced, taking into account comments made in submissions to this Review and the analysis of the subject matter specialist. Some of the current content can be integrated into other learning areas.
- As ACARA has mapped the *Daniel Morcombe Child Safety Curriculum* against the Australian Curriculum, the Reviewers recommend that the resources developed by the Daniel Morcombe Foundation and Queensland Department of Education, Training and Employment be mapped against the Australian Curriculum for technologies when this curriculum is endorsed by education ministers.

⁴¹⁷ Parent resources related to the *Daniel Morcombe Child Safety Curriculum*, can be accessed at <http://education.qld.gov.au/parents/school-life/child-safety-curriculum.html> (viewed 4 August 2014)

⁴¹⁸ The *Keeping safe – Child Protection Curriculum*, can be accessed at <http://www.decd.sa.gov.au/teachingandlearning/pages/pandp/Childprotection/?reFlag=1> (viewed 4 August 2014)

The arts

There seems to be universal agreement that the arts are a crucial part of formal school education and should not be viewed as an ancillary or ‘add-on’ component of schooling. In the words of the Australian Major Performing Arts Group:

*The evidence is thoroughly researched and well documented in Australia and internationally – the benefits of a comprehensive arts education are felt across all learning areas. Students whose learning is embedded in the arts achieve better grades and overall test scores, are less likely to leave school early, rarely report boredom, and have a more positive self-concept than students who are deprived of arts experiences. They are also more likely to become involved in community service.*⁴¹⁹

The view of the Australian Academy of the Humanities is that ‘art subjects are not a “pleasant diversion” or “optional extra” but an essential and productive component of a comprehensive, systemic curriculum’.⁴²⁰

However, there appear to be no other countries that have combined these five art forms into one curriculum. Music, visual arts, and drama exist in some form in most curriculums, but as standalone subjects, and are not always all part of the core. Dance is less common, and media arts is virtually non-existent as a standalone subject. This is not to say that these five art forms are not taught in schools in some manner; indeed most of them are also part of, or linked to, other learning areas, and are often part of extracurricular programs.

The matter of combining five art forms into one curriculum was a predominant element in submissions to this Review. We received strong views from 10 major arts organisations supporting the curriculum in its current form. Other submissions were concerned that one or other of the five art forms had been privileged. A number of submissions wanted a particular art form created as a standalone subject – music was the main focus of this approach and some submissions argued that music could only be delivered by music specialists. As might be expected, the followers and practitioner of each of the five strongly favoured their art form being given equal or greater prominence.

One overwhelming concern expressed in both submissions and consultations was whether generalist teachers would be able to handle all or any of these art forms, since they were written as specialist learning areas by specialists. It was signalled in unambiguous terms that considerable professional development would be required – particularly for primary teachers – in the middle years when the curriculum became very complex and highly specialised. The language and confusing terminology used in the curriculum did not help, it was claimed. The term ‘media arts’ caused some confusion and does not appear to have been satisfactorily defined in educational terms. There seemed to be a general feeling that schools would need to have specialists on staff or on contract to handle the arts curriculum in upper primary and secondary years. There was also the factor that the arts can be very resource intensive for schools, and so it might be beyond the realm of less-endowed schools to teach all of the five arts forms in the one curriculum. The question, particularly for a primary school,

⁴¹⁹ Australian Major Performing Arts Group 2014, Submission to the Review of the Australian Curriculum, p. 3.

⁴²⁰ Australian Academy of the Humanities 2014, Submission to the Review of the Australian Curriculum, p. 1.

is which arts specialist does a school bring in? What strand does it focus on? Where does it spend its money? Similar dilemmas face small secondary schools.

According to The Song Room:

*More than 3 out of 4 schools do not have a specialist music teacher. Generalist primary school teachers receive less than 20 hours of training across all art forms in their undergraduate degrees. Australian schools and teachers need to be supported to effectively implement a world class curriculum though the continued provision of quality, engaging, curriculum – aligned teaching resources.*⁴²¹

The Music Trust says that ‘the countries topping the PISA scores ... all offer much more music education than do government schools in Australia; music is taught by specialist music teachers or by generalist classroom teachers with up to 20, even 40 times more music education than is provided to Australian classroom teacher’.⁴²²

Research indicates that in other countries the arts are vital in understanding history and culture, and are important in developing artistic appreciation and skills, and play a vital role in cognitive development and achievement. However, in most of the PISA top performing countries music and the arts have separate learning areas. There is a considerable variation in the age to which these curricula are specified, varying from 14 to 18.

The curriculum in England states the objective of studying arts is to:

*know how art and design both reflect and shape our history and contribute to the culture, creativity and wealth of our nation. The aims of studying the arts in existing curricula include developing artistic skills, evaluating artistic works and understanding the history of art ... to know about the great artists, craft makers, and designers, and understand the historical and cultural development of their art form.*⁴²³

The Framework for the National Curriculum in England notes that an appreciation of the arts should be fostered:

*[It] should develop pupil’s knowledge, understanding, skills, and attitudes to satisfy economic, cultural, social, personal and environmental goals. More specifically, provision should be developed to ... provide opportunities for participation in a broad range of educational experiences and the acquisition of knowledge and appreciation in the arts ...*⁴²⁴

These perspectives open another debate in this curriculum area; i.e. the balance which should be struck between knowledge about and appreciation of the arts, and skill in the actual performance of them. This is one of the aspects of the focus brought to the Australian Curriculum by the two subject matter specialists commissioned by this review.

⁴²¹ The Song Room 2014, Submission to the Review of the Australian Curriculum, p. 3.

⁴²² The Music Trust 2014, Submission to the Review of the Australian Curriculum, p. 1.

⁴²³ Department for Education 2013, *The National Curriculum in England: art and design programmes of study*, can be accessed at: <https://www.gov.uk/government/publications/national-curriculum-in-england-art-and-design-programmes-of-study/national-curriculum-in-england-art-and-design-programmes-of-study>

⁴²⁴ Department for Education UK 2011, *The Framework for the National Curriculum. A Report by the Expert Panel for the National Curriculum Review*, Department for Education p. 16.

Subject specialists

The first subject matter specialist, Dr John Vallance, makes a strong case for the arts:

*The arts are an indispensable part of a child's education for many reasons. First they build social confidence and self-respect. They provide the equipment for the lifelong enjoyment and exploration of different forms of human communication. For some the arts will open routes to satisfying and socially useful employment. Even at the level of national security and social cohesion, it has been well documented that a broad grounding in the arts is an effective prophylactic against some forms of anti-social political extremism. Societies which support the education of young people in the arts provide their citizens with gifts and pleasures that can never be taken away from them. They leaven other parts of the curriculum which demand more solitary forms of work, and ... young people who have received training in the creative arts alongside other, more academic parts of their education, take a broader and more generous view of their obligations as citizens than their peers with a more narrowly focused education.*⁴²⁵

He comments that these factors mean that the arts must be an organic and consistent part of any school curriculum but is not convinced that these points are made forcefully enough in the Australian Curriculum. He finds that the broad distinction between 'making' and 'responding' seems reasonable at first glance but as the arts curriculum develops into taxonomical detail such as viewpoints, questions, bands, content descriptions, content elaborations, and achievement standards it becomes increasingly vague. Indeed, one of the main thrusts of his general criticism of the curriculum relates to the standardised and homogenised approach of the curriculum design. His concern is that such standardised formal language quickly starts to dominate content with inconsistent results and consequential difficulties for assessment. Also, it means that all of the art forms are described in the same terms, which is inappropriate.

Dr Vallance notes that there is no clear unambiguous indication in the curriculum of the amount of regular class time it is envisaged be spent teaching component parts of the arts curriculum. In the context of all Australian schools he questions the relative importance of each of the art forms in the curriculum, despite the fact that they are treated in the same manner. In his view, media arts does not require a separate curriculum at all; all the content set out for the media arts could readily be covered in other places – in visual arts, English, history, music and so on. He worries about the pressure brought to bear on less resourced schools by lobby groups and advocates of new technologies. This is the view taken in many other jurisdictions. Dance and drama, though obviously important, should not arguably have a claim on formal time in a core curriculum either – they are better pursued as co-curricular activities especially in the early years of school.

The rather crude bilateral taxonomy dividing the curriculum into areas of 'making' and 'responding' assumes that one must be either a producer or member of an audience, but this distinction is more of a hindrance than a help: 'is there any room to be a student?' he asks. Moreover, he finds that 'making' is privileged over 'learning how to make' and there is inadequate space in the curriculum for reading, listening, and reflecting. There is, he believes, an assumption that intuitive forms of

⁴²⁵ Vallance, J 2014, 'Subject matter specialist report on the Australian Curriculum: The Arts', prepared for the Review of the Australian Curriculum.

expression are enough on their own, without an additional need for disciplined training in the context-founded skills required for effective communication.

The standardised language does damage as well in relation to the cross-curriculum priorities. He believes they have been clumsily integrated without any serious attempt to establish the practical relevance of these priorities to specific learning areas:

By privileging say, Indigenous or Asian contributions to musical art over others, especially those related to the Western cultures of the majority of Australian students, the curriculum runs the serious risk of placing pupils at a great and isolating disadvantage, cutting them off from some of the most long-lived and highly valued human achievements in the arts. At the same time the integration of indigenous and 'Asian' material also risks limiting and patronising Australian children's encounters with the amazing richness and complex cultures, both indigenous and Asian.

Dr Vallance makes similar observations regarding the visual arts curriculum, observing that the attempts at integration suggest 'a disturbing ignorance of the status and spiritual importance of visual and aural expression in Indigenous cultures'.

He analyses each of the arts strands in more depth, and notes that in relation to music it is very clear that the music community was, on balance, unhappy with the draft curriculum. Descriptions of content and their elaboration are on the whole vague and differentiation and specification at various age points is very poor and so the curriculum provides a weak level of guidance for those teachers and schools most in need of it. Content descriptions notably lack any meaningful focus on the teaching of Western music notation – a foundational tool for anyone planning to pursue an interest in practical music whatever its origin – and there is no meaningful reference to the teaching of music theory, harmony, or counterpoint. He observes, 'Throughout, the encouragement of expression through intuition is placed before learning – sleepwalking into music, one might say'.

He is also critical of the vagueness and inappropriate sequencing of content in the other arts strands.

After a fairly forensic examination of the arts curriculum in England and the Republic of Korea, Dr Vallance comes to the conclusion that the Australian model is well behind both in terms of quality and clarity. The English curriculum is brief and concise, but nevertheless conveys a clear sense of the content areas to be covered at the appropriate stages. In the Republic of Korea there is much more detail – but here too, the detail is focused on specific areas of content, technique and practice, which in general are lacking from the Australian documents. He observes 'compared to the other two countries our curriculum appears organised around a series of unfocused, apparently unexamined, assumptions which have their origins far outside the classroom'.

In concluding his analysis Dr Vallance places the Australian Curriculum in the spectrum between the knowledge/truth-based approach to education and the 'romantic' approach. He is concerned that Australia over the years has drifted towards the latter and now has a strong tendency to privilege pedagogy over content:

Members of the Board and senior staff of ACARA, for instance, are mainly experts in teaching methods and assessment rather than specific specialists in any of the major subjects taught in school. For too long curriculum development in Australia has been left in the hands of

educators, rather than subject specialists ... These curriculum documents appear to have been drafted by experts in 'education' rather than by experienced leaders in the disciplines involved. The result is a series of vague, discursive and rambling targets, in which the need to find uniform and consistent terminology is privileged over the specific and distinctive requirements of each discipline.

He also finds the glossary of technical terms at the end of the arts curriculum to be highly controversial.

In short, he finds the documents are:

so vague as to provide an inadequate sense of their intended content ... The curriculums are far from being either balanced or substantial ... They appear overlong, overworked and unfocused ... They are the obvious product of multiple compromises, deals with interested parties and the red pen of educational bureaucrats. At nearly every point they lack rigour ... Australian children are being told that they can run before they can walk; it is a cruel hoax. The documents are too long diffuse and tendentious in terms of their quasi-technical vocabulary to be comprehensible to students or to parents who want to know what their children are learning.

His recommendation is that:

Media Arts, Dance and Drama be subsumed into other parts of the curriculum. The remaining courses should be shortened into concise yet flexible programmes of study along the lines of the English models which are clearly the result of careful work by area experts. Investment is required in arts programmes aimed at providing high quality mentoring and training for teachers across the country. If the cross-curriculum priorities are to survive this review, they must be more carefully integrated into the whole, and serious efforts must be made to ensure that they do not result in the banalisation of some of the world's great cultures – Indigenous, Eastern and Western.

His general summation is that 'In the case of all the arts ... school courses should provide a solid and carefully sequenced foundation in the practical and intellectual skills needed for effective artistic expression. I am not convinced that this curriculum achieves this aim'.

The second subject matter specialist, Ms Michele Chigwidden, is no less enthusiastic in her support for the arts to be in the Australian Curriculum, 'The arts offers richness to learning, confidence to explore, pride in achievement, and opportunities to become an "artist" not simply a passive spectator'.⁴²⁶

Overall she is less critical of the arts curriculum than the first specialist has been, and cites the international recognition the arts curriculum received in the International Arts Education Standards: Survey of the Arts Education Standards and Practices of Fifteen Countries and Regions, a report

⁴²⁶ Chigwidden, M 2014, 'Subject matter specialist report on the Australian Curriculum: The Arts', prepared for the Review of the Australian Curriculum.

prepared in August 2011 by the New York-based College Board for the National Coalition for Core Arts Standards⁴²⁷.

However, she does express some concerns. Foremost is the capacity of generalist teachers to deliver the various strands, especially as the years progress and the content becomes more complex. Delivering the arts in classrooms to cover the five subjects within each band is quite demanding. As an example: 'To cover the five arts subjects over 2 years (i.e. within each band) is quite a challenge, especially the suggested range in the time quota from Reception to Year 6'. She advocates that all of the time allocations be reviewed as they seem to be inadequate, and also presses strongly for more professional development for teachers.

Another of her concerns regarding most of the five art forms relates to the ratio between 'making' and 'responding'. In some areas she believes that an appropriate balance has been struck but not so in other parts.

Ms Chigwidden has concerns about the cross-curriculum priorities and would like to see some guidance as to the proportion of content or scope and sequence from all learning areas that is required to embed the three curriculum priorities. She notes that, in relation to Indigenous history and culture, if all the content descriptions are satisfied there would be themes or topics that would be at risk of being done to death. She calls for more use of contemporary Indigenous culture, life and issues. Many icons indicate that all three cross-curriculum priorities are embedded in the content descriptions, however they are misleading. She feels that the focus on Indigenous aspects is at the expense of the other two cross-curriculum priorities – Asia and sustainability.

The specialist provides a detailed journey through each of the five strands. In dance, she comments that in general the curriculum for F–10 looks to be robust with a good balance of activities linked to content. The scope for choice and flexibility is sound. However, she says that the F–2 subject matter seems quite technical in its approach, with some content elaborations focusing more on the responding rather than the making strand. She feels there is too much emphasis on dance from Aboriginal and Torres Strait Islander culture, but rather than excluding it she says that other cultural references to Asian and European exemplars should be included. If 'sustainability' is to be introduced, it needs to be quite explicit and relevant to students.

In drama she finds balance but seems to be disturbed that the ratio of making to responding in years F–6 is 3:1 and in Year 7 to Year 10 is 5:2. She thinks students do not respond well to too much talk about why, how, and reflection and it can get 'bogged down with theory'. She adds that to achieve greater balance in the content and band descriptions there needs to be additional references to the history of Australian and European drama.

Her assessment is that the music curriculum is quite prescriptive, with a clear and detailed structure and sequence. There is not enough emphasis on Asian cross-curriculum priorities here she believes. The core content in the music subject allows for flexibility in classroom delivery up to Years 3 to 4 but for Years 5 to 6 and Years 9 to 10 specialist resources, instruments and classrooms are required with delivery by a specialist teacher. She further comments that while the document is user-friendly

⁴²⁷ The College Board, *International Arts Education Standards: A survey of the arts education standards and practices of fifteen countries and regions*, New York, NY, August 2011 can be accessed at [http://nccas.wikispaces.com/file/view/int'l%20standards%208%201%20\(final\).pdf](http://nccas.wikispaces.com/file/view/int'l%20standards%208%201%20(final).pdf) (viewed 10 July 2014).

for teachers to the end of Years 3 to 4, generalist teachers for remaining bands would need further training and development.

Ms Chigwidden commends all aspects of the visual arts curriculum but says if sustainability is to be introduced, it needs to be more successfully embedded as a theme or topic.

In media arts she has similar concerns about ratios of content descriptions. She believes media arts should be a subject in its own right and calls again for the cross-curriculum priorities to be relevant.

Her report also covers the arts curriculums of England and the Republic of Korea. She commends many aspects of them – the clarity of the English curriculum, its aims and rationale etc. – but is disturbed by the hierarchy of subjects in the English curriculum and the fact that the weighting between core and non-core subjects is not reflected in the allocated time in the school day. And of course she is disappointed that the arts is not core in the curriculum in England. She finds the curriculum easy to read and follow except the attainment targets, which are far too generic and seem flimsy and lacking in depth in regard to arts subjects. By contrast, the Republic of Korea's curriculum seems to be very prescriptive and less accessible.

Ms Chigwidden is in favour of the continuation of the arts curriculum in Australia with attention to her concerns, the exclusion of media arts to become a separate subject, and the continued evolution of the other four art forms with the benefit of classroom experience in implementation.

Conclusion

There is considerable evidence that this curriculum has been cobbled together to reach a compromise among the advocates of all the five art forms, rather than a serious consideration on educational grounds as to the place of each in the whole curriculum, the current practices in schools, and the realities of a school's resources and time. It would also seem that not a lot of realistic thought has been given to the structure and sequencing of the components of each area and some major rewriting is required along the lines that both subject matter specialists suggest. It is also clear that, as the age level increases, the capacity of a generalist teacher to master the content and devise appropriate pedagogy becomes very strained. There would have to be specialist teachers used, on staff, or on contract, to handle such demanding material. Each strand also seems to be overcrowded and requires slimming down. Professional development would still be required for generalist teachers and the language needs to be made clearer.

It is also not evident whether curriculum writers took account of the considerable amount of 'doing' or 'responding' that schools are already achieving in these creative domains as part of their school-based activity. They will no doubt continue to do so, whether there is a national curriculum or not. Most schools would be very active already, in at least four out of five of these arts areas. They would also be effectively integrated into other curriculum streams; for example, drama in English, music and drama in history, media arts in technology and the ICT capability, dance in health and physical education, visual arts in history, and so on. Consequently, the key question arises as to whether all five strands should be integrated into one curriculum and whether they should all be mandatory.

Each of these art forms has much to offer and there can be no doubt that a curriculum should be available in each for those schools who want to access it. However, based on the international research, and evidence and opinions expressed to this Review we consider that media arts should

become a standalone subject and reduced in content. The other four arts areas – music, visual arts, drama, and dance – which have a more common foundation and conceptual base, would remain in one curriculum but be reduced down to a slimmer concise content. Then, only two of the five arts subject areas would be mandatory and the most likely ones would be music and visual arts.

However, schools could elect to offer any of the remaining three subjects in a form and structure of their choosing, and indeed might decide to choose which ones to offer based on their available resources, their comparative advantage, and the context of their community. Some schools will, of course continue to offer all five arts subjects.

Recommendations

- The arts curriculum should be available to all students throughout all the years of schooling. The learning area should be formally introduced at Year 3 but provide a rich source of resource material for Foundation to Year 2, the Foundation years.
- The core content of all five strands should be reduced and a considerable portion of the current core be included in school-based curriculum and activities, thus augmenting the rich arts programs which most schools are already conducting.
- Two of the arts strands should be mandatory and we recommend music and visual arts. The other three strands would be elective subjects and schools would choose which to offer according to their resources and wishes of the parents and nature of the school context. Media arts should become a separate standalone subject and substantially reduced in content.
- Elements of the current arts curriculum should also be integrated into other learning areas such as English, health and physical education, history and technologies.
- The content of each of the arts forms needs to be restructured and re-sequenced along the lines suggested by the subject matter specialists. The documents need be expressed in clearer language. The balance between ‘making’ and ‘responding’ in each of the strands needs to be revisited involving consultation with arts teachers.
- The considerable resourcing costs associated with delivering the arts curriculum need greater consideration, and professional development for teachers is needed as the years progress. It needs to be acknowledged that arts specialists will be needed at the advanced levels.
- An analysis needs to be undertaken to identify the extent to which the cross-curriculum priorities have produced repetition of content in these strands, and the extent to which they have skewed the content of all the strands, particularly away from Western and other cultures. The cross-curriculum priorities should be integrated, but only where appropriate, and their presence more clearly indicated.

Overview of the Australian Curriculum learning areas and subjects

Looking over all of the learning areas and subjects we have examined it is possible to make some general remarks about the content and pedagogy associated with the Australian Curriculum.

There is general agreement that it is pleasing to see a return to a knowledge base for the curriculum, rather than a consideration of only capabilities. The attempt to introduce some rigour has also been welcomed, including structure into many learning areas that had suffered from the introduction of ephemeral fads and concepts – for example, a fixation on theories such as deconstruction and neglect of phonics and phonemic awareness in English, and discredited curriculum approaches linked to unsound pedagogical methods embraced by OBE.

While there is some variation of opinion on the matter, there is general agreement that ACARA made a substantial effort to consult with a range of relevant stakeholders. There has been criticism of the processes used in shaping the curriculum but the intention and effort is widely acknowledged.

There have been a number of instances when concerns raised with ACARA were either not addressed or were done so perfunctorily. A number of disagreements among subject area proponents and experts were not satisfactorily addressed from an educational perspective, or were solved by simply compromising and over-inclusion of subject matter. The educational grounds for the decisions were never made clear. English, history, geography, and the arts are cases in point. We accept that the task is often made more difficult for a curriculum authority when there is a lack of agreement within the disciplinary areas themselves. It is clear that this was often the case here with even academic professions and subject associations unable to reach agreement within their own membership on the nature and scope of their discipline.

In all the learning areas and subjects there is inadequate evidence of international benchmarking in relation to both the content and the design of the Australian Curriculum.⁴²⁸ From comparisons arising through our research and our subject matter specialists, significant aspects of many of the subjects and learning areas do not align with common international practice in that field as to clarity, size, aims and values, scope, structure, sequencing, age levels, and terminology. Of course this may simply indicate that Australia is being more innovative in some learning areas as has been claimed by some in relation to the arts and technology, but it has the appearance of being more the result of compromise. The results of ACARA's benchmarking exercise and how this was implemented in the design of learning areas has never been adequately explained.

The design process was clearly a top-down one in all learning areas with minimum consideration of the realities of the school day, the manner in which teaching occurred, or the availability of resources including sheer time, teachers' capacity and funding.

Partly as a result of the compromises involved and the top-down design process there are claims of overcrowding in every learning area, especially in primary school. There are also claims that in all learning areas, too much content – especially complex concepts – are being introduced at too low a level, and in language which is too technical. In this and other aspects it is striking that, in relation to almost all the learning areas, there is quite a difference of opinion between the subject associations and the schools and teachers who seem to be more in touch with the real world.

In relation to other aspects relating to rigour there is widespread concern about the way some subject areas have been cobbled together, apparently as a simplistic way of maximum inclusion to achieve compromise and avoid the perception of overcrowding. The arts is a key example, along with economics and business. However, there seems to be more satisfaction with the coupling achieved within the learning areas of health and physical education, and technology. Most subjects have experienced some criticism, to a greater or lesser extent, about sequencing of content and there have been many suggestions for modification.

The monolithic and template-driven design process has been the subject of criticism for some learning areas. Although this is portrayed as rigour, the reality is that such a homogenous approach

⁴²⁸ As noted earlier in this Report, the ACARA sponsored benchmarking project titled *Curriculum Mapping Project Phase 4a Comparing International Curricula against the Australian Curriculum* does not adequately address the issue of robustness.

is not suitable for that specialism. This has figured largely in relation to the arts where creativity is prized and rigidity is eschewed, but also to some extent in business and economics, civics and citizenship, and health and physical education.

There are mixed feelings regarding cross-curriculum priorities but all are agreed that there are many misconceptions surrounding them and the dubious educational foundations of the way they have been introduced. Almost all the subject matter specialists want them to be properly embedded where appropriate in learning areas, rather than relying on the uncertain and confusing practice of following icons through a matrix of suggestions. This is largely for the benefit of younger teachers because, we have been told, an experienced teacher can readily identify where a theme can appropriately and productively be inserted in a lesson without much guidance.

In a few learning areas there has been serious criticism of inaccuracies in the documents including terminology and definitions contained in both text and glossaries. This is most apparent in economics and business, civics and citizenship, Years 11 and 12 physics, and to a lesser extent, in the arts and technologies. This would seem to indicate a deficiency in the specialist subject knowledge of staff employed by ACARA, together with an inadequate quality control process. These errors need to be addressed immediately.

Omissions are another cause for complaint in a number of learning areas, particularly economics and business, civics and citizenship, geography, history, and the arts. Some of these are quite serious; for example, scant mention of the role of the Prime Minister and Cabinet in a civics curriculum, or little emphasis on the contribution of industry to raising incomes, the functioning of markets and the importance of entrepreneurialism in an economics curriculum, or many of the defining epochs and moments of Australian and world history, or mention of figures such as Captain James Cook in a history curriculum, or the basic elements of financial literacy such as profit and loss, income, assets and liabilities and balance sheets in a business curriculum, or the absence of consideration of food security and population pressure in a geography curriculum. On the other hand, some learning areas, but not all, seem to contain some inappropriate content, though this is mentioned less frequently across the board.

This leads to the subject of balance and here all learning areas come in for some degree of criticism. One of the major areas of common and significant criticism is the neglect, and often omission, of the vital role of Western civilisation and Judeo-Christian beliefs and heritage in shaping Australian values, knowledge, culture and experience. This is mentioned particularly in relation to the English, history, arts, economics and business, and civics and citizenship curriculums. This criticism is made in relation to the whole content of many learning areas and is often seen as bias. In other cases, some subject matter specialists have speculated that the introduction of the cross-curriculum themes have caused teachers to skew their content away from Western influences to accommodate priorities on Asia, and Indigenous history and culture, and in the case of geography and history also to the neglect of the Pacific Islands as subjects of study. Similar arguments are advanced that the emphasis on sustainable development, and the very conceptualisation of the term, disparages the contribution industry has made historically to economic growth and raising standards of living. Indeed, the positive contribution of industry, entrepreneurialism, and economic development receives very little acknowledgement across the learning areas.

There are also examples of a lack of balance within subject areas, such as the neglect of physical geography in the geography curriculum, the neglect of Asian and Western cultures in the arts curriculum, the overt neglect of the positive role of the private sector, and failure to recognise government as well as market failure in the economics curriculum, the neglect of greats in Western and Australian literature in the English curriculum. A number of submissions also argue, in relation to the early years of reading, that the English curriculum lacks a systematic and comprehensive treatment of phonics and phonemic awareness. The history curriculum deserves special focus because we have discovered that because of the inordinate choice available in that curriculum students are able to avoid significant periods in Australian and world history. Moreover, there is some evidence that some sectors and schools are gaming this choice to focus only on their preferred content. The broad sweep of history which characterises curriculum in most other countries seems to be missing from the mandatory core in the Australian history document.

Another element of the debate regarding balance, is between prescription and choice. As we have seen in the geography example, the subject matter specialist observes that at first glance the documents appear far too prescriptive but when the lack of experience of novice teachers is taken into account, this imbalance will have to be accepted in the immediate future. It also seems to say a lot about the inadequacy of current pre-service education of aspiring teachers enrolled in education degrees in Australian universities, but this aspect is beyond the terms of reference of this Review.

For some learning areas which have a practical component, there is some dissatisfaction about the balance between the 'making' and 'responding' components. This is most noticeable in the arts, health and physical education, and technologies. Somewhat disappointingly, the view is generally that there is too much emphasis on 'making' and not enough on 'responding', corresponding to a widely held view that every moment at school has to be action-packed and entertaining, rather than often contemplating, theorising, and conceptualising – the capacity that the OECD has identified as a key Australian weakness.

In relation to pedagogy, while ACARA argues that its remit relates to detailing *what* should be taught and not *how*, the reality is that the Australian Curriculum is weighted towards an inquiry-based, student-centred and constructivist approach to teaching and learning. This should not surprise, as the prevailing orthodoxy in curriculum development and teacher education in Australia, as noted earlier in this Report, embraces a constructivist view of teaching and learning.

Any review of the Australian Curriculum should acknowledge the need, in the light of evidence-based research and developments in cognitive psychology, to balance constructivism with more discipline-based, structured and teacher-directed models of pedagogy such as explicit teaching and direct instruction.

There have been a few serious instances of schools and sectors being opposed to curriculum content to such an extent that they will refuse to teach it, or will considerably restructure it. Sometimes this is based on the content – as in health and physical education – and otherwise on the lockstep way in which it has been designed, which is considered unsuitable for particular contexts. In other instances we have been steered to what are considered to be superior curriculum content in jurisdictions such as Victoria or New South Wales, and which are preferred to the Australian Curriculum. There is considerable dissatisfaction with the lockstep design approach in all the learning areas, which is unsuitable for many Australian contexts.

Regrettably, there was hardly any mention in any learning area regarding whether the curriculum documentation was parent-friendly. This accords with what we have observed elsewhere regarding the general neglect by many sectors and schools of parental involvement and engagement in curriculum matters.

However, there was plenty of comment as to whether the curriculum was teacher-friendly. Sometimes this related to the language of the documents or the sequencing, but underneath this issue there lies a deeper conundrum. We were constantly told that the current cohort of teachers would not be able to handle content, especially as the years progressed, because they were generalists not specialists. ACARA must surely have been aware of this factor; indeed, we know that they were constantly apprised of it and a number of the early policy papers by the interim National Curriculum Board and ACARA signalled the issue as an important one to consider when designing the curriculum. In this regard we sympathise with ACARA in trying to design a robust curriculum but knowing that teachers may not be able to deliver it. We are pleased that ACARA resisted the temptation to downgrade the rigour of the content because of this factor. A curriculum authority should not compromise on standards in its content, even if it feels compelled to compromise on particular content inclusion. What it does mean is that in the medium term ACARA is going to have to work with the states and territories and sectors to develop many aids to pedagogy including resource material, case studies and examples, indicative lists of texts and other readings as occurs with positive results in England, and professional development programs linked to delivery of the Australian Curriculum, including learning outside the classroom. As we were often reminded, Australian teachers were once regarded as scholars and curriculum developers, as is the current situation in many other countries and cultures where teachers enjoy high status. That is not the current Australian situation; hopefully it will be the case before too long.

Chapter Eight: Future reforms to governance for curriculum development

Criticisms

We have already observed, in the section on development of the Australian Curriculum, a number of criticisms of the ACARA approach which relate to governance and process. They revolve mainly around the following factors:

- The decision to begin the design process with no fundamental consideration of the purpose, values, and goals of education other than via the Melbourne Declaration, which many consider inadequate for this purpose, and others argue has not been followed to the letter.
- The decision to begin the development process without an overarching framework or blueprint for the design of the curriculum.
- The failure to place the wellbeing and personal development of individual students explicitly at the forefront of curriculum development.
- The lack of obvious links of the curriculum design and content to the international benchmarking that was undertaken.
- The undue haste with which the curriculum was constructed.
- The constant compromises that occurred, which were often based on political or policy considerations rather than educational ones.
- The resultant overcrowding of curriculum content in an effort to appease all stakeholders.
- The top-down approach to determining content, and consequent failure to begin from the school and classroom setting – especially regarding what was achievable and deliverable and the manner in which schools actually teach – and the very different contexts for regional and remote areas as well as those for students with disability and socially disadvantaged students.
- The various design faults relating to the monolithic and template-driven nature of the curriculum structure, the introduction of some content at inappropriate levels, the failure to recognise adequately the discrete nature of the F–2 years, the lack of a link between NAPLAN assessment and Australian Curriculum content, the failure to properly validate achievement standards and the lack of consistency in the A to E formulation, the inappropriate means of introduction of the cross-curriculum priorities, and the confusion surrounding the mandatory nature of the content of the whole curriculum. Moreover, there is little documentation to explain why ACARA neglected these aspects or refused to address them.
- The neglect of various viewpoints put forward by some stakeholders, often repeatedly.
- The failure to involve particular community groups in the consultation process, or the late recognition of their importance.
- The lack of attention to the need for parent-friendliness of the new curriculum documents.
- The lack of transparency for all stakeholders in relation to policy directives and Ministerial and senior official deliberations. As BOSTES NSW has stated ‘the rationale for decisions on

curriculum was not transparent,⁴²⁹ or as PETAA put it, ACARA ‘documents and disseminates its revisions to the curriculum, but these are made post fact, invisible in terms of the process.’⁴³⁰

- The complexity of the consultation and advisory arrangements (‘more committees than Gosplan’ as one respondent put it).
- The insufficient dialogue between curriculum writers and advisory specialists and consultation committee members, together with some criticism of the bias of curriculum writers.
- The inadequate monitoring and consequent unevenness of the implementation of the Australian Curriculum, compounded by a lack of evaluation of the effectiveness of Australia-wide assessment, evaluation, and quality assurance processes.
- The lack of a visible and tangible linkage of curriculum content to international benchmarking.
- The absence of a visible curriculum content review cycle.

Paradoxes

By the same token there is a paradox in the current arrangements in that, although the states and territories have fiercely opposed any move by ACARA beyond its current remit, some jurisdictions and many of our respondents would like ACARA to extend its activities.

The other very apparent paradox is that while states and territories oppose the so called ‘intrusion’ of ACARA into what they consider their preserves like pedagogy and teacher professional development, the fact is that they are joint owners of ACARA and would be able to control such ‘intrusions’ if they did occur. It seems somewhat strange that a joint owner of a body would see it as an intruder.

Clearly the states and territories still see ACARA as an Australian Government body even though they jointly own it and have equal ownership and control of it. There is, of course, a design fault in the governance of ACARA which perpetuates attitudes of this kind. It relates to the circular pattern of advice within the model. The majority of ACARA Board members are each nominated by an education minister and are then formally appointed on the agreement of the same state and territory ministers. The vast majority of Board members to date have been state or territory government officials from education authorities. From our research and consultations, including with some former Board members, they seem to act as representatives of their nominating minister rather than independently or as educational experts; this might well be expected since this whole situation represents a conflict of interest for them. Consequently they wear two hats as they ride this Ferris-wheel of policy advice. They become the very people providing advice to ministers who are part of the Ministerial Council which is then issuing directions and Letters of Expectation to the ACARA Board on which they sit. This whole arrangement is also not conducive to ACARA becoming primarily an educational body governed by curriculum expertise, rather than a policy-driven one.

Then, curiously the ACARA legislation establishing ACARA requires it to develop ‘and administer’ a national school curriculum. (BOSTES NSW has suggested to this Review that the meaning of the word ‘administer’ needs to be clarified). Also, in its Charter, ACARA is required to support state and territory authorities in advising Ministerial Council on ‘the most effective process for implementing

⁴²⁹ Board of Studies, Teaching and Educational Standards, New South Wales 2014, Submission to the Review of the Australian Curriculum.

⁴³⁰ Primary English Teaching Association of Australia 2014, Submission to the Review of the Australian Curriculum.

the national curriculum’ and must provide advice on implementing ‘national curriculum as it is developed, including teaching resources and teacher professional development’.⁴³¹ Surely all of this gives ACARA a mandate to operate in these fields, which are often claimed to be exclusive state and territory roles (apparently as long as they do not set foot in, or directly contact, a school).

Suggestions for change

Suggestions to this Review include an involvement for ACARA in pedagogy through providing resource material for teachers to illustrate possible teaching approaches, conducting professional development in the design of school-based curriculum, and the provision of ever more resource material in all learning areas including indicative lists of topics such as texts for English, key events and topics for history etc. This could all be achieved largely through ESA, which has emerged as one of the success stories of Australian school education, allowing jurisdictions to share resources among each other as well as with ACARA.

Some respondents see no problem in ACARA monitoring and reporting on the implementation of the Australian Curriculum, including provision to schools of models of school reporting to parents on the curriculum. APPA says ‘While ACARA has no authority over implementation, the agency should play a role in supporting advising and coordinating a task that is broadly similar in each jurisdiction’. The Northern Territory Board of Studies would like ACARA to give more direction to help Northern Territory teachers to effectively assess and report student achievement, and would like strengthening of work samples for ‘at’, ‘above’ and ‘below’. The vast majority of our respondents want the A to E reporting issue resolved urgently.

However, these latter aspects raise the hackles of most state and territory jurisdictions – despite the fact that many have told this Review that they welcomed the Australian Curriculum because they had previously had only very flimsy, relatively unstructured, school curriculum of their own. There were also instances of some jurisdictions borrowing the curriculum of other jurisdictions. Some professional educators have also made the observation that many state and territory curriculum or studies authorities have neglected their curriculum development function and become obsessed with assessment and number crunching, especially in the high stakes arena of secondary schooling.

The way forward: options for the future

Most submissions to this Review and the results of our consultations have revealed support for the continuation of a national curriculum and a national body to oversee it. Even those who had been fiercely opposed to the development of a national curriculum now seem resigned to the merit of continuation with the experiment, though with modifications.

Some see it as the need for a national body to facilitate consultation and decision-making processes at jurisdictional and community levels. Others point to the advantages strong jurisdictional collaboration through ACARA allows in terms of rigour and quality of curriculum. We note with interest that the recent National Commission of Audit, while generally advocating the devolution of much responsibility for school education from the Commonwealth to the states and territories,

⁴³¹ Standing Council on School Education and Early Childhood 2012, *Charter for the ACARA*

nevertheless saw a continuing leadership role for the national government in relation to the Australian Curriculum.⁴³²

A number of submissions have suggested that the Melbourne Declaration and the ACARA Charter should be amended before ACARA continues the development of the Australian Curriculum – most notably the Catholic Education Commission of New South Wales, whose specific proposals for amendment include:

- acknowledge teacher capacity and quality as the key driver of student performance
- accommodate the implication that will arise from the necessary introduction of new technologies to educational contexts
- address and focus on personal learning
- more fully reflect the role, both past and present, of faith traditions generally, and Christianity specifically, in the development of Australia
- more fully acknowledge parents as the primary educators of children.

The submission also suggests combining ACARA and AITSL based on the BOSTES NSW model, and commencing a national education legislation harmonisation project under the direction of the Ministerial Council.

Views of jurisdictions

In this area the views of the state and territory governments become crucial given their key role in curriculum through their school systems and their equal partnership in the ACARA model:

- The **Australian Capital Territory** is strongly supportive of continuation of the process and observes that the shared funding of costs (50 per cent contributed collectively by the states and the remaining 50 per cent by the Australian Government) and the governance model of ACARA with the Ministerial Council overseeing the Charter, work plan and reporting of ACARA, was critical to the ongoing success of the Australian Curriculum. They say that although ACARA has no authority over implementation, the agency should play a role that is supporting, advising, and coordinating a task that is broadly similar in each jurisdiction.
- **New South Wales** is adamant that the role of ACARA is clearly delineated from that of its own curriculum authority which has its own legislative requirements around syllabus design. It also highlights the confusion that has been created when ACARA has been in direct contact with schools. The submission also notes that the wording of the ACARA Act which stipulates that the organisation's function to 'develop and administer' a national curriculum has created a lack of clarity.
- **New South Wales**, the **Northern Territory** and **Western Australia** note that while there is a role for ACARA it should be limited to ongoing support, liaison and analysis consistent with the ACARA Charter to develop agreed Australian Curriculum content. There should be no scope for ACARA to set implementation timelines or review implementation processes adopted by state or territory education authorities.
- **Victoria** has a perspective that ACARA has developed curriculum content as a statement of learning available for Foundation to Year 10. This should be seen as a resource that is available

⁴³² National Commission of Audit 2014, *Towards Responsible Government: The Report of the National Commission of Audit*, Appendix 1 can be accessed at <http://www.ncoa.gov.au/index.html> (viewed 10 July 2014).

to jurisdictions and schools and it is the responsibility of jurisdictions to determine how, and how much, of the material to use in schools. It is the prerogative of state and territory jurisdictions themselves, acting alone or in concert, to select and modify that content to suit their circumstances, and also to make it more ambitious in some learning areas. They believe that the Australian Curriculum model promoted by ACARA is too monolithic in its requirements for everyone to cover everything at all levels.

- **Queensland** supports the ACARA monitoring, evaluation and review strategy and stresses the importance of ensuring the Australian Curriculum is implemented consistently by all states and territories so that it remains truly rigorous. Queensland also proposes a clearly articulated minimum expectation for inclusion in all state and territory curriculum documentation.
- **South Australia** sees curriculum as an iterative process. South Australia supports the ACARA monitoring and review process as being designed to be flexible enough to be responsive to educational needs and developments as they arise while providing curriculum stability for schools, the community and education authorities.
- **Tasmania** endorses the process for ongoing monitoring, review and evaluation that ACARA has established.
- **Western Australia** has expressed concerns regarding timelines for implementation and has called for greater clarity in relation to responsibilities for implementing the Australian Curriculum under the *Australian Education Act 2013*.

Future of the ACARA model

The ACARA model has achieved the first stage of a rudimentary national curriculum, and given the existence of such a fragmented school system in Australia, this is an achievement.

However, it has been an incredibly complex, opaque, resource-consuming, compromise-dominated, top-down way of designing a national curriculum. This method of doing business may possibly have been necessary to achieve the arrival of an initial Australian Curriculum – especially given the exigencies of the political jungle that is Australian federalism. The formal requirement of decisions that in practical terms required unanimity of voting, in a setting of undue haste imposed by politically-driven timelines, clearly did not help.

Consequently, doubts must be raised as to whether the same model is now desirable for the rollout of the remaining phases and beyond.

The fundamental issue in this model is whether a curriculum development body like ACARA should be driven by educational foundations or by policy and political considerations. Some would say it ought to be a blend of the two aspects, but the distinction is very blurred in the ACARA model and policy and political imperatives seem to dominate. The question for the future is whether it is to be a compromise factory or an educational forum?

Apparently in the beginning ministers were faced with a choice of three governance formats for the establishment of a national curriculum body, all possible under Commonwealth legislation:

- a statutory authority
- a government business enterprise
- a company.

A report was commissioned from Boston Consulting Group (BCG) on this aspect. Examination of its findings and recommendations reveal that BCG believed ACARA's Board should be composed of experts and not representatives. It also needed to have an arm's length relationship from all ministers. Evidence to this Review, including that from former Board members and senior officials, suggests that these desires have not been fulfilled in practice under the current model.

One key advantage of a company format, other than establishing a legal demarcation from ministers, would have been the fact that Board members would have their primary loyalty and responsibility to the national curriculum entity, and not the body which recommended them for Board appointment. In other words, they would not feel obliged to act as representatives of their governments or sectors, and would clarify their potential conflict of interest, which would have to be declared. The fact that this option was rejected, could be interpreted as testimony to the fact that jurisdictions wished to retain some control over Board members, despite the legislative requirement that Board members must also possess certain expertise. Thus it becomes blurred as to whether ACARA Board members would be experts in some element of curriculum, or whether they would be representatives. This has bedevilled perceptions of ACARA ever since.

Indeed, it is not possible to be confident that curriculum decisions are being made on educational grounds in the whole ACARA model. Ministerial Council is by definition composed of education ministers and they are no doubt briefed by their bureaucrats and political advisers, but whether this is on the basis of educational criteria or purely policy and political criteria is not possible to determine. Many of the members of the ACARA Board including the bureaucrats could not be considered as curriculum experts, and for those who are, once they enter the chamber of intergovernmental dialogue they, like chameleons, are expected to transform themselves into policy advisers. It also creates an appearance of conflict of interest and it seems unfair to place them in that position. Since the minutes of the Ministerial Council are never made public, and the communiqués issued after meetings rarely mention the educational criteria on which decisions were based, or the educational foundations of the Letter of Expectation, we are none the wiser on this score. It also raises questions as to whether all decisions are evidence-based – in this case education evidence.

The Ministerial Council appoints the members of the ACARA Board and, under the legislation, is required to achieve a balance of expertise relevant to the curriculum task. However, the ACARA Board has possessed very little individual or collective curriculum development expertise; there have been education policy persons and measurement and assessment specialists but very few curriculum developers.

Submissions to this Review and our consultations confirm that the internal dynamics of ACARA Board deliberations are not transparent as to key criteria which are used to make curriculum content decisions, and the same can be said for Ministerial Council and AEEYSOC. It is a serious defect that the minutes of neither the ACARA Board nor the Ministerial Council are made public. The circular flow of advice from specialist educators to ACARA Board to Ministerial Council to ACARA is not transparent and very poorly documented. The role of ACARA management as a filter of education advice to the Board and then to Ministerial Council is unclear but appears to be dominant, raising the prospect that recommendations are fashioned on managerial criteria rather than educational ones.

The downward flow of direction from ministerial direction to ACARA through Letters of Expectation seems a very clumsy mechanism to use to convey educational considerations. Also, there seems to be no requirement in the Act for every ministerial or AEEYSOC policy direction, intervention or instruction to be published in ACARA's annual report or elsewhere. In this regard, it also seems rather curious that it is the Ministerial Council which approves ACARA's work plan, advised by the very public servants who sit on the ACARA Board, when all the states and territory departments have a vested interest in this domain and could well attempt to shape the work plan to suit their own administrative convenience – another example of ACARA being bedevilled by compromise.

The relationship between Ministerial Council and the ACARA Board is shrouded in mystery, as is the role of the nominee of the Commonwealth Minister who appears to have provided no reports on his perspectives or instructions. In short, this whole interface is not very transparent and therefore not particularly accountable.

Anyone outside the ACARA governance family would be hard pressed to find out why a particular decision or course of action had been followed or the educational criteria which had been applied.

Throughout Australia, parliamentary oversight and scrutiny of ACARA, as an intergovernmental body, seems extremely perfunctory at both national and state levels. Surprisingly, the appropriate Senate committee has never conducted a deep scrutiny of the educational foundations of the Australian Curriculum, and neither has the relevant committee of any state or territory parliament. Despite the millions of dollars involved in this exercise neither the ANAO nor any state or territory auditor has conducted a value for money audit into the money spent through ACARA on curriculum development and reporting.

Conclusions

A new model needs to be introduced for the next phase of development of the Australian Curriculum

The ACARA governance needs to be reformed to address the major defects which are:

- lack of evidence of educational criteria driving the decision-making, including insufficient curriculum expertise throughout the governance structure
- overemphasis on compromise based mainly on political and policy considerations, rather than on educational ones
- too much influence of political timelines
- lack of adherence to sound principles of curriculum development assessment and reporting, and no comprehensive linkage to international benchmarking
- potential for politicisation of the process, especially through a lack of transparency of decision-making in both Ministerial Council and the ACARA Board
- significant lack of external and internal transparency and accountability
- failure of the model to deliver quality assurance and consistent delivery and implementation
- fixation on monolithic template-driven curriculum design and delivery with an inadequate educational and value-based foundation.

Options

- Leave things exactly as they are.
- Abolish the Australian Curriculum and ACARA.
- Retain the Australian Curriculum, abolish ACARA, and contract one of the states to handle its current functions.
- Abolish ACARA and outsource an Australian education research body, operating in partnership with international counterparts and reporting to Ministerial Council, to modify the existing Australian Curriculum and develop the remaining phases.
- Keep the Australian Curriculum but modify the content (reduce and restructure in line with the recommendations from this Review); retain ACARA to do this but with a reformed governance model incorporating more educational expertise and an arm's length relationship from ministers, proper external and internal accountability regimes, and with a less complex and more transparent process of consultation and professional involvement.

Preferred option

Restructure the whole governance model by:

- separating the curriculum development and update, curriculum research, international benchmarking of curriculum and the development and administration of the National Assessment Program functions from other curriculum functions such as its evaluation and implementation.
- reforming the governance structure of ACARA by establishing it in a company format to ensure that the Board members are not acting as representatives but whose duty is to the organisation and its task, are chosen primarily for their curriculum expertise, and include educational experts from outside the various government systems. Although the Board would continue to be appointed by, and report to Ministerial Council, as a company the organisation would be legally at arm's length from education ministers, and would be subject to tighter transparency, accountability and reporting requirements. Its mandate would include a direction that its minutes be made public and it would be required to outline the educational basis of its decisions. All directions from ministers would have to be made public and there would be strict conflict of interest declaration regime.
- The new ACARA would begin the modification of the current Australian Curriculum in line with the findings of this Review and then continue to perform curriculum design and related assessment in accordance with design principles as outlined earlier in this report. However, all these functions would be conducted with less haste and in a more transparent and less monolithic manner, also ensuring that all assessment – including NAPLAN and all general capabilities – is linked to Australian Curriculum content.
- The current process of issuing a Letter of Expectation from Ministerial Council would also contain the educational justifications for the items contained therein. All other directions to the ACARA Board would be published on the ACARA website and in its annual report. The manner in which Board membership honours the expertise requirements would be clearly visible and those criteria would be amended to place greater emphasis on curriculum experience and expertise. With the minutes of the ACARA Board meetings being made public, all consultative and advisory committees would have access to reasons for decisions taken. They would also be given direct

access to curriculum writers. The appointment process for curriculum writers would be made more transparent including the relevant qualifications and experience they possess. Clearly, they should be qualified in the discipline for which they are writing.

- The ACARA Charter would be revised to give the restructured body extended functions to provide, in association with jurisdictions and sectors, assistance with pedagogy related to the Australian Curriculum content, professional development for teachers, advice on assessment and reporting including formative assessment, as well as additional resource material including indicative lists of texts. This could best be achieved through partnership with commercial publishers and ESA. The excellent international Civitas series could provide a model.
- As indicated, it would be an immediate priority, and mandatory, for schools to deliver a hard copy, parent-friendly version of the Australian Curriculum for every parent, provided in a suitable format.
- Since ACARA owns the intellectual property of the Australian Curriculum it would also pursue entrepreneurial opportunities, particularly in international markets.
- A new independent National School Performance Authority would be established, appointed by and reporting to Ministerial Council. It would be an educational authority operating with curriculum and educational expertise and tasked with evaluating the Australian Curriculum. This agency would also be tasked with leading and working collaboratively with jurisdictions and sectors, to assist them with establishing tighter quality assurance and certification approaches in relation to the delivery of Australian Curriculum content in all schools. It would also be responsible for overseeing ACARA's cyclical review of the Australian Curriculum.

Before any of these options were considered, the Ministerial Council would facilitate the convening of a national education forum to consider the goals of education and the underpinning values and purpose of a national curriculum. The forum would also reconsider the adequacy of the Melbourne Declaration as the foundation for current and future curriculum development in the light of the experience of other countries, particularly those who are top performers.

Despite the fact that ACARA operates in a quasi-corporate statutory framework, little advantage seems to have been taken of this factor. Since ACARA owns the copyright of the curriculum several entrepreneurial advantages ought to spring from this, including exporting of the intellectual property, and continuing to provide contracting niches for private publishers and textbook suppliers whom ACARA seems to have eschewed. There is, for example, no Australian equivalent of the Civitas series, and ACARA has made no effort to translate its curriculum into simple versions of the curriculum content plus resource material across all learning areas, for students and their parents. Some state and territory jurisdictions have endeavoured to fill this gap.

Future curriculum development would have as primary considerations the interests of students and their progress and the development of a rigorous, academically robust curriculum, and begin with consideration of the school context. Any future curriculum development should also seek to achieve a proper balance between the different views about the purpose of education and the various curriculum models outlined in Chapter One.

Section Three: Conclusions and recommendations

Conclusions

Australia now has a rudimentary national curriculum, which is widely considered to be a significant achievement, and one characterised by a concerted effort to consult and engage a variety of stakeholders. This makes Australia the first federal country in the world to have a comprehensive national curriculum which includes knowledge as content, as well as standards and capabilities.

Although the process has attracted the support of most of those who were engaged within it, there have also been many shortcomings and criticisms identified by this Review. The lessons learned and the results of international benchmarking indicate a number of ways in which the curriculum development process can be improved for the future.

Curriculum is always a difficult and complex matter to contextualise and achieve agreement upon. It has inevitably been the scene of lively debates among various viewpoints; this will no doubt always be the case.

Conceptually there are quite divergent views among educators as to the definition and nature of the curriculum, many of which stem from differing conceptions of the purpose of education. Different models have been formulated by various proponents and these are canvassed in Chapter One. We note that any attempt to compromise among differing views is bound to lead to a weakening of the rigour, balance, and standards of the curriculum, particularly if there is any rushed desire to achieve consensus. It is also likely to lead to an overcrowded curriculum and a softening of the design process which may stray from a purely educational foundation. These seem to have been characteristics of aspects of the development of the Australian Curriculum as we have outlined in Chapter One and Chapter Three.

The focus of this Review has been entirely upon the intended curriculum, and on the content rather than the pedagogical aspects, but we are very conscious of the many factors that contribute to a total curriculum framework including the vital role that school-based activity plays in this domain.

Our tracking of the various approaches to establishing a national curriculum in Australia during the past decade has revealed the marked extent to which the concept has grown in its scope and content, from original considerations of a narrow set of subjects and content to the considerably vaster document that exists today. This journey is documented in Chapter Three.

Australia, like many other nations, has been strongly influenced in recent years by international tests such as PISA, TIMSS, and PIRLS. Although these measures are not a comprehensive guide to the quality of education, they have revealed shortcomings in our overall performance, including the lesser known fall in performance of the results of our top performing students. Through discussions at the OECD, particularly regarding top performing countries; extensive interviews with key members of the recent review of the curriculum in England including analysis of the international benchmarking which was undertaken; the conduct of a particular focus on Asia; and the research and international benchmarking we have commissioned; we have managed to obtain a picture of

international practice and trends, as outlined in Chapter Two – and in relation to the learning areas – in Chapter Seven.

Of course all international comparisons have to be conducted cautiously since systems operate in different contexts. However, some key features of top performing countries and sound principles of curriculum have emerged, which we document in Chapter Two.

The OECD has identified the facets which contribute to the achievement of a high performing education system. Essentially, the key underlying foundation is the need to develop a holistic approach to schooling in which the curriculum is a vital foundation that must be accompanied by other essential components, which include specific components.

Essential components of a holistic approach to schooling

- A focus on the wellbeing of students and their individual progression
- A sound curriculum based on a clear set of values, principles, and educational aims
- High-quality teachers who are motivated and appreciated
- Leadership from school principals
- Resourcing
- Parental and community support, accountability reporting and quality assurance linked to systemic school improvement
- Development of the conceptualisation capacity of students – a key feature of countries which perform best in international benchmarking tests.

Australia does not take such a holistic approach largely because of the division of roles and responsibilities in our federal system and also because of the incremental way in which aspects of schools policy has been addressed. Indeed, we have been consciously aware during the course of this review that even if a nation has the best curriculum in the world it would not guarantee top educational outcomes without the presence of other essential ingredients of the school system. These are outside the scope of this review, especially intensive support for high-quality teaching and sound pedagogy as evidenced in both Europe and Asia. Australia also does not match the quality assurance and inspection frameworks and standards of most top performing countries, and our degree of parental engagement and community support for schools would also seem to lag.

Other key international findings and trends include a focus on students' ability to conceptualise, mandated core content but with pedagogy left to teachers, strong emphasis on a knowledge base with competencies and assessment always grounded in knowledge, trends to school autonomy but within a strong system-wide quality assurance and inspection system to guarantee accountability standards and improvement, as well as diagnostic assessment to foster the progress of individual students, community support for schools, and concern for the disadvantaged.

Australia has fallen below these international benchmarks in recent times, as documented in Chapter Two. One item singled out is the lack of a clear linkage between NAPLAN and curriculum content, along with a lack of symmetry between capabilities and content.

Our international benchmarking has also revealed a number of features which make for best practice in curriculum design and these design principles are captured in Chapter Four on page 83. Australia matches some of these but falls short in many others.

The development process

In the past two decades many countries have developed a new national curriculum or strengthened an existing one. The benefits of having a national or system-wide curriculum include its impact on aspirations of all participants in the whole schooling sector, improvement in attainment and rate of progression for all students including low achievers, consistency, equity, and an increase in international competitiveness. These factors were clear in the international benchmarking conducted during the review of the curriculum in England, and are outlined at page 44 of our Report.

In Australia, despite initial reluctance on the part of many jurisdictions and schools, there would now seem to be widespread support for having a national curriculum. The factors most often mentioned in our submissions and consultations include catering for mobility of both families and teachers, introducing rigour, lifting aspirations, creating equity and entitlement, and filling current gaps. Teachers have welcomed the improved access to an expanded range of course and teaching material that has eventuated and there is much praise for the role of ESA in this regard.

However, we have discovered that there are widely differing notions of just what a national curriculum is. The conceptual definitions offered ranged through some picturesque expressions including a syllabus, guideline, roadmap, 'bit of a framework', and just capabilities in which 'stuff' can be placed.

These widely differing conceptions appear to have been one of the key formative influences behind the acceptance of a national curriculum; participants saw it fitting their own perception. Another formative influence was the very different anticipations of whether it would be mandatory and to what extent. Most believed it would not be compulsory and some still seem to see the national curriculum as a kind of smorgasbord from which you can take the dishes that meet your taste. Even previously fierce advocates of purely school-based curriculum believed it would not occupy too much space and be optional. Interestingly, the key resistance to establishing a national curriculum came from New South Wales and Victoria who believe that they had a sound school system and rigorous curriculum already in place, but most other jurisdictions welcomed the emergence of a new national curriculum – especially those who had previously had no curriculum at all, or a sketchy one at best, or who had had bad experiences with fads such as outcomes based education. Parents embraced a national curriculum as they were looking for mobility, consistency, higher standards and greater resource material.

The curriculum design process is documented in Chapter Five. This Review has revealed a widespread acknowledgement that ACARA sought to consult widely and often. However, a number of groups complained that they were not consulted at all or their views were treated perfunctorily. These were mainly parents who have emerged as the neglected component in this whole experiment, but also Indigenous educators and special education educators. Some state and territory jurisdictions and sectors have also told us that their views and concerns were either ignored or just 'noted'.

The main fault, commonly mentioned in the vast majority of our submissions and consultations, was the rush to deliver the Australian Curriculum and the resultant constant compromising among viewpoints. These compromises did not appear to be made on educational grounds, and the basis on which they were made was never revealed in an internal ACARA milieu which is not strong on

transparency and whose minutes are not made public. This was often linked to an observed ‘top-down’ approach adopted in curriculum design, rather than starting with the reality of a school day in a school classroom, with teachers of varying capacity knowledge and experience, operating in vastly different contexts across the nation. These aspects led to overcrowding of the curriculum, as this compromise and lack of reality led to over-inclusion of material. Educational circles in New South Wales and Victoria have argued that little attempt was made to accept curriculum design and content which already existed in those states, resulting in unnecessary and confusing duplication.

Many groups have also pointed to two fundamental design faults in the process. One was a ‘missing step’ whereby ACARA should have paused to consider the purpose of education and the underlying aims, values and principles for a national curriculum – including those notionally espoused in the Melbourne Declaration – before rushing to implement the directives issued by Ministerial Council. Policy imperatives overrode educational considerations. The other very basic design fault that many of our respondents have lamented was the lack of an overall curriculum framework within which each learning area would be constructed and the notional space and time allocation for all the core content would be contemplated. In the words of one of our respondents who was engaged within the process, ‘It was like trying to do a jigsaw puzzle without having the picture’.

It is widely acknowledged that ACARA endeavoured to introduce rigour into its approach through international benchmarking; a threefold design structure featuring discipline content, general capabilities and cross-curriculum priorities; and inclusion of academics and practitioners in its advisory and consultative mechanisms. Those who were engaged within the consultation processes seem to have been reasonably satisfied with these approaches. However, our consultations have revealed considerable concern from others regarding each of these areas. It was not clear how the benchmarking was used in design of the content; the three-pronged framework proved to be too monolithic and template driven, causing homogenisation of the learning areas, and the lockstep nature of the content and its sequencing was unsuitable for many school contexts. The approach to ‘embedding’ the cross-curriculum priorities has been obscure and roundly condemned by most of the educational experts we have consulted – a theme that recurs in various parts of our report. Although there was widespread support for the three themes themselves, the manner of their inclusion, and the skewing effect they have produced in many learning areas appears to have produced a resultant lack of balance.

One particular concern expressed to us regarding the application of the ACARA framework has been the failure to recognise the unique context of early childhood which requires a quite different approach to both content and pedagogy. It has been argued by experts in this field that the curriculum design, for the foundation years, should have been mainly focused on the development of literacy and numeracy skills.

Does Australia really have a national curriculum?

In reality Australia does not have a national school system as the data in Appendix 3 reveals. It is even doubtful whether schooling is actually compulsory in Australia, and certainly whether it is enforced. Moreover, for some time now, various data, the crude NAPLAN results, and anecdotal evidence have suggested considerable unevenness in educational outcomes across Australian jurisdictions, sectors, and schools. Many students appear to have progressed through the stages of schooling without having mastered the knowledge expected at each stage. Some 24 universities

currently run ‘bridging’ courses, and anecdotal evidence suggests these are essentially remedial courses, particularly in literacy, numeracy and analytical capacity.

Consequently, it is even more remarkable that we appear to have produced a national curriculum – at least in intention. However, as analysed in Chapter Five, if possessing a national curriculum means that it is actually being delivered, it might well be questioned whether we do actually have a national curriculum. This Review has discovered that there are vast differences in implementation, or non-implementation occurring. Some jurisdictions, sectors and schools seem to believe that not all of the Australian Curriculum is mandatory and are acting accordingly. There is an awful lot of ‘adapting and adopting’ and ‘integrating’ going on, as well as some ‘picking and choosing’, and even some ‘placing a skin over it’ and rebadging it.

Of course there is nothing wrong with diversity in approaches to curriculum delivery. Indeed, it is to be applauded given the scope for adaptation to different school contexts, populations and locations, not to mention the benefits of innovation. We also recognise that there are various layers and filters through which curriculum delivery always passes, and there is always a desire for subsidiarity to the maximum extent possible. However, based on the evidence we have seen, we cannot be certain that the Australian Curriculum is being implemented as intended across the nation.

Views of the curriculum

Our Review has evinced many criticisms of the current Australian Curriculum but it is important to realise that there is widespread appreciation for what has been achieved by ACARA and a belief, in most jurisdictions and sectors, that it is better than what had existed previously. In conducting this Review we have endeavoured to take a positive approach in our evaluation to assist the revision process of existing material that needs to occur, and to guide the future rollout of subsequent phases.

We have listened carefully to the plaudits and criticisms of the current Australian Curriculum, especially those expressed by teachers, principals, and parents whose support is vital for the delivery of any curriculum. From our observations, even within the education fraternity, there is still a confusing array of concepts of curriculum in general, and a national curriculum in particular. Considerable work needs to be done to achieve more clarification.

Views of the current curriculum expressed to this Review are reported in Chapter Six. In summary they are:

- The aims and values underpinning the curriculum are not clear. They are not a true reflection of the Melbourne Declaration, especially as to moral and spiritual values. Many also argue that the place of religion, belief systems, and values is not being addressed, and there is a sizeable degree of support for the greater inclusion and emphasis of this content in the Australian Curriculum. There is also some support for an updating of the Melbourne Declaration.
- There is no overall statement of the purpose and goals of education.
- There is still no overall curriculum framework.
- While many participants in the curriculum development process believe that the resultant curriculum is robust, there have also been misgivings on this score, as documented in Chapter

Six, and in relation to each of the learning areas that are examined in Chapter Seven where many inaccuracies in terminology and definitions are also identified.

- There also differing views on whether the curriculum is balanced. Some are not concerned about this. However, we have received a number of expressions of concern regarding imbalance – even to the point of bias – in relation to content, especially in the light of serious omissions and doubtful inclusion of content. Examples include the neglect of Western historical and cultural influences across many learning areas, the failure to recognise adequately Judeo-Christian influences, the overt neglect of the positive impact of economic development on living standards, and the crucial role played by the private sector and markets. A lack of independence has also been identified in relation to what some perceive as the favouring of particular pedagogical approaches.
- Balance and choice are provided for in the Australian Curriculum in terms of choice within each learning area through elective topics. It is also generally true that a broad balance has been struck between content which is the prerogative of the Australian Curriculum and mandating of it by state and territory jurisdictions, and pedagogy which generally remains the preserve of schools and sectors. However, we have discovered that there is still considerable confusion amongst teachers in particular as to the amount of choice they have been given and particularly which aspects of addressing the curriculum they will be personally assessed on. These matters are discussed in Chapter Six.
- The design is still too monolithic, too template driven, homogenous, and too focused on rigid content descriptors and lockstep sequencing; and so it is unsuitable for many school settings and students with special needs. Student diversity is being seriously neglected especially as regards students with disabilities.
- The uniqueness of early childhood, F–2, is not being recognised and addressed.
- The mandatory nature of the content is not clear as to what is core, and the content descriptors are written in language which is too complex for teachers, especially given that many are generalists.
- The content is too overcrowded in terms of total quantum; disciplinary content is often introduced at a level which is too low; and sequencing does not follow the student learning pattern.
- NAPLAN is not linked appropriately to curriculum content and knowledge, achievement standards need to be validated and the levels of A to E remain a mystery, including to parents. The whole assessment and evaluation frameworks – national, jurisdictional, and school-based – do not seem to be being consistently used for formative assessment, individual student monitoring, and classroom improvement.
- There is considerable confusion regarding the cross-curriculum priorities, which most educators support and want to see properly embedded in learning areas but only where relevant and with an epistemological foundation. They also want to ensure that the cross-curriculum priorities have not deliberately or inadvertently skewed the content of each learning area. There are fears that the use of this technique has led to political interference in the curriculum and may continue to do so.
- The concept of general capabilities to develop 21st century skills is widely welcomed and supported, but those that have been developed by ACARA have produced much dissent from

jurisdictions – some of which are refusing to incorporate them – and also from education experts.

- The curriculum is not parent-friendly and so is not designed to achieve parental engagement with their children’s learning. Some, but not all, sectors and schools are taking a somewhat arrogant attitude to parents in this respect, not realising the need for them to be seen to be accountable to parents for what their children are being taught. Guidelines are needed for schools to address this, and there must not be sole reliance on web-based resources given the lack of access and facility of so many Australians regarding ICT.
- The curriculum is not entirely teacher-friendly with technical language, lack of clarity as to mandatory components, and its length and repetitiveness of documentation. There is also a need for more resource material, work samples, assistance with achievement standards and provision of indicative reading lists, and general aids to pedagogy and professional development. Some jurisdictions and sectors are making their own efforts in this domain.

Quality assurance, accountability and governance

There is a very uneven quality assurance process occurring across Australia in regard to the delivery of the Australian Curriculum. The foundation is weak with states and territories, independent and Catholic sectors simply required to sign off with the Australian Government that they are implementing the Australian Curriculum. Monitoring of government schools by some state and territory jurisdictions seems to be spasmodic, and some state and territory school certification processes are very perfunctory requiring little more than a signing off. Neither the Australian National Audit Office nor the state auditors have conducted value-for-money audits of Australian Curriculum spending or delivery. Parliaments and their committees seem to be not interested.

Accountability to parents and the community in general is also a mixed picture. We have discovered that some schools have made extensive efforts to report to parents about the actual content of the Australian Curriculum and how they are implementing it, but in other cases this whole area seems to be neglected. A few jurisdictions have issued guidelines for schools to follow but this practice is also not widespread.

As for governance, the current process through the Ministerial Council and ACARA has certainly managed to produce a national curriculum. However, the various components of governance do not appear to rest on a sound educational foundation and have rather displayed the hallmarks of expediency and political compromise. It is not the way to revise curriculum content; nor is it the way to develop a future curriculum.

Ministerial Councils, in an intergovernmental setting, will no doubt continue to function in the manner which is typical of Australian federalism, with buy-in from the two levels of government but minimal direct accountability and an absence of transparency for their policymaking. However, a better governance framework and process is required for bodies conducting the actual task, like ACARA. Ideally, it needs to be one which is:

- embedded in sound educational underpinnings
- transparent in all its decision-making and compromises, all of which must be justified on educational grounds

- operating at arm's length from Ministers with all directions from ministers completely documented in public
- directed by board members who are experts and not representatives of jurisdictions and sectors, who operate with no conflict of interests, and have their loyalty to the organisation.
- employ staff who are experts in discipline areas and are not just generic educators.

In addition, some of the current functions of ACARA need to be hived off to an independent body so that expert and independent evaluation can occur, accompanied by reporting free from perceived conflicts of interest.

We devote some attention to these aspects in Chapter Eight of this Report.

The learning areas

Chapter Seven details our analysis of each of the learning areas with the benefit of research, submissions and consultations, and the work of subject matter specialists. Individual summaries are provided for all of them. We find varying degrees of satisfaction with them. Looking across all of them we find that ACARA has made considerable efforts to consult widely in their design. There is also a welcome return to a knowledge base rather than the overemphasis on purely capabilities that had taken hold over past decades – an imbalance that has been criticised by the OECD among others. There is also a welcome attempt to introduce rigour after the previous dominance of ephemeral and sometimes destructive fads in teaching and curriculum approaches, such as deconstruction and avoidance of phonics in English, and other practices linked to failed trends such as outcomes based education.

However, our analysis has revealed some common causes for concern including:

- the inadequacy of international benchmarking
- the lack of balance in the content with some evidence of bias in omissions and inclusions in content as with history, economics and business, and civics and citizenship; and particularly the virtual absence of the defining influences of Western civilisation and Judeo-Christian heritage in a number of learning areas
- the location of complex content at too early a phase in the spectrum F–10 or F–12 accompanied by inappropriate sequencing
- the lack of recognition of the uniqueness of the F–2 years
- significant overcrowding as a result of compromise, cobbling together various disciplines to create one subject area – such as in the arts, economics and business, and health and physical education
- a lack of consideration of the realities of the school and classroom in a typical school day and week, as well as capacity of generalist teachers.

The homogenous monolithic and template-driven design adopted for all learning areas has come in for criticism especially in the arts, and to a lesser extent in economics and business, civics and citizenship, and health and physical education. Once again the clumsy approach to the indicative embedding of cross-curriculum priorities has caused concern in that it has a poor epistemological base with suggestions for inclusion often inappropriate. Moreover, the approach has created token recognition of the importance of Indigenous content, skewed content and teaching away from

Western influences, failed to recognise the importance of the Pacific Islands, and because the methodology has not been properly clarified by ACARA – especially as to its voluntary nature – has brought confusion for teachers and some ridicule on the Australian Curriculum. Too little choice is available for teachers in some learning areas and too much inappropriate choice exists in others.

The existence of many errors in terminology and definitions is a cause for serious concern and would seem to reflect a lack of discipline-based knowledge on the part of ACARA curriculum writers and a quality control process in need of serious attention.

All these aspects are examined in Chapter Seven along with conclusions for each learning area. Some are suitable for minor modification, but others require fundamental reconstruction and rewriting.

Teaching

Although pedagogy and teaching practices in general were outside the scope of this Review, a number of aspects kept recurring, which we believe are relevant to curriculum design and delivery and so are worth noting. We were told that many teachers, through no fault of their own, no longer have curriculum development skills, and possess generalist education degrees with minimal disciplinary content. This would partly explain why the notion of an Australian Curriculum has been welcomed for the introduction of some rigour and content. It also seems to cast light on the reason for the frequent suggestions we have received for more professional development in the areas of curriculum development, translation of curriculum into practice, and the design of pedagogy, along with a desire for more resource material. We were also somewhat surprised to hear that newly graduating teachers often have a fear of teaching outside the classroom – on field trips, excursions and the like – owing to a lack of organisational skills, and concern about liability and litigation. Curriculum standards should not be compromised because of these factors and there would seem to be a strong case for jurisdictions to address these matters, especially through more comprehensive pre-service education and training, and in-service professional development.

Recommendations

The curriculum, in addition to being grounded in what the Blackburn Report describes as ‘our best validated knowledge and artistic achievements’, should acknowledge the central importance of students. As such, curriculum design should have students’ wellbeing and their progression through the stages of learning at the centre of considerations. The design of the curriculum and associated assessment regimes need to facilitate close monitoring of each student’s development. This needs to become the prime focus of curriculum development in Australia.

Recommendation 1

The Ministerial Council oversee a redesign of the Australian Curriculum and associated assessment regimes that has as its prime focus, students’ wellbeing and the monitoring of their progression through the stages of learning.

Parental engagement with the education of their children is crucial, and curriculum documents should facilitate their understanding of the knowledge their children are gaining and the capabilities they are acquiring. A smaller parent-friendly version of the Australian Curriculum should be produced immediately and made available to the parents of all Australian school students, and greater efforts should be made by schools to engage with parents in relation to what their children are being taught.

Recommendation 2

ACARA develop a smaller, parent-friendly version of the Australian Curriculum which clearly explains the intended curriculum a child will be learning in each year they are at school.

Recommendation 3

Education authorities and schools devote greater attention to engaging parents in understanding what the intended curriculum is for their child each year they are at school.

Australian governments should follow the practice of leading countries and adopt a holistic approach to school policy, whereby curriculum is a vital foundation factor but is interwoven with other systemic policy components including quality teaching, leadership from principals, resourcing, parental engagement, quality assurance and community support.

Recommendation 4

Australian governments adopt a more holistic and systemic approach to school policy, particularly in relation to quality teaching, school leadership, financial resourcing, parental engagement, quality assurance and community support.

While recognising that the Teacher Education Ministerial Advisory Group is yet to report, we recognise that of all the systemic factors in schooling, the role of teachers is the most crucial in the effective delivery of any curriculum. A first-rate curriculum without first-rate teachers serves little purpose in the drive to achieve the best educational goals for the benefit of the student, society, and

the economy. It is clearly the key ingredient in all of the top performing countries, and Australia needs to make every effort to raise the status and capacity of our teachers.

In relation to curriculum this task includes ensuring that our teachers have disciplinary knowledge and are not just generalists, capability in school-based curriculum design and development, and the ability to translate the Australian Curriculum into work plans and lesson content. Skills are also needed in using NAPLAN and other assessment in the design by teachers of formative assessment.

All of this needs to be accompanied by skills in organisation of curriculum-related school activities within and outside the classroom. Teachers also need effective interpersonal skills and a reporting facility on student progress that relates meaningfully to parents, thus forming a partnership with parents and families of students to join students and teachers in the journey through the curriculum. We recommend that jurisdictions, universities, and sectors recognise the vital importance of this challenge and carefully study the many successful practices adopted internationally – particularly in Finland and the top performing Asian jurisdictions which have been the subject of our attention (particularly Singapore and Shanghai).

Pre-service, in-service, and professional development programs for teachers need to have these elements as a prime focus.

Recommendation 5

Education authorities and teacher education bodies continue to focus on raising the capacity of teachers, particularly in relation to increasing their ability to:

- translate the Australian Curriculum into their school-based curriculum and their programs of teaching and learning
- use relevant data to improve student learning.

The Australian Curriculum documents could be made more teacher-friendly by simplifying some of the complex language, and indicating more clearly which elements of content descriptions and options are core or mandatory. Considerably more resource material is needed, more work samples, assistance with achievement standards and provision of indicative reading lists, as well as general aids to pedagogy and professional development. Some jurisdictions and sectors are addressing this and there would appear to be scope for more sharing of the results of these efforts.

Recommendation 6

ACARA revise the curriculum documents to make them less complex and unwieldy, including through clearly identifying and communicating what is considered mandatory and what is considered optional or elective.

Recommendation 7

ACARA develop further work samples to clearly illustrate A to E achievement for each achievement standard, as well as, in conjunction with Education Services Australia (ESA), further aids to teachers such as indicative reading lists and general aids to pedagogy.

Curriculum development should begin with a fundamental consideration of the purpose and goals of education and proceed to a discussion of the aims, values, and principles which should underpin the school curriculum. To rectify the gap that occurred in the past curriculum development process, the current curriculum rollout should pause and as soon as possible the Ministerial Council should convene a forum of community and educational participants to conduct this discussion. The forum would also consider whether the aims, values and principles of the Melbourne Declaration are being adequately and transparently translated into the foundations of the Australian Curriculum, and make recommendations for any necessary modification of the curriculum. In addition, clarification needs to be sought as to the concept and nature of curriculum, including the special circumstances of a national curriculum and its mandatory requirements.

Recommendation 8

The Ministerial Council to convene a forum of community and educational participants to consider the purpose and goals of education and develop the aims, values and principles which should underpin the nature of a national school curriculum for Australia within the context of the federal system, including the curriculum's mandatory requirements.

A comprehensive framework for the Australian Curriculum needs to be produced, demonstrating the overall design – including the space occupied by the core content of all the learning areas – notional time allocations, sequences of learning content, and phasing of assessment. This design should then be tested against the school context, school, week, classroom practice, and teaching capacity, to provide a reality check to identify the areas where it is currently not realistic. Particularly attention needs to be focused on the lockstep nature of the content and more flexibility needs to be introduced to allow for different school contexts, populations, and locations. This is especially the case in regard to the needs of disadvantaged students, and collaboration with a number of not-for-profit organisations who are active in this field is recommended.

Recommendation 9

The Ministerial Council oversee ACARA's development of a comprehensive framework for the Australian Curriculum that includes the notional time allocation and core content for each learning area and subject that is practically implementable, especially in the primary years.

The special circumstances of students with disability needs better attention than it has received in the past. We recommend that ACARA reinvigorate the momentum that had been established in this area with further research and a deep consultation with special education experts, plus trials in schools of the approach which has been taken with 'Towards Level 1' in AusVELS in Victoria which has been highly commended to us.

Recommendation 10

ACARA, guided by special education experts, improve the inclusivity of the Australian Curriculum by more appropriately addressing the needs of students with disability, particularly those working towards the Foundation level.

The Review has heard calls for reconceptualisation of the Australian Curriculum. The Review has also heard that early childhood should be better recognised for the unique phase in student development that suggests there should be greater flexibility in relation to the current rigid framework of key learning areas, and be concerned primarily with literacy and numeracy.

As a result of the research, benchmarking, and consultations we have conducted, we recommend that a comprehensive approach be taken to the reform of the existing Australian Curriculum, which needs to be reduced, rebalanced and restructured, with the aid of fresh disciplinary and curriculum experts.

Steps should be taken immediately to reduce the overcrowding of the Australian Curriculum, especially in the primary years. The quantum of core content should increase gradually as the years progress. The actions to reduce overcrowding should include a significant reduction in the core content of each learning area, shifting content into more educationally-appropriate later years related to student learning patterns, and introducing some learning areas in later years than at present. There is also scope for allowing schools to incorporate much of the current core content into their own school-based curriculum, such as in the arts, health and physical education, and technologies, where most schools already have rich practical programs.

This Review has outlined two approaches that are outlined on page 144.

Recommendation 11

The Ministerial Council consider the two options we have advanced for reconceptualising the Australian Curriculum that are set out on pages 143–6 of this Report.

Recommendation 12

Subsequently, ACARA revise the structure of the Australian Curriculum to reduce the amount of content to a narrow core required to be taught, especially in the primary years. Foundation to Year 2 should focus on literacy and numeracy.

As noted in this Report⁴³³, any intended curriculum document, either implicitly or explicitly, favours a particular approach or approaches to teaching and learning. While ACARA argues that the Australian Curriculum only deals with *what* to teach and not *how* to teach, the evidence suggests otherwise.

Particular subjects like history, geography and science state that they are based on an inquiry-based approach and, in relation to civics and citizenship, APPA notes the ‘positive and explicit approach to the use of inquiry approaches’.

In the English and history intended curriculum documents, especially in the early years, there is also an explicit emphasis on relating learning to the immediate world of the student and to draw on what is local, contemporary and relevant.

Inquiry-based learning and relating the curriculum to the world of the student are associated with a constructivist model of pedagogy. In addition, as noted by a number of OECD studies, compared to

⁴³³ See Chapter 1 and Chapter 6, under the heading Balance, for an outline of how various models of curriculum generally privilege a particular approach or approaches to pedagogy.

many other OECD education systems Australian classrooms are characterised as adopting a constructivist approach.

Constructivism is a model of pedagogy distinct from what is described as explicit teaching – of which direct instruction is one approach.

As previously noted in this Report, effective teachers employ a range of often different models of teaching and learning, depending on what is being taught, the ability and motivation of students, the year level and the nature of the intended outcomes.

The difficulty arises when one particular approach is treated as the orthodoxy and privileged over other styles of teaching and learning. The imbalance towards constructivism is especially concerning given the weight of research arguing that explicit teaching, while not suitable for all occasions, is a more effective and efficient approach in terms of outcomes and use of resources and time.

Recommendation 13

That research be undertaken to establish the efficacy of different pedagogical approaches ranging from constructivism to explicit teaching and direct instruction. This research should be based on classroom studies, desktop research and include identifying the pedagogical approaches adopted by top performing countries as measured by international tests such as TIMSS, PISA and PIRLS. The results of this research should contribute to any future evaluation and revision of the Australian Curriculum.

We have made recommendations for each learning area in Chapter Seven of this Report, which include areas of imbalance relating to specific learning areas. Further, there are serious omissions and inappropriate inclusions which have been identified in various learning areas that should be addressed with the many inaccuracies in definitions and terminology changed immediately. The curriculum needs to be rebalanced to rectify the deficiencies we have identified across the curriculum and within each learning area.

Further, we note there were significant calls for greater recognition to be made in the Australian Curriculum of the contribution and influence of Western civilisation, recognition of the cultural and historical foundations of the nation's Judeo-Christian heritage, the positive contribution of economic development and industry to raising standards of living, and the democratic underpinnings of the British system of government in our political executive and legal institutions and processes.

Recommendation 14

ACARA rebalance the core content in each learning area and subject in line with the findings of this Review outlined in Chapters Six and Seven, particularly in relation to the deficiencies in each subject.

Recommendation 15

ACARA revise the Australian Curriculum to place more emphasis on morals, values and spirituality as outlined in the Melbourne Declaration, and to better recognise the contribution of Western civilisation, our Judeo-Christian heritage, the role of economic development and industry and the democratic underpinning of the British system of government to Australia's development.

The curriculum needs to be restructured with its monolithic and template-driven framework adapted in particular learning areas to provide the greater freedom and flexibility identified in this Report. Rigid content descriptors, comprehensive lists of homogenous capabilities and lockstep sequencing of content need to allow some flexibility that takes account of the nature of the content of a learning area, and the context of the school location, size, population, setting, and resources.

Recommendation 16

Education authorities implement the content of the Australian Curriculum with some flexibility in the manner in which it is sequenced and delivered.

There has been considerable support for the themes of the cross-curriculum priorities of Aboriginal and Torres Strait Islander histories and cultures, Asia and Australia's engagement with Asia, and sustainability, to be retained within the content of the Australian Curriculum, but considerable concern as to how this has been approached. We recommend that the priorities remain and be redesignated as 'curriculum priorities', but they must be embedded properly within particular learning areas, only where relevant, and where their inclusion can be justified on epistemological grounds. We are also persuaded that there is a danger of content relating to the priority covering Aboriginal and Torres Strait Islander knowledge, culture and heritage being treated in a tokenistic and superficial manner unless taught by specialists.

This confusing and simplistic approach to the injection of cross-curricular themes into the curriculum, which has featured in the current curriculum development process, should not be followed in future – not just because it is educationally unsound, but also because it has raised considerable fear that the school curriculum could easily become politicised through such an approach. Indeed some believe this has already occurred.

We note that other countries, including top performing ones, have included what might be considered contemporary national priorities in their curriculum; for example, being a global citizen and sustainable development in Finland, or intercultural and interfaith understanding in England, or orientation to globalisation and international competitiveness in Asian countries. However, these are usually established as values or guiding principles, and if they are formally included into the curriculum content this is done in an explicit manner.

Recommendation 17

ACARA reconceptualise the cross-curriculum priorities and instead embed teaching and learning about Aboriginal and Torres Strait Islander histories and cultures, Asia and Australia's engagement with Asia, and sustainability explicitly, and only where educationally relevant, in the mandatory content of the curriculum.

The majority of submissions and consultations are in favour of the general capabilities and see them as an important aspect of the Australian Curriculum. Many argue that such capabilities are an essential aspect of 21st century learning and that they are relevant and helpful in assisting students to be adaptable, lifelong learners.

At the same time, and similar to concerns raised about the manner in which the cross-curriculum priorities are dealt with in the Australian Curriculum, a number of submissions have criticised the capabilities. Chapter 6 of this Report sets out a more detailed explanation of these criticisms.

BOSTES NSW argues that, with the exception of literacy and numeracy, the way the capabilities are dealt with in the Australian Curriculum undermines the integrity of the subject disciplines. An alternative approach is adopted whereby the capabilities, where relevant and best dealt with, are embedded within the New South Wales syllabus content.

Both the Victorian and the Western Australian submissions from state based curriculum authorities also express concerns about the general capabilities in relation to validation and a fear, as expressed by the Western Australian submission, that they might become a 'de facto curriculum at the expense of specific content knowledge'.

Research related to cognitive psychology and the most effective way to structure and deal with the subject disciplines also raises concerns about the manner in which the capabilities are defined and dealt with across the curriculum. Learning theory suggests, as a general rule, that capabilities are best taught in a subject-specific context and that the ability to be creative or to act ethically is domain specific. As such, instead of being treated in a cross-curricular manner, they need to be embedded in specific subjects and learning areas.

Recommendation 18

With the exception of literacy, numeracy and ICT that continue as they currently are dealt with in the Australian Curriculum, the remaining four general capabilities are no longer treated in a cross-curricular fashion. Critical and creative thinking, personal and social capability, ethical understanding and intercultural understanding should be embedded only in those subjects and areas of learning where relevant and where they can be dealt with in a comprehensive and detailed fashion.

Regrettably, assessment is often seen incorrectly as the bugbear of curriculum, and this has become evident in Australia. NAPLAN and other components of the testing regime need to be seen as positive contributors to the understanding of knowledge. As recommended by the OECD this assessment regime must become better aligned with the content of the Australian Curriculum and have a stronger focus on knowledge in addition to capabilities.

The results of these assessments should not be regarded as fodder for league tables or other simplistic school benchmarking, but rather as diagnostic tools to be used more productively by teachers and schools in the monitoring of individual student progress and reporting to parents. They should also be viewed positively by teachers as a significant aid to design of their formative assessment instruments. There are many schools adopting these positive approaches and methodologies, and there is significant scope for the sharing of such experiences.

Recommendation 19

ACARA expedite the alignment of the National Assessment Program with the Australian Curriculum, and increase the assessment of knowledge compared with capabilities.

Urgent clarification of the achievement standards for the Australian Curriculum is required for the benefit of teachers and parents as well as students, and there needs to be an assurance that they have been properly validated. The true meaning of the A to E formulation needs to be established and should be uniform across the nation if the Australian Curriculum is to achieve its main purposes.

Recommendation 20

The Ministerial Council agree and expedite a process through ACARA to adopt uniform descriptions of achievement at an A to E level that are used for biannual reporting to parents on their child's achievement at school.

Recommendation 21

ACARA undertake a quality assurance process to validate the Foundation–Year 10 achievement standards in each learning area and subject against the implemented Australian Curriculum.

An intended curriculum that is not being fully implemented is not really a national curriculum in the true sense of the word. The mapping that has been done by ACARA tells us little about the actual situation regarding nationwide implementation, and our own extensive consultations have not greatly clarified the picture either.

As we have outlined in the report, the Australian Curriculum is being adopted and adapted in a variety of ways, but some content and design features have also been rejected. In addition, there seems to be some genuine confusion as to whether the Australian Curriculum is mandatory in its entirety. There is an urgent need for more accurate mapping of the implementation of the Australian Curriculum by jurisdictions, sectors, and schools. Where they are refusing to implement, urgent explanations are required to ascertain whether the curriculum itself needs to be modified or an exception formally made. If there appears to be no valid reason for non-implementation it needs to be made clear in national reporting arrangements. Flexibility and choice are usually good maxims – as is the principle of subsidiarity – but they need to be balanced against the ideal of national equality of access for all students to the same standard of education.

Linked to curriculum implementation is the broader issue of quality assurance for schools. As indicated in our report the international research we have conducted has revealed that quality assurance is a basic determinant of a top performing education system. In all the countries we have analysed external evaluation of schools in some form is used. The modalities vary widely from a strong presence of inspection mechanisms, which are very common in Europe and Asia, to an external evaluation of school performance through assessment, survey and reporting, or a reliance on follow-up to student results on national and international testing. The best-known regime is probably the inspection body Ofsted in England which, in tandem with system-wide reporting on student results in assessment, is very much welcomed by parents and the community as it seeks to lift performance. But all of these quality assurance systems, inspectors included, endeavour to

function in partnership with schools, helping them to identify and address areas for improvement including in curriculum delivery.

In Australia the approach to quality assurance varies significantly between jurisdictions. Some are much more robust than others. This arena is largely a matter for the jurisdictions themselves and the broader considerations are beyond the scope of this review. Suffice to say that a more rigorous approach to quality assurance of schools across the nation would play an important part in achieving effective delivery of the Australian Curriculum. We recommend that this topic be the subject of debate and comparison at Ministerial Council.

There is a mixture of constitutional responsibility for ensuring implementation of the Australian Curriculum. States, territories, and the Catholic and independent sectors, receive school funding from the Australian Government under legislation which stipulates that one condition of this funding is that the Australian Curriculum is to be implemented. After the various jurisdictions sign off there appears to be no further check as to whether this undertaking is being honoured.

Similarly, in the certification/registration process for schools, operated by state and territory governments, there is an obligation for schools to be implementing the Australian Curriculum. However, from our observations there is a considerable variation and significant deficiencies in the way agencies are monitoring and enforcing this requirement. While the delivery of a national curriculum should not be shrouded in regulation and compliance measures, we recommend that education authorities seek to find more rigorous ways of ensuring that all the effort which has been expended to deliver the Australian Curriculum is not wasted nor denied to every Australian student and their families. A more robust delivery regime is required.

Recommendation 22

As the body responsible for compliance with the *Australian Education Act 2013*, the Australian Government through the Ministerial Council develop a process to oversee, map and report on the status of implementation of the Australian Curriculum. This process should involve a more nationally consistent quality assurance regime that enables parents and members of the community to determine the extent to which a school is implementing the Australian Curriculum and any areas it has chosen not to implement.

The findings of this review help to point the way forward for future curriculum development. We recommend that this begin by an adoption of the principles of curriculum design which we have identified from our international research and which are outlined on page 83.

We also caution against repeating the poor, dangerous practices of the recent past: curriculum development must not be rushed solely to meet political deadlines and any compromises that are made regarding the knowledge base must be made on educational grounds and be transparent. The design and substance of the curriculum must involve much more representative consultations, and be informed by a broader range of expertise and exchange of views between community and professional representatives, and curriculum writers, who themselves need to be qualified in the disciplines under consideration and not be just generalist educators. In particular, there needs to be far more engagement with parents – not just their peak associations.

Curriculum design should not be solely top down. It should begin, not end, with consideration of the school setting and careful note must be taken of good practice that is already occurring and good curriculum approaches that have been sanctioned by jurisdictions, so as to avoid future unnecessary duplication. Individual experienced teachers need to be engaged more in the curriculum development process.

Recommendation 23

That in the preparation for future curriculum design, planning should take better account of teaching contexts, the learning environment and engaging teachers in the design process. Curriculum development should not proceed in haste and any compromises should be transparent and be made on educational grounds.

Good governance is necessary to continue the momentum that has been created towards achieving a high-quality curriculum. However, based on the evidence tendered to this Review we believe that the current ACARA model falls short of sound international practice in many respects, and is not the best professional way to develop the Australian Curriculum for the future.

Australia needs a curriculum governance framework that is embedded in sound educational underpinnings; is transparent in all its decision-making; only makes compromises on sound educational grounds, operates at arm's length from ministers; is directed by a board comprising experts and not representatives, whose members have no conflict of interest and whose loyalty is solely to the task and the organisation, and is serviced by staff who are experts in the disciplines of the learning areas which comprise the curriculum content and not just generalist educators. In short, while anybody charged with the responsible task of developing the Australian Curriculum must be responsible and accountable to governments, it should be driven primarily by educational considerations and not by purely political policy directives.

Consequently, as outlined in Chapter Eight, we recommend a restructure of the current governance model by:

- Separating the curriculum development and update, curriculum research, international benchmarking of curriculum and the development and administration of the National Assessment Program functions from other curriculum functions such as its evaluation and implementation.
- Reforming the governance structure of ACARA by establishing it in a company format to ensure that the Board members are not acting as representatives, but whose duty is to the organisation and its task, are chosen primarily for their curriculum expertise, and include educational experts from outside the various government systems. Although the Board would continue to be appointed by, and report to, Ministerial Council, as a company the organisation would be legally at arm's length from education ministers, and would be subject to tighter transparency, accountability and reporting requirements. Its mandate would include a direction that its minutes are made public and it would be required to outline the educational basis of its decisions. All directions from ministers would have to be made public and there would be a strict conflict of interest declaration regime.

- The new ACARA would begin the modification of the current Australian Curriculum in line with the findings of this Review and then continue to perform curriculum design and related assessment in accordance with design principles as outlined earlier in this report. However, all these functions would be conducted with less haste and in a more transparent and less monolithic manner, also ensuring that all assessment including NAPLAN, and all general capabilities, are linked to Australian Curriculum content.
- The current process of issuing a Letter of Expectation from Ministerial Council would also contain the educational justifications for the items contained therein. All other directions to the ACARA Board would be published on the ACARA website and in the annual report. The manner in which Board membership honours the expertise requirements would be clearly visible and those criteria would be amended to place greater emphasis on curriculum experience and expertise. With the minutes of the ACARA Board meetings being made public, all consultative and advisory committees would have access to reasons for decisions taken. They would also be given direct access to curriculum writers. The appointment process for curriculum writers would be made more transparent including the relevant qualifications and experience they possess. Clearly they should be qualified in the discipline for which they are writing.
- The ACARA Charter would be revised to give the restructured body extended functions to provide, in association with jurisdictions and sectors, assistance with pedagogy related to the Australian Curriculum content, professional development for teachers, advice on assessment and reporting (including formative assessment), as well as additional resource material including indicative lists of texts. This could best be achieved through partnership with commercial publishers and ESA. The excellent international Civitas series could provide a model. As indicated, an immediate priority would be for schools to deliver a hard copy and parent-friendly version of the Australian Curriculum to every parent, in a suitable format, which would be mandatory. Since ACARA owns the intellectual property of the Australian Curriculum it would also pursue entrepreneurial opportunities, particularly in international markets.
- A new independent National School Performance Authority would be established, appointed by and reporting to the Ministerial Council. It would be an educational authority operating with curriculum and educational expertise to be tasked with evaluating the Australian Curriculum. This agency would also be tasked with leading and working collaboratively with jurisdictions, and sectors, to assist them with establishing tighter quality assurance and certification approaches in relation to the delivery of Australian Curriculum content in all schools. This agency would also be responsible for overseeing ACARA's cyclical review of the Australian Curriculum.

Recommendation 24

ACARA be restructured, and the Australian Curriculum, Assessment and Reporting Authority Act 2008 and ACARA's Charter be revised, so its role is limited to:

- development and cyclical updates of the Australian Curriculum
- curriculum research
- international benchmarking of curriculum
- development and administration of the National Assessment Program.

Recommendation 25

ACARA be reconstituted, possibly as a company that is at arm's length from education ministers and the education departments that serve them.

Recommendation 26

ACARA's Board not be representative of education authorities but comprise curriculum and assessment experts, independent of education authorities.

Recommendation 27

The restructured ACARA operate more transparently in relation to the publication of its minutes and decisions.

Recommendation 28

A small, educationally-focused independent National School Performance Authority be established to evaluate the Australian Curriculum and assist education authorities improve its delivery. Reporting only to the Ministerial Council, the agency would also maintain the My School website and oversee ACARA's cyclical review of the Australian Curriculum.

ACARA's annual reports and progress reports to Ministerial Council should be tabled in the Australian Parliament and state and territory parliaments for information and debate.

Recommendation 29

ACARA's annual report and progress reports to the Ministerial Council be tabled in the Australian Parliament and state and territory parliaments for information and debate.

A comprehensive review of the Australian Curriculum including international benchmarking should be conducted every five years.

Recommendation 30

The Ministerial Council establish a comprehensive and independent review of the Australian Curriculum every five years.

Acknowledgements

The Reviewers would like to acknowledge all of the organisations, groups and individuals who took the time to make submissions or meet with us in consultations.

The conduct of this review would not have been possible without the efficient and professional support of the Australian Government Department of Education and its officers throughout Australia and overseas.

ACARA provided a range of material and engaged in consultation with us and we thank them for their cooperation.

We also thank officers of the UK Department for Education for sharing the experiences of the recent review of the national curriculum in England, and arranging interviews with key stakeholders and experts. Our thanks also to go to the officials of the OECD for a range of relevant material and advice on international experience.

Most of all we express our gratitude for the highly efficient and professional services of the secretariat for this Review, which included often going beyond the call of duty to meet our requests in the context of tight deadlines:

Head of Secretariat, Mr Tim Kinder

Members of the Curriculum and Learning Branch, Schooling Group, Australian Government Department of Education

Appendix 1: Stakeholders who met with the reviewers

Organisations

Association of Independent Schools of New South Wales
Association of Independent Schools of South Australia
Association of Independent Schools of the Australian Capital Territory
Association of Independent Schools of the Northern Territory
Association of Independent Schools of Western Australia
Association of Parents and Friends of Australian Capital Territory Schools
Australian Association for the Teaching of English
Australian Association of Mathematics Teachers
Australian Capital Territory Board of Senior Secondary Studies
Australian Capital Territory Council of Parents and Citizens Associations
Australian Capital Territory Education and Training Directorate
Australian Chamber of Commerce and Industry
Australian Council of State School Organisations
Australian Curriculum, Assessment and Reporting Authority
Australian Curriculum Studies Association
Australian Education Union
Australian Geography Teachers Association
Australian Industry Group
Australian Parents Council
Australian Primary Principals Association
Australian Science Teachers Association
Australian Secondary Principals Association
Australian Special Education Principals Association
Board of Studies, Teaching and Educational Standards, New South Wales
Business Council of Australia
Catholic Education Commission, New South Wales
Catholic Education Commission of Victoria
Catholic Education Office, Archdiocese of Canberra and Goulburn
Catholic Education Office of Western Australia
Catholic Education in South Australia
Catholic School Parents Australia
Council of Catholic School Parents New South Wales/Australian Capital Territory
Federation of Catholic School Parent Communities
Federation of Parents and Citizens Associations of New South Wales
Federation of Parents and Friends Associations of Catholic Schools in Queensland
History Teachers' Association of Australia
Independent Education Union of Australia
Independent Schools Council of Australia
Independent Schools Queensland
Independent Schools Tasmania

Independent Schools Victoria
Isolated Children's Parents' Association of Australia
National Aboriginal and Torres Strait Islander Principals Association
National Catholic Education Commission
New South Wales Department of Education and Communities
New South Wales Parents Council
Northern Territory Board of Studies
Northern Territory Catholic Education Office
Northern Territory Council of Government School Organisations
Northern Territory Department of Education
Office of the Chief Scientist
P&Cs Queensland
Parents and Friends Federation of Western Australia
Parents Victoria
Queensland Catholic Education Commission
Queensland Department of Education, Training and Employment
Queensland Curriculum and Assessment Authority
Social and Citizenship Education Association of Australia
South Australia Association of School Parents Clubs
South Australian Certificate of Education (SACE) Board of South Australia
South Australia Department for Education and Child Development
Tasmanian Catholic Education Commission
Tasmanian Catholic Schools Parents Council
Tasmanian Department of Education
Tasmanian Qualifications Authority
Victorian Catholic Schools Parent Body
Victorian Curriculum and Assessment Authority
Victorian Department of Education and Early Childhood Development
Victorian Parents Council
Western Australian Council of State School Organisations
Western Australia Department of Education
Western Australia School Curriculum and Standards Authority

Individuals

Associate Professor Raymond Brown, School of Education and Professional Studies, Griffith University

Mr Chris Robinson, Chief Commissioner, Australian Skills Quality Authority

Mr Warren Mundine, Prime Ministers Indigenous Advisory Council

Mr Bruce Wilson, Review of Indigenous Education in the Northern Territory

Professor Lyn Yates, Faculty of Education, The University of Melbourne

Winthrop Professor David Andrich, Graduate School of Education, The University of Western Australia

Emeritus Professor John Sweller, School of Education, University of New South Wales

Professor Lester-Irabinna Rigney, Dean, Indigenous Education, The University of Adelaide

Appendix 2: International comparison of school curriculum features

	England
Curriculum aims	The objectives of the new National Curriculum in England are to promote the spiritual, moral, cultural, mental and physical development of students and society, and to prepare students for the opportunities, responsibilities and experiences of later life.
Curriculum structure	The National Curriculum is structured according to four Key Stages (KS) and 12 subjects. A Programme of Study (POS) is published for each subject. It outlines the matters, skills and processes that are to be taught in each KS.
General capabilities	The National Curriculum in England notes only two general capabilities that ought to be fostered across all learning areas. They are numeracy and mathematics, and language and literacy.
Stages versus years	Subjects are structured according to Key Stages in the national curriculum of England. KS1 corresponds to Years 1–2, KS2 to Years 3–6, KS3 to Years 7–9 and KS4 to Years 10–11.
Core curriculum	Maintained schools in England are required to follow the national curriculum. However, the National Curriculum forms only one part of the school curriculum. In England's National Curriculum there are 'core' subjects (English, mathematics and science) and 'foundation' subjects (see below).
Mandatory subjects	The 'core' subjects of English, mathematics and science are mandatory in KS1, 2, 3 and 4. All other subjects are 'foundation' subjects. Of the foundation subjects physical education and computing are also mandatory in KS1, 2, 3 and 4. Art and design, design and technology, geography, history and music are mandatory in KS1, 2 and 3. Citizenship is mandatory in KS3 and 4 and languages are mandatory in KS2 and 3 only. In addition to these subjects all schools are required to teach religious education in KS1, 2, 3 and 4. Secondary schools must also provide sex and relationship education in KS3 and 4.
Streaming	There are no provisions for formal streaming in the National Curriculum of England.
Assessment	Once the new National Curriculum in England comes into effect (September 2014), assessment will be conducted at the end of KS2 along with the General Certificate of Secondary Education. GCE Advanced Level (A level) qualification is used as the main assessment for university entrance. In addition to the above, the English Baccalaureate is conducted as a performance measure. It indicates whether students have attained a C grade or above across the subjects of English, mathematics, history or geography, the sciences and a language at KS4.
School inspections	School inspections in England are conducted by Ofsted. All inspections follow a framework and results are published on Ofsted's website. Inspections can vary with respect to the number of inspectors, the length of the inspection, the amount of notice provided, what happens during an inspection, and the content of the final report.

Sources: Department for Education, 2013, *The National Curriculum in England Framework Document*
Office for Standards in Education webpage, How Ofsted Inspects, www.ofsted.gov.uk/inspection-reports/how-ofsted-inspects [accessed 26/06/14]
Department for Education, English Baccalaureate: information for schools, Guidance, webpage www.gov.uk/english-baccalaureate-information-for-schools
Department for Education, 2014, Assessment, curriculum and qualifications: Research priorities and questions, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/315159/Assessment_curriculum_and_qualifications_research_priorities_and_questions.pdf

	Finland
Curriculum aims	The National Core Curriculum for Basic Education has an educational and instructional objective. Its educational objective is to offer students the chance to acquire a general education and to complete their educational obligations. Its instrumental objective is to act as a tool for the development of educational capital, and the enhancement of equality and the sense of community.
Curriculum structure	Attainment targets and subject content are specified by subject in the National Core Curriculum for Basic Education.
General capabilities	There are seven cross-curricular themes incorporated into all subjects. These are growth as a person; cultural identity and internationalism; media skills and communication; participatory citizenship and entrepreneurship; responsibility for the environment, well-being and a sustainable future; safety and traffic; and technology and the individual.
Stages versus years	Subject-specific content in the National Core Curriculum for Basic Education is set out according to stages. The stages vary according to subject; for example, Finnish is set out for grades 1–2, 3–6 and 7–9 whereas mathematics is set out for grades 1–2, 3–5 and 6–9.
Core curriculum	The National Core Curriculum for Basic Education specifies the objectives and core subject content for students aged 7 to 16. In addition to this, there is a core pre-primary curriculum for students aged 6 to 7 and a core upper-secondary curriculum for students aged 16 to 19.
Mandatory subjects	The core subjects of the Finnish basic education are mother tongue and literature, the second national language, foreign languages, environmental studies, health education, religious education or ethics, history, social studies, mathematics, physics, chemistry, biology, geography, physical education, music, art, crafts, and home economics.
Streaming	There is no streaming in Finland between the ages of 7 and 16. After completing their basic education, students will enter either upper-secondary school, or vocational and apprenticeship training.
Assessment	There are no national tests for pupils in basic education in Finland. Instead, teachers are responsible for assessment in their respective subjects on the basis of the objectives included in the curriculum. The only national examination is a matriculation exam at the end of general upper-secondary school. These results are used to determine students' placement in universities, polytechnics or vocational institutes.
School inspections	School inspections in Finland were abolished in the early 1990s. The focus is now on schools' self-evaluation and national evaluations of learning outcomes. National evaluations are carried out frequently and undertaken by a sample base.

Sources: Basic Education Act (Finland) 628/1998

Finnish National Board of Education, 2004, National Core Curriculum for Basic Education 2004, Finnish National Board of Education

Finnish National Board of Education 2003, National Core Curriculum for Upper Secondary Schools 2003, Finnish National Board of Education.

Ministry of Education et al. 2012, Finnish education in a nutshell, Education in Finland series, viewed 26 June 2014, can be accessed at:

http://www.minedu.fi/export/sites/default/OPM/Julkaisut/2013/liitteet/Finnish_education_in_a_nutshell.pdf

	Hong Kong, China
Curriculum aims	The overall educational aims in Hong Kong are identified as enabling students to learn how to learn and providing experiences for whole-person development in the domains of ethics, intellect, physical development, social skills and aesthetics.
Curriculum structure	Hong Kong's curriculum has three interconnected components: Key Learning Areas (KLAs), generic skills, and values and attitudes. The curriculum also contains different pathways, which enable a difference in the breadth and depth of content as well as pedagogical approach.
General capabilities	The curriculum in Hong Kong promotes nine 'generic skills', which are developed across all learning areas. The generic skills are collaboration, communication, creativity, critical thinking, information technology, numeracy, problem-solving, self-management, and study skills.
Stages versus years	Subject syllabuses in Hong Kong are structured according to Key Stages (KS). The KS cover the following year levels: KS1 (primary 1-3), KS2 (primary 4-6), KS3 (secondary 1-3), KS4 (secondary 4 and above).
Core curriculum	Hong Kong has a Basic Education Curriculum for primary 1 to secondary 3. All subjects in this curriculum are grouped into eight KLAs: Chinese; English; mathematics; personal, social and humanities; science; technology; art; and physical education.
Mandatory subjects	From primary 1 to secondary 3 all eight KLAs are mandatory. However, in primary 1 to primary 6 three KLAs (science; personal, social and humanities; and technology) are grouped into one subject 'General Studies for Primary Schools'.
Streaming	Education in Hong Kong is guided by the principle 'one curriculum framework for all'. As such, while provisions are made for gifted and special education needs students, there is no streaming.
Assessment	In Hong Kong there are internal and external assessments. Teachers may conduct internal tests and exams for the purpose of student assessment. Hong Kong Examinations and Assessment Authority (HKEAA) provides online material to assist in this process. The Territory-wide System Assessment (TSA) is an external examination. The TSA provides schools with data on student attainment in the areas of Chinese language, English language, and mathematics. The purpose of the TSA is to assist schools in improving their teaching and learning plans. The results of individual students in the TSA are not made available. HKEAA also administers the Hong Kong Diploma of Secondary Education, which is undertaken at the completion of secondary education. The results of this exam may be used for admission into higher education institutes.
School inspections	Hong Kong's Education Bureau conducts school inspections. These inspections complement a self-evaluation process undertaken by schools. For primary and secondary schools, inspections focus on specific KLAs and aspects of the school's work.

Sources: Education Bureau, The government of the Hong Kong Special Administrative Region n.d., Curriculum Development, viewed 26 June 2014, can be accessed at: <http://www.edb.gov.hk/en/curriculum-development/list-page.html>
 Education Bureau, The government of the Hong Kong Special Administrative Region n.d., Quality Assurance Inspection, Education Bureau, viewed 26 June 2014. Can be accessed at <http://www.edb.gov.hk/en/sch-admin/sch-quality-assurance/quality-assurance-framework/qa-insp/index.html>
 OECD 2011, 'Shanghai and Hong Kong: Two Distinct Examples of Education Reform in China' in OECD, Lessons from PISA for the United States, OECD Publishing.

	Ontario, Canada
Curriculum aims	To support high-quality learning, to give every student the opportunity to learn in the way that is best suited to their strengths and weaknesses, and to choose programmes that suit their skills and interests.
Curriculum structure	The Ontario Curriculum is a collection of subject syllabuses that contain subject aims, content (including skills, knowledge and values), and learning objectives. Some subject syllabuses also contain overarching 'curriculum expectations'.
General capabilities	Some capabilities are emphasised in the subject syllabuses; for example, literacy along with communication skills, critical thinking, social skills and aesthetic appreciation are emphasised in the English secondary curriculum. However, there are no provisions for teaching set general capabilities throughout the Ontario Curriculum.
Stages versus years	Subject syllabuses in the Ontario Curriculum (primary and secondary) are structured according to year levels.
Core curriculum	All publicly-funded schools in Ontario offer the same core curriculum and program. However, many schools offer special additional programs such as English as a second language, international language, or French immersion programs.
Mandatory subjects	In order to graduate from secondary school in Ontario, students must earn 30 credits. 18 of these credits are called 'compulsory credits'. Most of these 18 credits must come from each of the following subjects: English or French, mathematics, science, Canadian history, Canadian geography, art, health and physical education, civics, and career studies. The remainder of the 18 credits must come from one subject in each of the following groups: (1) an additional English, a language other than English or French, a social science/humanities, additional Canadian and world studies, native studies, guidance and career education, or cooperative; (2) business studies, an additional health and physical education, an additional art, French as a second language, cooperative education; (3) an additional science, technological education, French as a second language, computer studies, cooperative education.
Streaming	There are no provisions for formal streaming in the Ontario Curriculum.
Assessment	The Ministry of Education provides Provincial Report Cards for school-based assessment. These are used in Years 1–12 and should reflect students' attainment of the curriculum. They are completed by teachers against the achievement standards provided in the Ontario Curriculum. The Education Quality and Accountability Office (EQAO) administers a provincial-wide assessment in Ontario which involves the assessment of reading, writing and mathematics in the primary division (grades 1–3) and the junior division (grades 4–6), mathematics in grade 9, and the Ontario Secondary School Literacy Test in grades 10 and above. Students also undertake the national Pan-Canadian Assessment Programme (PCAP) which assesses the reading, maths and science skills of students aged 13 to 16.
School inspections	The major transparency and accountability measure in the Ontario education system is the School Board Progress Report. Each year the Ministry of Education reports on the progress of school boards across ten criteria collected from assessments administered by the EQAO. The 10 criteria are: <ul style="list-style-type: none"> • reading results in Year 6, along with progress in this area • literacy results in Year 10, along with progress in this area • the percentage of students who have completed 16 credits or more by the end of Year 10, along with progress in this area • the percentage of students who have completed 23 credits or more by the end of Year 11, along with progress in this area • the percentage of primary classes with 20 or fewer students, along with progress in this area.

Sources: Ontario Ministry of Education 2010, *Growing Success: Assessment, Evaluation and Reporting in Ontario Schools*, 1st edition, Ontario Ministry of Education, viewed 27 June 2014, can be accessed at: <http://www.edu.gov.on.ca/eng/policyfunding/growSuccess.pdf>
 Ontario Ministry of Education, 2011, *School Board Progress Reports*, Ontario Ministry of Education, viewed 27 June 2014, can be accessed at: <http://www.edu.gov.on.ca/eng/bpr/faq.html>
 Ontario Ministry of Education 2011, *Curriculum*, viewed 27 June 2014, can be accessed at: <http://www.edu.gov.on.ca/eng/teachers/curriculum.html>

	Republic of Korea (also known as South Korea)
Curriculum aims	Education in the Republic of Korea aims to assist every citizen in building up one's character based on humanitarianism, to manage a humane life by developing autonomous life skills and the qualifications needed as a democratic citizen, and to contribute to the development of a democratic country and realise the public idealism of humankind.
Curriculum structure	The national curriculum determines general standards for the local community and school level curriculum. It is divided into a general introductory section, which includes the Direction of Curriculum Design; Educational Goals by School Level; Organisation of the Curriculum and Time Allocation; Guidelines for the Formulation and Implementation of the Curriculum; and an explanatory section which describes the curriculum in detail by subject.
General capabilities	The national curriculum framework identifies some general capabilities such as problem-solving, creativity, social skills, and critical thinking. However, they appear only under the general educational goals for each level of school.
Stages versus years	Subject syllabuses are structured according to year levels.
Core curriculum	The national school curriculum consists of the Basic Common Curriculum (which covers 10 years from the first year of elementary school through the first year of high school) and the Selected Curriculum at the high school level. The national curriculum, along with regional guidelines accord flexibility to individual schools in accordance with the particular characteristics and objectives of each school.
Mandatory subjects	Elementary and middle school are compulsory. Mandatory subjects include Korean language, social studies/moral education, mathematics, science/practical course, physical education, arts (music/fine arts) and English. The curriculum for first and second grade is structured differently – into Korean language, mathematics, disciplined life, intelligent life and pleasant Life, as well as 'We are the first graders' in first year. In high school, students must take 10 mandatory subjects in Year 10, comprising Korean language, ethics, social studies (including Korean history), mathematics, science, technology and home economics, physical education, music, fine arts, and English; however, they are able to select their own subjects in Years 11 and 12.
Streaming	High schools are divided into general/academic, vocational, and special purpose (foreign language, art, and science) high schools. Admittance into high school is, for the most part, based on each student's educational attainment level in middle school. General high schools offer the national basic curriculum, in which there are general and advanced courses for most subjects.
Assessment	Students undertake school-based testing at all year levels. All students in Years 6, 9 and 10 also undertake a national test in two subjects. These tests are known as the National Assessment of Educational Achievement and are used for informational purposes. The Republic of Korea also has an Admissions Officer System, which assesses students' skills, potential, aptitudes and character. This system is designed to move away from the selection of students for college based on test scores alone. However, students are also required to take a College Scholastic Ability Test.
School inspections	Schools are inspected by external monitoring groups. Inspections are based on the Ministry of Education's evaluation plan, which includes the assessment of teaching and learning practices, curriculum, and student needs. The results of inspections are publicly available.

Sources: Lee, K 2014, Competency Based Curriculum and Curriculum Autonomy in Korea, IBE Working Papers on Curriculum, no. 12, UNESCO International Bureau of Education.

Ministry of Education, Republic of Korea n.d, Overview, Ministry of Education, viewed 27 June 2014, can be accessed at: http://english.moe.go.kr/web/1693/site/contents/en/en_0203.jsp

Ministry of Education, Republic of Korea n.d, Secondary Education, Ministry of Education, viewed 27 June 2014, can be accessed at: http://english.moe.go.kr/web/1696/site/contents/en/en_0206.jsp

Ministry of Education, Science and Technology, Republic of Korea 2009, The School Curriculum of the Republic of Korea, Ministry of Education, Science and Technology.

	Shanghai, China
Curriculum aims	Education in China over the recent two decades has been guided by the fundamental principle that education should be oriented to modernisation, to the outside world, and to the future. In addition to responding to changing socioeconomic and cultural development contexts, the objectives of the national curriculum standards reflect the desired outcome for a 'qualities-oriented education'. This aims at all improvement of basic qualities of all learners for all-round development (moral, intellectual, physical and aesthetic education) and to lay the solid foundation for learning after school leaving and throughout life.
Curriculum structure	Shanghai's curriculum has three components: the basic curriculum, to be experienced by all students, mainly implemented through compulsory courses; the enriched curriculum, which aims to develop students' potential and is realised mainly through elective courses; and inquiry-based curriculum, which is mainly implemented through extracurricular activities. The inquiry-based curriculum asks students – backed up by support and guidance from teachers – to identify research topics based on their experiences. It is hoped that through independent learning and exploration, students can learn to learn, to think creatively and critically, to participate in social life and to promote social welfare.
General capabilities	Curriculum reform in Shanghai has seen a fundamental shift from one-sided focus on discipline-based 'basic knowledge' and narrowly defined 'basic skills' to three dimensions of curriculum content in the interest of holistic, all-round human development of the learners; namely, knowledge and skills, processes and approaches and affection/attitudes and values. The nationally-set curriculum aims to strengthen linkages of knowledge acquisition and skills development to learners' own life experiences and to actual social realities in developing creativity, innovative spirit and practice capabilities as key competencies of future Chinese citizens.
Stages versus years	The structure of the nationally-set curriculum is based on learners' physical-psychological development characteristics at different ages/grades. It is defined in terms of grades and level of education. For example, the mathematics curriculum is set at three levels respectively for Years 1–3, 4–6, and 7–9; Chinese language and literature at four levels for Years 1–2, 3–4, 5–6, and 7–9; and science at two levels for Years 3–6 and 7–9.
Core curriculum	The core curriculum covers eight domains of learning: language and literature, mathematics, natural sciences, social sciences, arts, skills (including ICT), sports and fitness, and integrated practical learning. The last domain comprises community service and other activities that serve to motivate students to engage with the community.
Mandatory subjects	The curriculum is divided into three broad subject categories: Foundational Subject, Expanded Subject and Inquiry/Research Subject. Foundational Subjects are standardised subjects that are compulsory for all students and cover the eight domains of learning. Expanded Subjects are intended to cater to the students' different interests and learning abilities as well as society's needs. There are two types of Expanded Subjects: Compulsory Expanded Subjects focus on real life application in society, while Elective Expanded Subjects centre on the various domains of learning such as language, sports and fitness and the arts. Inquiry/Research Subjects serve to help students to 'learn to learn', inspire them to learn and conduct research independently and apply what they have learnt in real life. It is known as Inquiry Subject from the primary to the junior secondary levels and as Research Subject at the senior secondary level.
Streaming	After completing junior secondary education, students take a locally administered entrance exam. Students who wish to continue their studies have the option to attend a regular senior secondary school or enter a vocational secondary school. Regular senior secondary schools usually offer three years of education. Graduates from senior secondary school education are admitted to a university after successfully completing a nation-wide entrance examination.

Assessment	Students receive formative assessments throughout their education. These typically take the form of year-end or term-end tests as well as casual assessment from teachers. They are also required to take graduation examinations at the end of primary, lower secondary and upper secondary school, in addition to the entrance examinations for the next level of schooling. These tests are formulated by the local education departments, and typically examine at least mathematics and Chinese language knowledge, though they can include other subjects. Students who hope to go on to university must also sit for a rigorous university entrance examination at the end of upper secondary school.
School inspections	<p>Teacher's capacity building has accompanied ongoing curriculum changes in China and Shanghai. Shanghai has a particularly strong approach to induction and the Shanghai Municipal Education Commission has policies around supporting new teachers in the system at the school and district level. In Shanghai's induction programs, beginning teachers learn from different teachers in different settings. They have multiple specialist mentors and learn from senior teachers in research and lesson groups. They model effective practice in demonstration lessons for group feedback and undertake research projects under mentor guidance.</p> <p>The Shanghai Municipal Education Commission is responsible for inspecting schools every three years based on both common measures and on the school's stated individual goals, taking into account research data and parent and teacher feedback. At the district level, monitoring systems for school leaders and teachers are in place through the mechanics of performativity such as league tables, appraisal meetings, the annual reviews, report writing, site visits, inspections and peer reviews.</p>

Sources: KPMG 2012, Education in China, KPMG, viewed 21 July 2014, can be accessed at:

<http://www.kpmg.de/docs/Education-in-China-201011.pdf>

Nanzhao, Z & Muju, Z 2007, Educational Reform and Curriculum Change in China: A Comparative Case Study, International Bureau of Education

OECD 2011, 'Shanghai and Hong Kong: Two Distinct Examples of Education Reform in China' in OECD, Lessons from PISA for the United States, OECD Publishing.

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	Singapore
Curriculum aims	<p>Singapore has desired outcomes of education (DOE), which are attributes that educators aspire for every Singaporean by the completion of formal education. DOE are different to learning outcomes as they outline the desired characteristics for students. In summary, Singapore articulates these as being a good sense of self-awareness, a sound moral compass, and the necessary skills and knowledge to take on challenges of the future; also, a sense of responsibility to family, community and the nation, and an appreciation of the beauty of the world, a healthy mind and body, and a zest for life. In sum, the Singaporean student is:</p> <ul style="list-style-type: none"> • a <u>confident</u> person who has a strong sense of right and wrong, is adaptable and resilient, knows them self, is discerning in judgment, thinks independently and critically, and communicates effectively • a <u>self-directed learner</u> who takes responsibility for their own learning, who questions, reflects and perseveres in the pursuit of learning • an <u>active contributor</u> who is able to work effectively in teams, exercises initiative, takes calculated risks, is innovative and strives for excellence • a <u>concerned citizen</u> who is rooted to Singapore, has a strong civic consciousness, is informed, and takes an active role in bettering the lives of others around them. <p>There are a further three sets of eight more detailed DOE: one for the end of primary, secondary and post-secondary education. Each syllabus within the curriculum also expresses the aims for learning in each subject area.</p>
Curriculum structure	The curriculum contains subject syllabuses which specify content, learning outcomes, concepts, values and attitudes. The subject syllabuses form the content-based component of the curriculum. They are complemented by life and knowledge skills, which run throughout all subject syllabuses for primary and secondary education.
General capabilities	The curriculum includes a framework for 21 st century competencies. The inner circle of this framework contains values that define a person's character. The middle circle contains social and emotional competencies. The outer circle contains general capabilities: civic literacy, global awareness and cross-cultural skills; critical and inventive thinking; and communication, collaboration and information skills.
Stages versus years	The learning objectives in the subject syllabuses are typically structured by stages. For example, primary 1–2, primary 3–4, primary 5–6. The scope of stages differs between subjects.
Core curriculum	All students in Singapore are required to complete six years of primary education. During this phase, all students follow a broad-based curriculum. In the secondary phase of education streaming occurs (see below). As such there is no one core secondary curriculum.
Mandatory subjects	The subjects that are examined in the Primary School Leaving Examination (PSLE) are English, mother tongue, mathematics and science. Each of these subjects is offered in the 'standard' and 'foundation' stream. Higher mother tongue is an optional subject that is also examinable. In addition to these subjects, students also take non-examinable subjects: co-curricular activities, character and citizenship education, national education, program for active learning, physical education and values in action. The combination of subjects and streams taken by each student is decided by parents with advice from teachers.

Streaming	Streaming occurs after the primary phase. Students (aged 12) sit the PSLE, which determines the stream that each student will take. The streams are secondary express course, secondary normal academic course, and secondary normal technical course. (Students may also enter specialised independent schools or private schools.) While there is a natural progression from each course into a particular form of further education, there are pathways that enable students to attain different levels of learning regardless of their stream.
Assessment	Teachers conduct assessments of their students at each year level. At the end of primary school, all students take the PSLE. This examination is used to determine each student's placement in a lower-secondary school and within a particular stream. After four years of lower-secondary school, students take the Cambridge GCE O- or N-level examination. This exam determines each student's placement and stream for their upper-secondary education. Students who enter a pre-university stream of upper-secondary education will take the Cambridge General Certificate of Advanced Level (A level) to determine their university entrance.
School inspections	In Singapore, the old school inspection system was replaced with an accountability measure known as the School Excellence Model (SEM). In addition to external validation, the SEM aims to enable schools to objectively measure their strengths and weaknesses. It also enables schools to benchmark themselves against other schools thereby promoting improvement.

Sources: Keat, H S 2012, Keynote Address, Ministry of Education Work Plan Seminar, 12 September 2012, Ministry of Education, Singapore, viewed 25 June 2014, can be accessed at: <http://www.moe.gov.sg/media/speeches/2012/09/12/keynote-address-by-mr-heng-swee-keat-at-wps-2012.php>
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Appendix 3: Overview of education systems and curriculum provision across Australia

Ages of compulsory school attendance	<p>The age at which schooling becomes compulsory is six years in all states and territories, except Tasmania, where it is five years.</p> <p>The National Youth Participation Requirement includes the mandatory requirement for all young people to participate in schooling until they complete Year 10, and to participate full time in education, training or employment, or a combination of these activities, until the age of 17.</p>
Length of school day	<p>The length of the school day is generally set at a school level, depending on locally-based factors. Some jurisdictions do provide guidance on school hours of operation. In Queensland most schools hold classes from 9 am to 3 pm, in the Northern Territory most schools are open from 8 am to 2.30 pm, and in Victoria most schools are open between 8.30 am and 3.30 pm, and schools must provide a minimum of 25 hours of instruction time per week.</p>
No. days in school year	<p>In Australia in 2014 there will be about 39 weeks of tuition, though will vary by a few days per year across jurisdictions.</p>
How is the Australian Curriculum presented?	<p>Most jurisdictions – the Australian Capital Territory, the Northern Territory, Queensland, South Australia and Tasmania – have adopted the Australian Curriculum as published by ACARA as the primary source from which schools develop learning programs and lesson plans appropriate for their students.</p> <p>New South Wales and Victoria have adapted Australian Curriculum content to incorporate it into their existing curriculum structures. For example, the Australian Curriculum endorsed to date has been adapted for incorporation into the New South Wales' Foundation–10 syllabus. In the syllabuses the mandatory Australian Curriculum content descriptions have been supplemented with additional explication for teachers, as well as additional content direction. The syllabus is also presented in a two-year stage structure and not the single year structure developed by ACARA.</p> <p>Victoria has incorporated the Australian Curriculum F–10 for English, mathematics, history and science within its existing AusVELS curriculum framework. It states on its website that AusVELS uses an 11-level structure to reflect the design of the new Australian Curriculum while retaining Victorian priorities and approaches to teaching and learning.</p> <p>Western Australia has adopted the Australian Curriculum for the phase 1 learning areas of English, mathematics, science and history; however, indicated in its submission to the Review of the Australian Curriculum that the curriculum for phases 2 and 3 is 'not suitable for implementation' in its current form, and will be subject to revision in that jurisdiction.</p> <p>All jurisdictions are continuing to use existing state and territory curricula and syllabus documents for learning areas that have not, as yet, finalised comparable Australian Curriculum.</p> <p>States and territories have agreed to endorse the senior secondary (Years 11 and 12), as the agreed and common base for the development of state and territory senior secondary courses.</p>

Accessing Australian Curriculum content	<p>ACARA publishes all curriculum documents on the Australian Curriculum website.</p> <p>The way that school curriculums are presented, and therefore how Australian Curriculum content is presented to students, parents, teachers and the community across state and territory websites, varies considerably.</p> <p>In New South Australian curriculum content is accessed directly from the BOSTES website through the framework of New South Wales' F–10 syllabuses. Victoria presents Australian Curriculum content through the AusVELS framework on the Victorian Curriculum and Assessment Authority website.</p> <p>The websites for Tasmanian Department of Education and the South Australian Department for Education and Child Development provide their own contextual information about the Australian Curriculum and its implementation. However, they link directly to the ACARA website for users to access Australian Curriculum content, where finalised.</p>
School registration and review processes	<p>Non-government schools are required to undergo a process of registration and/or accreditation in all states and territories. South Australia and Victoria also register government schools.</p> <p>These registration and/or accreditation processes ensure schools meet minimum standards in providing a safe and supportive learning environment and quality learning programs.</p> <p>Most state and territory authorities explicitly require registered/accredited schools to teach the approved curriculum. Some states and territories, such as the Northern Territory, require detailed evidence that registered schools are teaching the curriculum, including:</p> <ul style="list-style-type: none"> • descriptions of the curriculum to be used across stages of schooling • a sample of a whole-school curriculum plan showing how scope and sequence of content across the key learning areas will be recorded • a sample of a classroom teaching and learning plan • a description of how curriculum planning will occur at the whole school and class level. <p>Queensland, on the other hand requires that schools provide 'curriculum overview; written educational program; co-curricular and extra curriculum programs' to show that they are teaching to a standard where students can 'achieve Queensland standards of learning or standards of learning comparable to Queensland standards'.</p> <p>The procedures put in place by registration authorities to review whether schools comply with registration requirements vary across Australia. These review regimes typically consist of a combination of school self-assessments, external audits of available evidence that schools are complying with registration requirements, and/or site visits by inspectors.</p> <p>Site visits are typically conducted as part of the initial registration of a school. Following a school's registration, site visits can take place according to an agreed schedule, at random or if the registering authority has reason to understand that schools may not be complying with registration requirements.</p> <p>Although government schools are not registered in most jurisdictions, state and territories may have regular compliance and review processes for them.</p> <p>The New South Wales Minister for Education announced in May 2014 that government schools will be independently verified that they meet the standards for the registration of</p>

	<p>non-government schools by the end of 2015.</p> <p>Although Queensland does not register or accredit government schools, it has introduced Teaching and Learning Audits for every government school to provide feedback on how the school is performing and to inform school planning processes. Teaching and Learning Audits are usually carried out every four years or following the appointment of a new school principal.</p> <p>The Department of Education in Western Australia has a school audit program, whereby all schools are subjected to an audit process each year by either an audit by in-house auditors (approximately 25 per cent of all schools) or by Control Self Assessment (CSA) (approximately 75 per cent of schools).</p>
Reporting	<p>The ACARA website, My School, reports the following annually-updated information on all schools across Australia:</p> <ul style="list-style-type: none"> • a short description of the school • school facts that include information about school sector, type and total enrolments • numbers of teaching and non-teaching staff • a summary of school financial information • a link to the school's website and, where applicable, a link to the website of the school sector or system to which the school belongs • school-level data about students' backgrounds • the school's value on the ICSEA • student enrolments and attendance • senior secondary school outcomes • a summary of student enrolment numbers in vocational education and training (VET) courses and school-based apprenticeships and traineeships. <p>All schools in Australia are also required to develop, implement, publish and review a school improvement plan in accordance with regulations under the Australian Education Act. The school improvement plan must contain:</p> <ul style="list-style-type: none"> • contextual information about the school including characteristics of the students at the school • teacher standards and qualifications • workforce composition, including Aboriginal and Torres Strait Islander peoples • student attendance at school • students results in NAP annual assessments • parent, student and teacher satisfaction with the school, including (if applicable) data collected using the National School Opinion Survey • school income broken down by funding source • (for a school that provides secondary education) senior secondary outcomes, including the percentage of Year 12 students undertaking vocational training or training in a trade; and the percentage of Year 12 students attaining a Year 12 certificate or equivalent vocational education, as well as post school destinations. <p>In addition, jurisdictions have their own performance improvement frameworks and reporting regimes that may require schools to report additional information. For example, in Queensland, all schools are to include in their annual report information such as:</p> <ul style="list-style-type: none"> • distinctive curriculum offerings • extracurricular activities – descriptions of the activities should be provided, particularly those that involve a significant number of students • the social climate of the school, including pastoral care programs and strategies to respond to bullying • strategies used for involving parents in their child's education

	<ul style="list-style-type: none">the title of a school-based contact person for further information on the school and its policies.																		
Teacher registration	<p>There is a nationally consistent approach to teacher registration across Australia, although the timing and process for renewal of registration differs between jurisdictions. The nationally consistent approach includes a set of elements common to the registration processes and requirements of each state and territory within Australia. The elements include the initial period of registration, fixed period of registration, alternative authorisation to teach, discipline and de-registration, suitability, qualifications, English language proficiency and mutual recognition.</p> <p>Following a period of initial registration for a graduate teacher, teachers can be fully registered for a period of up to five years, provided they meet certain requirements, such as:</p> <ul style="list-style-type: none">appropriate tertiary qualificationsproficiency against the Australian Professional Standards for Teachers has been maintainedundertaken specified amounts of professional development (the equivalent of 20 hours per year)undertaken specified amounts of professional practice (the equivalent of 20 days per year).																		
Nature of reporting to parents	<p>Australian Government legislation requires that all schools report to parents twice per year using a five-point scale, reported as A, B, C, D or E (or on an equivalent five-point scale) for each subject studied, clearly defined against specific learning standards.</p> <p>The method for assessing and reporting against this scale can vary between jurisdictions.</p> <p>In its submission to the Review of the Australian Curriculum, BOSTES NSW states that in the Australian Curriculum F–10:</p> <p><i>the achievement standards are presented through a model where C represents the very broad centre of a normal range of achievement against the standard. This approach has been adopted by most jurisdictions. The New South Wales’ assessment and reporting model, however, does not align directly with ACARA’s model. In the New South Wales standards-referenced approach, A to E grades are awarded against course performance descriptors; there is no assumed distribution of grades for any year level.</i></p> <p>Descriptors attached to the A to E scale differ between jurisdictions. For example, a comparison of descriptors for A to E reporting for Tasmania and South Australia follows:</p> <table><tr><th></th><th>Tasmania</th><th>South Australia</th></tr><tr><td>A</td><td>Indicates that a student is performing well above the standard expected</td><td>Your child is demonstrating excellent achievement of what is expected at this year level</td></tr><tr><td>B</td><td>Indicates that a student is performing above the standard expected.</td><td>Your child is demonstrating good achievement of what is expected at this year level</td></tr><tr><td>C</td><td>Indicates that a student is performing at the standard expected</td><td>Your child is demonstrating satisfactory achievement of what is expected at this year level</td></tr><tr><td>D</td><td>Indicates that a student is approaching the standard expected</td><td>Your child is demonstrating partial achievement of what is expected at this year level</td></tr><tr><td>E</td><td>Indicates that a student is performing below the standard expected.</td><td>Your child is demonstrating minimal achievement of what is expected at this year level</td></tr></table>		Tasmania	South Australia	A	Indicates that a student is performing well above the standard expected	Your child is demonstrating excellent achievement of what is expected at this year level	B	Indicates that a student is performing above the standard expected.	Your child is demonstrating good achievement of what is expected at this year level	C	Indicates that a student is performing at the standard expected	Your child is demonstrating satisfactory achievement of what is expected at this year level	D	Indicates that a student is approaching the standard expected	Your child is demonstrating partial achievement of what is expected at this year level	E	Indicates that a student is performing below the standard expected.	Your child is demonstrating minimal achievement of what is expected at this year level
	Tasmania	South Australia																	
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C	Indicates that a student is performing at the standard expected	Your child is demonstrating satisfactory achievement of what is expected at this year level																	
D	Indicates that a student is approaching the standard expected	Your child is demonstrating partial achievement of what is expected at this year level																	
E	Indicates that a student is performing below the standard expected.	Your child is demonstrating minimal achievement of what is expected at this year level																	

	<p>For students in Years 1 and 2, Queensland uses the five-point scale of 'very high', 'high', 'sound', 'developing' and 'support required' to explain students' understanding of required concepts, facts and procedures.</p> <p>In addition to A to E reporting, each jurisdiction can have their own requirements for reporting to parents. Victoria, for example, has mandatory additional requirements for student report cards including:</p> <ul style="list-style-type: none"> • a graphical representation that shows achievement against the expected AusVELS during the reporting period, as well as achievement in the preceding 12 months (i.e. where the child was placed against expected standards in their previous year of school compared to their current achievement) • a graphical representation to show a child's work habits (effort and behaviour in class) • written information about what a child knows and can do, where the child may need additional support or to be extended, how the school will provide that assistance and what parents can do at home to help their child's learning • student involvement in reporting through student comment and in secondary school, student identification of their own personal learning goals • parental involvement in reporting through parent comment • details of absences.
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Acronyms and abbreviations

AACS	Australian Association of Christian Schools
AAMT	Australian Association of Mathematics Teachers
AARE	Australian Association for Religious Education
AATE	Australian Association for the Teaching of English
ACARA	Australian Curriculum, Assessment and Reporting Authority
ACHPER	Australian Council for Health, Physical Education and Recreation
ACS	Australian Computer Society
ACSA	Australian Curriculum Studies Association
ACSSO	Australian Council of State School Organisations
Adelaide Declaration	Adelaide Declaration on the National Goals for Schooling in the Twenty-First Century
AEYSOC	Australian Education, Early Childhood and Youth Affairs Senior Officials Committee
AEU	Australian Education Union
AITSL	Australian Institute for Teaching and School Leadership
AIG	Australian Industry Group
ALP	Australian Labor Party
ANAO	Australian National Audit Office
ANCD	Australian National Council on Drugs
AOD	Alcohol and Other Drug
APC	Australian Parents Council
APEC	Asia-Pacific Economic Co-operation
APPA	Australian Primary Principals Association
APTA	Australian Professional Teachers Association
ASDAN	Award Scheme Development and Accreditation Network
ASEPA	Australian Special Education Principals Association
ASIC	Australian Securities and Investments Commission

ASPA	Australian Secondary Principals Association
ASTA	Australian Science Teachers Association
AusVELS	Australian Curriculum in Victorian Essential Learning Standards
BOSTES NSW	Board of Studies, Teaching and Educational Standards, New South Wales
C2C	Curriculum into the Classroom
CCSS	Common Core State Standards
CDA	Children with Disability Australia
CDC	Curriculum Development Centre
CECV	Catholic Education Commission of Victoria
CEO	Chief Executive Officer
CENT	Catholic Education Northern Territory
CEOM	Catholic Education Office Melbourne
COS	Course of Study
CPA	Certified Practising Accountants
CRA	Criterion-Referenced Assessment
CSCNEPA	Curriculum Standing Committee of National Professional Associations (now known as the Australian Curriculum Coalition)
DOE	Desired Outcomes of Education
EQAO	Education Quality and Accountability Office
ERB	Education about Religions and Beliefs
ESA	Education Services Australia
ETA NSW	English Teachers Association New South Wales
GCE	General Certificate of Education
GCSE	Graduate Certificate of Secondary Education
GDP	Gross Domestic Product
HKEAA	Hong Kong Examinations and Assessment Authority
HSC	Higher School Certificate
HTAA	History Teachers' Association of Australia

ICPA	Isolated Children's Parents' Association
ICSEA	Index of Community Socio-Educational Advantage
ICT	information and communications technology
IEUA	Independent Education Union of Australia
ILO	International Labour Organization
IMF	International Monetary Fund
IPA	Institute of Public Affairs
ISCA	Independent Schools Council of Australia
IT	information technology
JMSS	John Monash Science School
KLA	key learning area
KS	Key Stage
LGBTI	lesbian, gay, bisexual, transgender and intersex
MANSW	Mathematical Association of New South Wales
Melbourne Declaration	Melbourne Declaration on Educational Goals for Young Australians
Ministerial Council	Currently known as Education Council, formerly the Standing Council for School Education and Early Childhood
MLA	Member of the Legislative Assembly
NAP	National Assessment Program
NAPLAN	National Assessment Program – Literacy and Numeracy
NCEC	National Catholic Education Commission
NRA	norm-referenced assessment
OBE	Outcome Based Education
OECD	Organisation for Economic Co-operation and Development
Ofsted	Office for Standards in Education, Children's Services and Skills (England)
PALS	Professional Association for Learning Support
PCAP	Pan-Canadian Assessment Program
P&C	parents and citizens

PETAA	Primary English Teaching Association Australia
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PSLE	Primary School Leaving Examination (Singapore)
QASEL	Queensland Association of Special Education Leaders
RE	religious education
REENA	Religions, Ethics and Education Network Australia
SBCD	school-based curriculum development
SEM	School Excellence Model (Singapore)
SOSE	Studies of Society and Environment
TALIS	Teaching and Learning International Survey
TIMSS	Trends in International Mathematics and Science Study
TSA	Territory-wide System Assessment
UNESCO	United Nations Educational, Scientific and Cultural Organization
UTAS	University of Tasmania
VCAA	Victorian Curriculum and Assessment Authority
VCTA	Victorian Commercial Teachers Association
VET	vocational education and training
VELS	Victorian Essential Learning Standards

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