A Comparison of the Change Process in States' and Territories' Implementation of the Australian Curriculum

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PREFACE

In 2011, I published a report titled *The Common Core State Standards Initiative: an Overview*. This report evaluated decision-making in the Common Core State Standards Initiative as the change process moved from research, development and diffusion activities to adoption of the standards by the states. Work on this report brought me into contact with key staff members of the National Governors Association Center for Best Practices, the Council of Chief State School Officers and state education agencies, who were involved with the Common Core State Standards Initiative.

As an Australian educational researcher, I am interested in comparing curriculum trends in the USA and Australia. In December 2010, the Australian Curriculum, Assessment and Reporting Authority released Phase One of the Australian Curriculum for the six states and two territories to implement within their jurisdictions. Between February 2010 and November 2011, 46 states and the District of Columbia adopted the Common Core State Standards, and then began implementing them within their jurisdictions. In 2015, I published a report titled *States' Implementation of the Common Core State Standards and the Australian Curriculum: a Comparison of the Change Process in Two Countries*, representing an attempt to apply a model of the implementation process based on a delivery framework to gauge the strength of each state's capacity to implement the Common Core State Standards or Phase One of the Australian Curriculum.

Early in 2017, I became interested in revisiting the topic of the implementation of the Australian Curriculum to identify the impact of Phases Two and Three, and investigate innovative attributes of processes and products of state-level implementation. The present report applies the same model of implementation based on a delivery framework to gauge the strength of states' and territories' capacities to implement the Australian Curriculum. The demands of such a task required assistance and advice from people working in the field.

I want to thank the following people for reviewing and commenting on draft profiles referring to their respective states and territories: Clare Byrne formerly of the Australian Capital Territory Department of Education and Training, Emily Ross formerly of the Queensland Curriculum and Assessment Authority and John Boustead of the Queensland Department of Education, Training and Employment, Elizabeth Banks, Susan Tolbert and Michelle Peck formerly of the Tasmania Department of Education, Craig Smith of the Victorian Curriculum and Assessment Authority, and Geoff Quinton formerly of the School Curriculum and Standards Authority in Western Australia. Prudence Greene and Elizabeth Williams of the New South Wales Department of Education provided electronic files to draft the profile on New South Wales.

I wish to acknowledge the contributions made by the following people with regard to particular aspects in the report. Nick Rodriguez of Delivery Associates and Laura Voyle of Inc. London are thanked for following up an inquiry about potential application of the delivery approach in Australian education systems. The Hon. James Merlino, Victoria's Minister for Education, is thanked for acknowledging that Victoria's Education State reforms are broadly consistent with a delivery approach.

BIOGRAPHICAL NOTE

Michael Watt taught in several secondary schools in Tasmania, and worked as an education officer in the Tasmania Department of Education. He holds masters' degrees in educational studies and education from the University of Tasmania, and a doctorate in education from the University of Canberra. He currently works as an education consultant.

ABSTRACT

The purpose of this study was to examine and compare key elements of the actions that states and territories are taking to implement the Australian Curriculum, and what innovative processes and products they are using to facilitate implementation. A rubric adapted from a diagnostic tool, developed by Achieve and the U.S. Education Delivery Institute, was used to analyse the strength of strategies employed by states and territories to implement the Australian Curriculum. The analysis of state-level implementation focused on the preliminary phase, 'organise to implement', and the first two implementation actions: 'align instructional practices'; and 'train educators'. Content analysis was used to analyse educational literature and research studies investigating state- and local-level implementation of the Australian Curriculum, and to describe and classify the strategies reported by eight Australian states and territories. The results showed that the strengths of states' and territories' capacities to implement the Australian Curriculum varied widely across the preliminary phase and the two implementation actions. The preliminary phase sets out a process for a state or territory to organise implementation based on seven building blocks: aspiration; internal leadership team; timeline; budget; gap analysis; guiding coalition; and communications. The capacity of states and territories was equal and strong for aspiration and internal leadership team, equal and moderate for timeline, equal and weak for budget, and varied from weak to moderate for gap analysis, guiding coalition and communications. Implementation action I sets out a process for a state or territory to disseminate aligned instructional practices to teachers by undertaking three critical actions: identify strategies to achieve success; understand how the strategies will be implemented through the field to the classroom; and connect strategies to expected outcomes. The capacity of states and territories ranged from moderate to strong for identifying strategies to achieve success and understanding how the strategies will be implemented through the field to the classroom, and weak for connecting strategies to expected outcomes. Implementation action II sets out a process for a state or territory to train teachers by undertaking three critical actions: identify strategies to achieve success; understand how the strategies will be implemented through the field to the classroom; and connect strategies to expected outcomes. The capacity of states and territories were strong for identifying strategies to achieve success and understanding how the strategies will be implemented through the field to the classroom, and ranged from weak to strong for connecting strategies to expected outcomes. The findings identified important implications for educational theory, research and practice relating to the four objectives of the study. First, planning, structuring and implementing decisions made during the change process were effective in producing a national curriculum that satisfied the expectations of most stakeholders. Second, each state and territory engaged with stakeholders on various strategies to align instructional practices to the Australian Curriculum and train educators to implement the Australian Curriculum. Third, states and territories showed some variation in the strength of plans for aligning instructional practices to the Australian Curriculum but little variation in the strength of plans for training educators to implement the Australian Curriculum. Fourth, there was no evidence that states and territories use delivery approaches, although several states have created new structures at the local level conducive to adoption of a delivery framework.

CHAPTER 1

INTRODUCTION

The purpose of this chapter is to indicate to the reader why research into the change process of implementing the Australian Curriculum is important for understanding which variables affect successful implementation of this national innovation. This topic is introduced by examining outcomes-based education, an antecedent of the innovation, to provide a basis for the reader to establish a connection to the development of national statements and profiles in Australia in the late 1980s and early 1990s. Then, the nature of policymaking involved in promoting the concept of a national curriculum in Australia in the mid-2000s is discussed in greater depth to provide the reader with an understanding of this movement. The Australian Curriculum is discussed in terms of its development over three phases, and its review in 2014. The key topic of this report, the implementation of the Australian Curriculum, is considered with reference to its monitoring and evaluation as well as the findings of studies examining various issues associated with its implementation. The rationale statement that follows presents the assumptions and goals guiding the selection and ordering of the objectives for the study.

Background to the innovation

The key principle of outcomes-based education of identifying outcomes, and then constructing a curriculum to achieve them, provided a foundation for national curriculum collaboration in Australia. The adoption of corporate management approaches by education systems in Australia led to the incorporation of outcomes-based education as a significant assumption underpinning national curriculum collaboration, because policymakers viewed its key principle of delivering measurable outcomes to be compatible with the drive for economic reform. Its widespread acceptance in the education community was fostered by a consortium of national and state organisations sponsoring a visit to Australia by William Spady, a leading advocate of outcomes-based education, who conducted a series of workshops in Canberra, Sydney, Melbourne and Brisbane in September 1992.

Originating from a perceived need to rationalise curriculum planning among the Australian states and territories, the initiative to develop national statements and profiles through a process of national collaboration between 1988 and 1993, was based on assumptions and goals driving the broader agenda for educational reform during the 1980s. Marsh (1994) argued that the predominance of the Australian Government's agenda until 1993 led to the ascendancy of a corporate approach to managing the curriculum, which was characterised by subordinate groups, such as professional associations, school administrators and educators, carrying out key decisions made by superordinate groups, in particular, the Australian Education Council, its Curriculum and Assessment Committee, and the Curriculum Corporation.

The failure of the superordinate groups to consult the education community led to controversy over incorporation of an outcomes-based approach in the mathematics profile, an emphasis that perturbed mathematics educators. This controversy led a

group of mathematicians to lobby state politicians, which ultimately caused conservative ministers to block adoption of the national statements and profiles in July 1993. At its meeting in December 1993, the Australian Education Council approved a compromise motion to refer the national statements and profiles to the states and territories for endorsement, which ensured that a prescriptive national curriculum that overrode states' rights, was not adopted. Instead, the national statements and profiles formed a common foundation for the states and territories to develop curricula that met their particular needs.

The effects of global economic competition, poor student performances in international studies of educational achievement, achievement gaps between socioeconomic and ethnic groups, and the increasing diversity of state and territory curricula were important factors shaping the debate among policymakers about a national curriculum for Australia in the mid-2000s.

The agreement policymakers reached in Australia to develop a national curriculum can be traced back to initiatives undertaken to establish greater national consistency between education systems. Enactment of the Schools Assistance (Learning Together – Achievement through Choice and Opportunity) Act by the Australian Parliament in December 2004, introduced new requirements to achieve greater national consistency, which included introducing a National Assessment Program for literacy and numeracy administered in years 3, 5, 7 and 9, and sample assessments for science literacy in year 6, civics and citizenship in years 6 and 10, and information and communication technologies in years 6 and 10 administered over a three-year cycle.

In considering the need for greater national consistency in curriculum outcomes, the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) commissioned the Curriculum Corporation to survey the states and territories on their provision of curriculum. Reported by the Curriculum Corporation (2003), the findings of this study showed that the structure, bands and organisation of most curriculum documents were related to the national statements and profiles, but varied considerably in the extent, to which the content students should learn, was specified. After considering this report, MCEETYA agreed in July 2003 to develop statements of learning for English, Mathematics, Science, and Civics and Citizenship, and in May 2005, added Information and Communications Technologies. Approved by MCEETYA in August 2006, the statements of learning represented a shift to greater national consistency in the school curriculum.

In 2005, the Australian Government commissioned the Australian Council for Educational Research to investigate options for a single Australian Certificate of Education. In its report, the Australian Council for Educational Research (2006) recommended that a national standards body should identify essential content and develop achievement standards in core subjects, and award an Australian Certificate of Education. This recommendation led the Australian Government to commission the Australian Council for Educational Research in June 2006 to examine the common content, essential content and standards of achievement in English, mathematics, physics, chemistry and Australian history in curriculum documents used across Australia at the senior secondary level. The Australian Council for Educational Research (2007) found that the degree of consistency varied from

subject to subject, almost all essential content was represented in each curriculum document, and there was a high degree of consistency in assessing students' achievements. From this study, it was recommended that core content for each subject should be identified, and a set of national academic standards should be developed for the core content in each subject.

At an address to the National Press Club in January 2006, Prime Minister John Howard called for renewal of the teaching of Australian history in schools as a structured narrative to replace a fragmented stew of themes and issues. The Australian History Summit, convened by the Australian Government in August 2006, led to the development of a model curriculum framework for Australian history in years 3 to 10 and a guide for teaching Australian history as a subject in years 9 and 10. The proceedings of the Australian History Summit opened a wider debate among policymakers about the need for a common model curriculum. In the opening address at the conference of the History Teachers' Association of Australia held in October 2006, Julie Bishop, the Minister for Education, Science and Training, proposed that the approach used to develop a model curriculum for Australian history could be applied to develop a common model curriculum. She argued that a national board of studies, consisting of representatives from the states and territories, could use the best examples of state-level curricula to develop a model curriculum in other core subjects.

In October 2006, the Council for the Australian Federation established a committee of education officials to review cooperative federalism since adoption of the Adelaide Declaration on Schooling in April 1999. The report of the Council for the Australian Federation (2007) discussed major accomplishments of national collaboration, cited results in international studies of educational achievement, examined key challenges and priorities for developing a new statement on the future of schooling, outlined commitments to be incorporated into a new statement, and proposed an action plan. A new statement on the future of schooling should be based on seven commitments. High quality education is crucial to deliver equality of opportunity, meet changing workforce demands, deliver knowledge and skills for an information age, address environmental challenges, promote social cohesion, and prepare for global citizenship. Governments and education agencies need to build partnerships with parents, communities and businesses. Students need to progress from focusing on literacy and numeracy in the early years to the core disciplines through secondary school, and then onto skills to synthesise, create and apply new information across disciplines and a range of electives. The curriculum needs to be based on rigorous standards in the learning areas. Governments and education agencies need to provide professional standards, pre-service training and ongoing professional development, performance reviews and career opportunities for teachers. Governments and education agencies need to develop policies to provide equality of opportunities for different groups in society, improve transition through the levels of schooling, and provide the conditions necessary in schools to offer high quality education. Governments at the federal and state levels need to collaborate to encourage and share best practices in education.

The fourteen-point action plan focused on eight areas of activity. The states and territories should collaborate to set content and achievement standards in the core disciplines, provide flexibility for states, territories and local systems to implement the

standards, and broaden options in emerging areas of knowledge. The states and territories should develop a plan to assist schools assess students' performances and diagnose students' strengths and weaknesses in relation to national standards, ensure administration of high quality national tests and sample-based surveys, and apply targeted intervention strategies for schools, in which students are not meeting benchmarks. The states and territories should develop a plan to assist schools report clearly students' performances on national standards, establish three benchmark levels for national tests, and develop a schedule for public reporting of school performance. The states and territories should review school leadership programs across Australia and overseas to develop guidelines to promote best practices, and develop policies for rewarding high performing principals and teachers. The states and territories should cooperate in aligning teacher registration requirements with national professional standards, and develop a national approach for accrediting pre-service teacher education courses. The states and territories should identify impediments caused to schools by regulations, and shift funding agreements towards a performance focus. The states and territories should convene a biennial national forum to showcase innovative and excellent practices at the local level, and feature reforms recognised internationally.

Australian Curriculum

Governance

The action plan set out in the report of the Council for the Australian Federation (2007) provided the basis for the Australian Government to appoint a National Curriculum Board in April 2008, charged with developing a national curriculum for kindergarten to year 12. In June 2008, the National Curriculum Board convened a forum in Melbourne to consult stakeholders about directions to be taken in developing a national curriculum. In response to discussions at the forum, the National Curriculum Board released a discussion paper outlining the scope and structure for the proposed national curriculum. Following review of the discussion paper by stakeholders, the National Curriculum Board released three key documents to guide development of the Australian Curriculum.

In October 2008, the Council of Australian Governments agreed to establish the Australian Curriculum, Assessment and Reporting Authority (ACARA) to manage curriculum, assessment and reporting of student performance. Following this decision, the Australian Government introduced legislation into the Australian Parliament, which was enacted as the Australian Curriculum, Assessment and Reporting Authority Act in December 2008. The Act set up ACARA by providing governance through a thirteen-member board. In October 2008, MCEETYA appointed a subcommittee to develop a charter for ACARA, and provide advice on its budget, transition arrangements, and a nomination and appointment process. Based in Sydney, ACARA subsumed the National Curriculum Board's work in May 2009.

Curriculum Development Process

In 2012, ACARA published three key documents to guide the curriculum development process. The Australian Curriculum, Assessment and Reporting Authority (2012a) published a policy document, subsequently revised on three occasions, which outlines a rationale for the Australian Curriculum, philosophic positions underpinning the Australian Curriculum, and assumptions about the scope, dimensions, organisation of curriculum content, instruction and assessment. The Australian Curriculum, Assessment and Reporting Authority (2012b) published a guide, subsequently revised on five occasions, which outlines the phases of curriculum shaping, curriculum writing, preparation for implementation and curriculum monitoring, evaluation and review, criteria applied during the curriculum development process, and the roles and responsibilities of groups involved in the curriculum development process. The Australian Curriculum, Assessment and Reporting Authority (2013a) published a guide, subsequently revised on two occasions, which outlines design specifications to guide the development of the Australian Curriculum for foundation to year 12, and sets out the elements for foundation to year 10 and the senior secondary level. The process of curriculum development is discussed in terms of six considerations: the nature of the learner and learning; the whole curriculum; structural matters; inclusivity; general capabilities; and cross-curriculum priorities. Specifications are set out for organising the elements of the Australian Curriculum for foundation to year 10 and the senior secondary level.

The following roles of particular groups within the curriculum development process are delineated in these documents. The Board is responsible for policy decisions, approves the curriculum development process, and adopts curriculum documents. The Curriculum Committee makes operational decisions about the curriculum development process, and approves drafts and consultation procedures. The Secretariat manages learning area projects. The lead writer oversees the curriculum writers. Curriculum writers, consisting of two to four members for each band, are appointed by the Board on the basis of expertise in a learning area, curriculum development or teaching experience. Advisory panels, consisting of learning area or cross-curriculum experts, are drawn from universities, industry groups, education agencies and professional associations. In addition, a national teacher consultative panel, consisting of teachers selected from across Australia, reviews the drafts, and international experts are consulted to provide feedback.

The curriculum development process, which consists of four phases, is described in these documents. Curriculum shaping involves identification of key issues and production of a position paper, preparation of an initial shape paper, and production and adoption of a shape paper in each learning area. Curriculum writing involves development of a draft in each learning area according to directions outlined in the shape paper. First, the scope and sequence of what students are taught, are developed by the writing teams and reviewed by advisory panels, representatives of professional associations and curriculum experts. Second, the detail of what students are taught together with achievement standards are developed by the writing teams, and reviewed by the education community. Following revision based on feedback, each draft is reviewed by the Curriculum Committee prior to submission to the Board for approval. Implementation involves ACARA's staff diffusing and demonstrating the Australian Curriculum to representatives of state and territory education agencies, and Catholic and independent schools. Then, each of

these sectors determines the schedule for implementation, and provides teachers with support documents and professional development. Curriculum evaluation and review involves ACARA's staff determining the need for revision of the Australian Curriculum by consulting the education community, reviewing practices in other places, and considering alternative options for addressing relevant issues.

Structure

The Australian Curriculum is organised into discipline-based learning areas, general capabilities that can be developed across the curriculum, and cross-curriculum priorities structured into four bands: foundation to year 2; years 3 to 8; years 9 and 10; and years 11 and 12. Consisting of eight learning areas specified in the *Melbourne Declaration on Educational Goals for Young Australians*, the Australian Curriculum was developed over three phases. Consisting of English, Mathematics, Science and History, a subject of Humanities and Social Sciences, Phase One was adopted by MCEETYA in December 2010. Consisting of the Arts, Languages and Geography, a subject of Humanities and Social Sciences, Phase Two was partially completed before the Review of the Australian Curriculum. MCEETYA adopted Geography in May 2013 and Drama, a subject of the Arts, in July 2013. Consisting of Health and Physical Education, Technologies, and Economics and Business, and Civics and Citizenship, both subjects of Humanities and Social Sciences, Phase Three was partially completed before the Review of the Australian Curriculum.

Defined in the *Melbourne Declaration on Educational Goals for Young Australians*, the Australian Curriculum incorporates seven general capabilities: literacy; numeracy; information and communication capability; critical and creative thinking; personal and social capability; ethical understanding; and intercultural understanding. During 2010 and 2011, successive versions of the general capabilities were developed by writing teams with expertise in particular capabilities as advice for the learning area writing teams. In February 2011, draft general capabilities were developed in consultation with stakeholders. In June 2011, the draft general capabilities were released for a two-month public review. Feedback from respondents showed high levels of support for the general capabilities, but identified particular areas for revision. Work on revising the general capabilities continued until completion of all the learning areas. This work involved verification of the learning continua in schools, review of the materials as additional learning areas were developed and approved, and a review of the extent to which general capabilities have been addressed in the Australian Curriculum. Organised into six levels, the general capabilities are presented in learning continua describing knowledge, skills, behaviours and dispositions students can be expected to develop.

Identified in the *Melbourne Declaration on Educational Goals for Young Australians*, the Australian Curriculum also includes three cross-curriculum priorities: Aboriginal and Torres Strait Islander histories and cultures; Asia and Australia's engagement with Asia; and sustainability.

Review

In January 2014, Christopher Pyne, the Minister for Education, appointed Professor Kenneth Wiltshire and Dr Kevin Donnelly to review the Australian Curriculum. The reviewers commissioned 15 individuals and groups to analyse the subject matter of ten subjects, conducted meetings with organisations and individuals, and reviewed a range of documents, data and projects derived from national and international sources. Almost 1,600 public submissions were lodged on the Australian Government Department of Education's Students First website.

The reviewers contended that the Australian Curriculum emphasises utilitarian ends, 21st century learning, personalised learning, and equity and social justice. These intentions are reflected in the prominence of cross-curriculum priorities and general capabilities at the expense of subject disciplines. The perceptions of stakeholders varied about the concept of a national curriculum, and the extent to which it would be mandatory. Furthermore, the developmental process was unclear to many stakeholders, the quality of the shaping documents varied, the general capabilities were developed separately from the content of the learning areas, the debate about a rationale for the Australian Curriculum was inadequate, and an iterative process was followed in each learning area. The introduction of discipline-based content into the early years, and incorporation of the cross-curriculum priorities across the whole curriculum were seen as major design faults by many stakeholders. The results of the analysis of the Australian Curriculum in terms of its robustness, independence and balance were mixed. The benchmarking studies, which were reported by the Australian Government Department of Education (2014), showed that English, History, the Arts, and Economics and Business were lacking rigour, independence and balance in many aspects. Based on an analysis of the submissions, feedback from the meetings and the reports of the subject matter specialists, the reviewers presented recommendations for revising each learning area. The reviewers believed that a different governance structure was needed for ACARA to ensure that decision-making is based on educational expertise instead of policy considerations. The reviewers concluded that ACARA should be established as a company to ensure that board members are not acting as representatives.

Donnelly and Wiltshire (2014) presented 30 recommendations for reducing the subject matter, cross-curriculum priorities and general capabilities, informing parental engagement with the Australian Curriculum, improving accessibility for students with disabilities, rebalancing the emphasis placed on specific subject matter, and reforming ACARA's governance and functions. Concurrently, the Australian Government published a response to the review focusing on five themes: resolving the overcrowded curriculum; improving parental engagement around the curriculum; improving accessibility for all students; rebalancing the curriculum; and reviewing ACARA's governance.

In December 2014, the Education Council referred the recommendations relating to the first four themes to ACARA for advice, but deferred acting on the recommendations relating to ACARA's governance pending the findings of a legislative review. In March 2015, the Education Council approved actions ACARA proposed to address these recommendations.

Between March and May of 2015, ACARA engaged concurrently in various activities to address these recommendations. The Australian Curriculum, Assessment and

Reporting Authority (2015a) reported engaging simultaneously in using a panel of primary teachers to work with lead writers in drafting changes to content descriptions and achievement standards, consulting experts to strengthen the presence of phonics and phonemic awareness in the Australian Curriculum for English, and replacing the subjects of History, Geography, Civics and Citizenship, and Economics by a single Humanities and Social Sciences curriculum for foundation to years 6-7. The Students with Disability Advisory Group was consulted to determine the best approaches to improve accessibility for students with disabilities, and proposals were developed for improving accessibility. Discussions were held with a sample of teachers, curriculum directors and Education Services Australia staff to identify strategies to improve parental access to the Australian Curriculum, parent organisations were consulted to obtain feedback on possible actions, and proposals were developed to improve parental engagement with the Australian Curriculum.

Following completion of these activities, ACARA distributed the draft changes together with online surveys to key stakeholders for review. The Australian Curriculum, Assessment and Reporting Authority (2015b) reported that responses received from 98 individuals and 31 organisations to eight online surveys and from 24 written submissions were divergent. Although the manageability of the primary curriculum had improved, various views were expressed regarding the reductions ranging from disagreement that the number had been reduced to a concern that reduction could reduce clarity and affect learning progression. There was support for measures to strengthen phonics and phonemic awareness in English, and for the reorganisation of Humanities and Social Sciences.

Work on changes to reduce content in the Australian Curriculum and strengthen phonics and phonemic awareness in English, proposals to improve accessibility for students with disabilities, and proposals to improve parental engagement were approved by the Board in June 2015. In September 2015, the Education Council adopted the revised Australian Curriculum for English, Mathematics, Science, History, Geography and the Arts as well as Languages. In addition, the Education Council adopted Health and Physical Education, Technologies, and Economics and Business, and Civics and Citizenship, both subjects of Humanities and Social Sciences, comprising Phase Three of the Australian Curriculum. In December 2015, new materials to improve parental engagement with the Australian Curriculum were published for each band.

Monitoring and Evaluation

The process for monitoring and evaluating the effectiveness of the Australian Curriculum on an annual basis was designed in 2013. The Australian Curriculum, Assessment and Reporting Authority (2013b) described the monitoring and evaluation phase as separate sequential stages. Monitoring refers to identifying and reviewing feedback received from various sources about evaluating the effectiveness of the Australian Curriculum, and reporting these findings to the Board. As part of this process, state and territory education agencies, state and territory curriculum, assessment and certification boards, and Catholic and independent sectors are invited to submit information about the effectiveness of the Australian Curriculum. Data collected from these sources are compiled into a report, which is submitted to

the Board for identification of issues warranting formal evaluation. Evaluation refers to a process of reviewing and analysing data to determine what actions should be taken in response to an issue identified for evaluation. The scope of the issue determines the extent of the evaluation process in terms of its duration, consultation with the education community, and recommendations provided by a curriculum advisory group. An evaluation report, including recommendations for curricular revision, is prepared for the Board for consideration, followed by submission of any approved changes to the Australian Curriculum for adoption by the Education Council.

In 2014 and 2015, the monitoring process coincided with the Review of the Australian Curriculum. While the monitoring report in 2014 focused on the manageability of the Australian Curriculum at the primary level, the monitoring report in 2015 focused on activities undertaken to revise the Australian Curriculum. In contrast, monitoring activities, undertaken in 2016, occurred during a period of stability in the Australian Curriculum. Similarly, monitoring activities, undertaken in 2017, occurred during a period of stability in the Australian Curriculum, but were marked by the commencement of initiatives for the development of the second generation of the Australian Curriculum.

In April 2016, ACARA contacted stakeholders by letter seeking feedback about the implementation of the achievement standards and general capabilities. In addition to responses received from 17 organisations, the monitoring process was informed by a user survey referring to the Australian Curriculum website, a quantitative analysis of website usage, content analysis of interviews with a sample of stakeholders and feedback received through media channels. The Australian Curriculum, Assessment and Reporting Authority (2016) reported an overview of the implementation of the Australian Curriculum, an analysis of data on the use of the Australian Curriculum website, and an analysis of data submitted by stakeholders. The overview, represented in tabular format, showed that each learning area, general capabilities and cross-curriculum priorities were being implemented in each state and territory in ways that reflected their contexts. The analysis of stakeholder feedback, the user survey and interviews with a sample of stakeholders showed general satisfaction with the Australian Curriculum website, but suggestions were made about improvement regarding ease of navigation and print functionality. The analysis of data in relation to the achievement standards identified some negative comments about their holistic design, inconsistent structure and varied scope, but the general capabilities were valued for their capacity to complement the learning areas. Educators in schools reported requiring additional support to assist their understanding of the achievement standards and general capabilities.

In May 2017, ACARA contacted stakeholders by letter seeking feedback about implementation of the cross-curriculum priorities and support for student diversity. In addition to responses received from 17 organisations, the monitoring process was informed by interviews with officials from curriculum, assessment and certification boards in New South Wales, Victoria and Western Australia, a quantitative analysis of website usage, and content analysis of feedback received through media channels, from users and reviews of curriculum-related literature. The Australian Curriculum, Assessment and Reporting Authority (2018) reported an overview of the implementation of the Australian Curriculum, an analysis of data on the use of the

Australian Curriculum website, and an analysis of data submitted by stakeholders. The overview, represented in tabular format, showed that state-level implementation of the Australian Curriculum reflected modifications prevailing in New South Wales, Victoria and Western Australia. The analysis of stakeholder usage of the Australian Curriculum website showed an overall decrease in usage, particularly in Victoria and Western Australia, greater access to the Humanities and Social Sciences learning area than other learning areas, and increased access to the general capabilities, the cross-curriculum priorities and student diversity resources. The analysis of data submitted by stakeholders from 17 organisations focused on their perceptions about the cross-curriculum priorities, student diversity and the learning areas. The analysis of data relating to the learning areas also referred to feedback from media channels, users and reviews of curriculum-related literature. Some stakeholders reported on resources their organisations had developed to support instruction in the cross-curriculum priorities, but all stakeholders indicated the need for ACARA to produce additional resources for the cross-curriculum priorities. Stakeholders reported general satisfaction with student diversity materials presented on the Australian Curriculum website, but they also presented recommendations for improving these materials. For the English learning area, consideration may need to be given to increasing use of English as a global language. For the Mathematics learning area, consideration may need to be given to the organisation of conceptual understandings in fostering higher order thinking and creativity. For the Science learning area, a shift away from conceptual knowledge to a stronger focus on skills needs to be taken into account. For the Humanities and Social Sciences learning area, the importance of critical thinking, problem solving, analysing, collaborating and communicating skills need to be taken into account. For the Arts learning area, the importance of the arts curriculum in enhancing opportunities for inter-disciplinary, humanistic and cross-cultural competencies needs to be taken into account. For the Health and Physical Education learning area, consideration needs to be given to clearer identification of concepts and definitions within the learning area. For the Technologies learning area, the issues of the changing nature of employment with growing emphasis on soft skills and a continuing focus on science, technology, engineering and mathematics (STEM) education needs to be taken into account. For the Languages learning area, the importance of multilingualism as an integral part of communication, and intercultural interaction as an essential element for 21st century skills development needs to be taken into account. For the general capabilities, various efforts internationally to define the competencies that will develop the aptitudes and skills that young people will require for future study and work needs to be taken into account. For the cross-curriculum priorities, the importance of Indigenous systems of knowledge in transforming the curriculum and the development of an inclusive curriculum that inspires social justice, equity and intercultural understanding needs to be taken into account. For student diversity, the trend towards personalising student learning to meet the needs of diverse learners, occurring in the education systems of many countries, needs to be taken into account.

Policymaking Setting

Little attention has been paid by researchers to analysing shifts in policymaking arising from the development of the Australian Curriculum and its initial

implementation. Savage (2016) investigated how state policymakers were responding to the advent of the Australian Curriculum by interviewing officials from ACARA and state curriculum, assessment and certification boards in New South Wales, Queensland, Victoria and Western Australia. State officials reported that ACARA had stimulated the formation of new national policy networks and forms of inter-agency collaboration between states. On the other hand, state officials reported confusion about decision-making processes at the national level and concerns about ACARA's communications about the Australian Curriculum to schools, which contradicted communications generated at the state level. Furthermore, state officials from Queensland and Western Australia reported concerns that policymakers from the most populous states dominated the decision-making process. Savage concluded that the advent of ACARA and the Australian Curriculum has shifted curriculum policymaking through the creation of new formal and informal networks, which may reduce the role of state curriculum, assessment and certification boards to implementers.

Studies on Implementation

Few research findings referring to the implementation of the Australian Curriculum have been published. The following reviews of four articles and seven theses show that researchers are only beginning to give attention to specific factors that influence effective implementation of the Australian Curriculum.

Articles

Batiste, Walker and Smeed (2014) used a questionnaire to survey the perceptions of 69 teachers in a high school north of Brisbane, Queensland, about the principal's transformational leadership skills in implementing Phase One of the Australian Curriculum. Analysis of variance was used to test for significant differences in group means between mathematics, English and science teachers. Three multiple regressions were conducted to explore the extent to which teachers' perceptions of the principal's leadership predict their perceptions of the implementation of the Australian Curriculum. The results of the analysis of variance showed that there were significant differences between mathematics, English and science teachers in regards to leadership dimensions. The results of the regression analysis were significant for clarity and capacity, but not for complexity. The findings indicated that teachers with positive perceptions of the principal's leadership also had positive perceptions of their own capacity to implement the Australian Curriculum. Specifically, teachers, who perceived the principal as holding high expectations and providing intellectual stimulation, believed they had the capacity to successfully implement curriculum change.

Paynter and Bruce (2014) surveyed 115 teachers from 12 secondary schools by an online questionnaire to identify their perceptions about implementing the futures-oriented elements of the cross-curriculum priorities and general capabilities. The main finding to emerge from the study was that a large cohort of teachers perceived a high proportion of time was allocated to a futures-oriented approach and their students would achieve many of the futures-oriented goals by the end of year 10.

However, mathematics teachers felt that there was less opportunity to incorporate this area, and their current time allocations for futures-orientation were less than other subjects.

Lowe and Appleton (2015) used a questionnaire, interviews and observations to identify teachers' strategies for preparation and experiences with implementing the Australian Curriculum for Science in two regional primary schools in Queensland with a closer examination of six teachers and their instructional practices. For preparation, teachers in both schools were introduced to the Science curriculum in staff meetings and then expected to peruse the documents with little or no professional development. In implementing the Science curriculum, teachers relied on Curriculum into the Classroom materials and *Primary Connections: Linking Science with Literacy*, a program developed by the Australian Academy of Science, to link the teaching of science with the teaching of literacy in primary schools, with little evidence of change in instructional practices that reflected the science inquiry process.

Parkinson (2015) used autobiographical method to present an early-career teacher's account of implementing the Australian Curriculum in a remote school in the Northern Territory. At the time that implementation of the Australian Curriculum commenced, the school was beginning to achieve success with a dual-knowledge, transformational outcomes-based curriculum based on the Northern Territory Curriculum Framework. Implementation of the Australian Curriculum required a content-driven approach, inherent in the Australian Curriculum, to be integrated with an outcomes-based approach. The author found that the Australian Curriculum did not adapt easily to a multi-grade classroom, and difficulties were experienced in using an A to E assessment scale.

Theses

Dann (2016) investigated ways that the Australian Curriculum for Science provides impetus for curriculum change and instructional improvement, and to what extent such impetus influences changes in practice. The methodology for the study, which was conducted between July 2012 and February 2013, used case study research involving content analysis of policy and curriculum documents, selection of a sample of teachers, administration of a questionnaire and interviews, and classroom observations. A purposive sample of nine teachers was selected from three schools in the public, Catholic and independent sectors in regional Queensland. The public school had 14 staff and 250 pupils from foundation to year 7. The independent school had 14 full-time staff and 800 pupils on two campuses with the primary section having 400 pupils from foundation to year 6. The Catholic school had 28 staff and 680 pupils from foundation to year 7. A pre-test post-test design was used for administration of the questionnaire to the full staffs of the three schools before implementation of the Australian Curriculum and one year after its implementation. The questionnaire focused on the subjects' perspectives about curriculum reform and instructional practices in science. The Statistical Package for the Social Sciences was used to analyse the data to determine whether the means of the pre-test and the post-test differed significantly and whether there were statistically significant differences between schools. Semi-structured interviews, administered to

each school's principal, curriculum coordinator and nine teachers, focused on eliciting their views about planning and implementation practices. NVivo, a qualitative data analysis package, was used to combine practices by school, and compare similarities and differences in practices between schools. The researcher observed an initial planning session and two lessons presented by each of the nine teachers, and recorded field notes documenting teaching strategies and materials used by the teachers. The results for each school were reported by analysing the setting before implementation of the Australian Curriculum and one year after implementation. In the public school, planning and implementation of the Australian Curriculum for Science were superficial in meeting long-term requirements for effective instruction. Science had a low priority in the school and the teachers perceived professional development to be ineffective, although they believed they were well-prepared to teach the new curriculum. However, they did not use an inquiry-based approach, preferring to use a didactic approach. In the independent school, teachers demonstrated little positive change due to lack of planning and preparation. They were not offered school-based professional development, and relied on using *Primary Connections: Linking Science with Literacy* for instruction. In the Catholic school, a collaborative and capacity building process was used to develop teachers' knowledge and understanding of the new curriculum. They received more sustained professional development than teachers in the other schools, and their use of inquiry-based approaches was higher. The results of the study were discussed in relation to four research questions referring to the implementation of the Australian Curriculum: contextual factors; teachers' confidence; teachers' beliefs about science; and the impact of the implementation process. The capability of the school leadership to support teachers, planning and preparation including professional development, and use of high quality materials were influential contextual factors. Alternative perspectives teachers held about science and teachers' preparedness to teach the new science curriculum affected teachers' confidence. The level of professional development was influential in changing teachers' beliefs about science. Differences in implementation processes between schools, insufficient planning and preparation, the role of the principal, the level of teacher support and available time were important factors affecting effective implementation of the new curriculum. Discussion of the results led to eight findings for the study. Professional development and support provided at the state and school levels should be informed by current research, and resources provided to facilitate their provision. Materials provided during curriculum change must include professional development. Leadership priorities should include science, because leaders' priorities impact on teachers' priorities. Implementation of a new curriculum requires the school leadership to make decisions that have a positive and effective impact on developing teachers' understanding and skills. A science support person within schools can provide support on science teaching for generalist teachers. A realistic timeline for implementation should allow for development of understanding, professional development and acquisition of materials. Professional development should include effective instructional strategies for diverse learners. Decisions at government and school levels should be based on research and creative means to build vision, knowledge and practice at lower levels.

Evans (2016) investigated how teachers engage with, mediate and contextualise implementation of Phase One of the Australian Curriculum in terms of their instructional practice, perceptions of their professional capacity, and agency.

Conducted in a Lutheran independent school with 62 staff and 850 pupils located in a coastal region of Queensland, the study examined the engagement, mediation and negotiation practices of six teachers as they prepared to implement the Australian Curriculum. The methodology used case study research involving content analysis of the school's policy documents, interviewing three curriculum coordinators, and administering a pre-test post-test design to six teachers including a pre-preparation, semi-structured interview in October 2011, requiring the teachers to maintain field notes, and a post-preparation, semi-structured interview in March 2012. The data collected from the interviews and field notes were analysed by thematic analysis to produce codes. Then, the data were grouped into categories relating to four influences of self-efficacy: mastery experiences; vicarious experiences; social and visual cues; and psychological and emotional state. Subsequently, the coded data in each category were grouped into themes based on the incidence of an idea, comment or perception. The final step involved using axial coding to review the themes and codes. Analysis of the school's policy documents identified that the curriculum coordinators had prepared a PowerPoint presentation to introduce teachers to the Australian Curriculum at staff professional development days in January 2011, designed a timeline, conducted subject-based gap analyses, and developed an implementation plan. Interviews with the curriculum coordinators identified that they exercised considerable influence over the work activities of the participating teachers, had extensive experiences in managing education reforms, and believed their initial engagement with the Australian Curriculum was crucial to effective implementation. Implementation of the Australian Curriculum was characterised by early planning meetings providing time and support for the teachers to meet implementation requirements, flexibility in the leadership styles of the curriculum coordinators and instructional practices of the teachers, use of external support provided by the Queensland Studies Authority (QSA) and Independent Schools Queensland, and adaptation of ACARA's curriculum documents to meet the school's needs. Analysis of the school's policy documents showed evidence of relatively passive levels of teacher agency, and interviews with the curriculum coordinators identified that capable and competent teachers in their departments were viewed as critical for implementing the Australian Curriculum, that they used divergent approaches to managing change, and they believed it was important to provide an appropriate amount of time for teachers to engage with the innovation before implementation. Analysis of the data from the teachers' interviews and field notes examined four dominant themes: lived experiences; relationships with critical 'others'; cultural construct of place; and sense of self. The teachers' perceptions about their capacity to engage with the innovation were influenced by past engagement experiences, they had developed ritualised patterns of behaviour in response to engaging with previous workplace cultures and practices, and they developed an efficacy construct regarding the quality and nature of the innovation. The teachers' relationships with others were based on hierarchical authority. They agreed that the principal should make negotiation and mediation decisions about implementing the Australian Curriculum, the curriculum coordinators should establish structures and procedures that support their implementation requirements, and collegial relationships influenced their agency. The teachers' self-efficacy beliefs were influenced by an acknowledgement that the Australian Curriculum had been developed by experts using a robust process, a workplace culture in the school supported their preferred ways of engagement, differences between staff were managed effectively, availability and degree of reliance on textbooks and other

materials, and their capability to work within their fields of expertise. The teachers' sense of self was influenced by a desire to align the innovation to current practices, development of a sense of ownership of the implementation requirements, reflection on their personal attitudes towards change, the mandated nature of the innovation and its implications for implementation, issues causing resistance, preferred ways of working, need for professional learning, and status and stage of career. A typology of changes in teacher practices was developed from analysis of emergent themes of the study. First, teachers approach engagement with attitudes derived from previous experiences with reform. Second, teachers look at the school setting, school leaders and external environments to gain a sense of external attitudes towards reform. In mandated reform, they locate themselves as responsible for implementation. Third, leaders begin a process of auditing current practice with curriculum reform by undertaking a gap analysis. Fourth, teachers implement reform. As implementation unfolds, teachers undertake a process of review and reflection. New practices are more likely to replace previous practices as a consequence of evidenced successful implementation.

Rose (2016) investigated whether educators perceived that the quality of pre-service education and in-service professional development affected the implementation of Phase One of the Australian Curriculum. The methodology involved administering a questionnaire in August 2012 to survey educators from 1,073 independent schools across all states and territories, except New South Wales. Of 235 respondents, 48 percent were teachers, 14 percent were curriculum leaders, 12 percent were subject or faculty leaders, 17 percent were administrators and nine percent responded to other categories. Data collected from the respondents were analysed in relation to five research questions relating to pre-service education and in-service professional development. First, the proportion of respondents, perceiving their pre-service education was inadequate in providing knowledge and preparing them to enact on that knowledge in the classroom, varied across subjects. Content knowledge was rated as inadequate by 34 percent of mathematics teachers, 38 percent of English teachers, 45 percent of science teachers and 57 percent of history teachers. Enacting on the knowledge in the classroom was rated as inadequate by 45 percent of mathematics teachers, 46 percent of English teachers, 48 percent of science teachers and 51 percent of history teachers. Second, the proportion of respondents, perceiving their pre-service education and in-service professional development were inadequate in providing knowledge and skills for addressing differentiated instruction, varied across subjects. Although a high proportion of respondents - 71 percent of mathematics teachers, 66 percent of English teachers, 72 percent of science teachers and 74 percent of history teachers – reported that the knowledge and skills they received in pre-service education were inadequate, a lower proportion of respondents - 40 percent of mathematics teachers, 43 percent of English teachers, 57 percent of science teachers and 53 percent of history teachers - reported that the knowledge and skills they received in in-service professional development were inadequate. Third, a high proportion of respondents perceived their pre-service education was inadequate in preparing them to incorporate the literacy and numeracy capabilities into science and history. In science, 70 percent of respondents reported their pre-service education was inadequate for incorporating the literacy capability, and 78 percent of respondents reported their pre-service education was inadequate for incorporating the numeracy capability. In history, 64 percent of respondents reported their pre-service education was inadequate for

incorporating the literacy capability, and 83 percent of respondents reported their pre-service education was inadequate for incorporating the numeracy capability. Fourth, 75 percent of respondents agreed that inquiry learning is the optimal pedagogy for implementing the Australian Curriculum. Fifth, a high proportion of respondents perceived their pre-service education was inadequate in preparing them to incorporate the three cross-curriculum priorities: 71 percent for Aboriginal and Torres Strait Islander histories and cultures; 88 percent for Asia and Australia's engagement with Asia; and 71 percent for sustainability.

Dao (2017) investigated strategies that school leaders used to implement Phase One of the Australian Curriculum in an independent school located in Brisbane, and the challenges and enablers they encountered during the change process. The school with approximately 150 staff and 1,500 pupils was organised into four sub-schools: preparatory to year 6; years 7 to 9; years 10 to 12, and high school and English preparation program for international students. The school's organisational structure comprised three levels: the principal and senior level positions; managerial level positions; and pedagogical and learning support positions. Phase One learning areas of the Australian Curriculum were implemented in a staged approach, first in sub-school one, then sub-school two, followed by sub-school three. The methodology, which was conducted in 2013, involved analysing policy and curriculum documents, and administering an online questionnaire to a sample of the school's staff involved in implementing the Australian Curriculum, and a semi-structured interview schedule to an external curriculum consultant, the school leadership team and selected teachers. Analysis of leadership strategies identified that formal authority and hierarchical position were important factors affecting implementation of the Australian Curriculum. The principal's role focused on setting key directions and expectations, and delegating tasks to curriculum leaders. Senior level curriculum leaders delegated tasks, but also provided support, such as time release, guidance and information pertinent to implementation of the Australian Curriculum. Middle level curriculum leaders, responsible for a subject area or a year level, were involved in providing support and collaboration in leading implementation of the Australian Curriculum. Analysis of subjects' responses identified five main challenges. Lack of clarity about roles and responsibilities continued following introduction of a new learning managerial model in 2011. Lack of time and resources existed in relation to planning implementation of the Australian Curriculum. Provision of professional development by external providers, as well as school-based professional development, was inadequate to support implementation of the Australian Curriculum. Difficulties were experienced in planning for a significant amount of discipline-specific content in the Australian Curriculum and developing assessment marking criteria. A sub-school site culture, characterised by teachers working in isolation and a school climate arising from multiple changes being implemented in 2011, were counter-productive to planning for implementation of the Australian Curriculum. Analysis of subjects' responses identified four enablers. Collaboration between curriculum leaders and teachers assisted planning for implementation of the Australian Curriculum. Time release provided to middle level curriculum leaders assisted their planning for implementation of the Australian Curriculum. Resources provided by ACARA and QSA assisted middle level curriculum leaders and teachers implement the Australian Curriculum. Professional development provided by professional associations and informal professional learning assisted planning for implementation of the Australian Curriculum. The

findings of the study showed that members of the school leadership team from different levels relied on different leadership approaches. The principal used strategies that demonstrated an authoritarian leadership approach. The majority of senior level curriculum leaders used strategies that demonstrated a facilitative leadership approach. The majority of middle level curriculum leaders relied on strategies that demonstrated a democratic, empowering leadership approach. Analysis of the change process in terms of the teachers, the school and workflow as units of change identified their interactive nature, which translated into challenges for the curriculum leaders in implementing the Australian Curriculum effectively.

Grice (2017) investigated pedagogical change during implementation of the English syllabus for the Australian Curriculum in the primary sections of two independent schools located within Sydney's metropolitan area. The methodology used case study research involving selection of a sample of participants and administration of a semi-structured interview. Five participants, consisting of the head of school, director of learning or learning innovator, pedagogical coach or curriculum coordinator, pedagogical coach or deputy head, and a teacher, were selected from the staff of each school. The semi-structured interview, administered to the ten participants, focused on eliciting their views about pedagogical leadership and student outcomes. Data collected from the interviews were analysed by thematic analysis following a sequence of three steps: initial coding; focused coding using NVivo; and axial coding using NVivo. The school climate and culture in the two schools were analysed from the participants' perspectives across seven attributes: school learning culture; curriculum implementation and reform; strategies for student learning outcomes; pedagogical leadership; distributed leadership; relational leadership; and teacher professional learning. The results showed that the mandatory implementation of the English syllabus was the catalyst for curriculum and pedagogical change. This change arose from new knowledge and transformative pedagogical practices based on teacher professional learning and syllabus documentation leading teachers to question traditional and progressive learning approaches. A sense of pedagogical change also came from external pressures of transparency and accountability driving more instructional and evidence-based pedagogies. At one school, the head of school was seeking to transform the learning community using transformative inquiry pedagogies and a form of distributed pedagogical leadership with both teachers and students in accordance with the International Baccalaureate Primary Years Programme. At the other school, the head of school sought both curriculum and pedagogical change, but the specific pedagogical and leadership directions were less clear and more fluid. The results showed that teachers in both schools experienced pedagogical conflict between the use of instructional and transformative practice, and between traditional and progressive pedagogical approaches. Changes to pedagogical leadership practices created tension between teachers manifested by trust, affirmation and teamwork or mistrust and division. Professional learning and pedagogical leadership practices were enacted in different ways in the two schools highlighting that professional learning can encourage or inhibit change as the practice architectures create subcultures of learning. The impact of professional learning upon school culture either enabled or constrained pedagogical change and the enactment of curriculum change. The finding that the learning cultures enacted within the practice architectures of the two schools enabled and constrained curriculum reform and pedagogical change led to the identification of seven drivers of pedagogical change.

First, identifying pedagogical issues of practice for pedagogical change was constrained by one-off training by experts unfamiliar with the school setting, inadequate reflection time or pedagogical ignorance and enabled by action research or pedagogical consensus. Second, sharing pedagogical issues of practice for pedagogical change was constrained by unresolved dialogue about pedagogy and enabled by constructive dialogue about pedagogy. Third, leading pedagogical change collectively was constrained by imposed hierarchical pedagogical leadership or contrived collegiality and enabled by collaborative group inquiry. Fourth, building a philosophy of pedagogical practice in context for pedagogical change was constrained by pedagogical compliance, perfectionism or narrow thinking about purpose and context and enabled by new pedagogy, mistakes or deep thinking about purpose and context. Fifth, learning-focused improvement for pedagogical change through deep understanding of the individual and collective learning needs of students and teachers was constrained by cohort learning opportunities and enabled by personalised learning opportunities. Sixth, a desire to see evidence of learning progress through pedagogical change was constrained by hierarchical structure and enabled by mentoring. Seventh, pedagogical change is justified, connecting curriculum and its relationship with individuals in context, was constrained by change for change's sake, system compliance or disconnection between curriculum and pedagogy and enabled by pedagogy driven by the needs of students, specific site-based reflexivity or deep connection between curriculum and pedagogy.

Moran (2017) investigated English teachers' perceptions about the impact of implementing the Australian Curriculum for English on their instructional practices as a basis for identifying needs for support and professional development. The methodology used case study research involving content analysis of policy and curriculum documents, selection of a sample of teachers, and administration of a questionnaire and follow-up interviews. A purposive sample of 12 teachers was selected from seven secondary schools in the public, Catholic and independent sectors located within Hobart's metropolitan area. A questionnaire was administered to each teacher followed by eight of the teachers participating in a semi-structured interview. The data collected were analysed by thematic analysis following a sequence of three steps: initial coding; focused coding; and axial coding. Thematic analysis of the data identified five themes: perspectives of reform; systemic efficacy and clarity for reform; teacher agency and induced self-efficacy; satiated and hovering needs; and time factors for teachers. The five themes were reconstructed using critical discourse analysis into two dominant discourses: discourse of conformity; and discourse of teacher reflexivity. The discourse of conformity identified the expectations of the Australian Curriculum and the attempts by the participating teachers to comply with them. The discourse of teacher reflexivity identified the language that the participating teachers used in their attempts to support implementation of the Australian Curriculum, and showed professional responses to the challenging reform agenda. Within the identified discourses, specific and contextualised issues were identified relating to resources and provisions that support implementation of the Australian Curriculum for English. The key aspects that the participating teachers perceived to influence their instructional practices in implementing the Australian Curriculum for English were resources, time pressures and teacher agency. They were concerned about the level of availability of suitable resources, which was linked to professional practice and equity. Time pressures for teachers, which led to workload stress, impacted on the

implementation of the Australian Curriculum for English. Teacher agency was influenced by lack of respect and deficiency in transparent reform processes and support. The participating teachers reported three main areas of need. First, differences in resource management between the three education sectors affected equitable resource provision. Second, the convoluted structure and terminology in the Australian Curriculum for English required focused professional learning. Third, mentoring was crucial for teachers to improve self-efficacy, teacher agency and practice. Recommendations suggested increasing teacher voice as an integral and accepted part of the reform agenda, and providing resources for teachers that are specific, differentiated, focused and appropriate.

Ross (2017) investigated how teachers interpret and what factors influence their interpretation, while implementing the Australian Curriculum for Mathematics in a primary school located approximately 70 kilometres from central Brisbane. The school, which had 33 staff and 600 pupils, commenced implementing the Australian Curriculum in 2012 using Curriculum into the Classroom units. The study sought to explore the process of curriculum interpretation used by teachers. From a review of research literature on curriculum interpretation, a theoretical framework for curriculum interpretation was designed for the study consisting of three components. The intended curriculum, constructed by curriculum authorities in the form of frameworks, sets the direction for a learning area or subject. The planned curriculum, constructed by educators in the form of planning documents, provides an interpretation of the intended curriculum. The enacted curriculum, consisting of the transactions between teachers and students, comprises planned and unplanned activities. The methodology used case study research incorporating semi-structured interviews of the school's administrative team and a pre-test post-test design to investigate five teachers' instructional practices during implementation of a five-week unit across years 3 to 7 by administering a pre-unit, semi-structured interview, maintenance of a teacher's journal and a post-unit, semi-structured interview. The data collected were analysed by thematic analysis following a sequence of four steps: data familiarisation; generation of initial themes; identification of initial themes in the data sets; and review of themes. Then, analysis of two categories of data followed separate sequences: curriculum interpretation themes were compared to the conceptual framework of the study; and curriculum decision-making themes were compared across teachers to ascertain the degree of influence. The results of the study showed that teachers employed similar strategies when interpreting the intended curriculum to the planned curriculum, but each teacher followed a unique process to enact the curriculum. Further, the teachers engaged in a process of reflection to support the refinement of the planned curriculum following enactment. While similar influences impacted on this process, there were variations in terms of how they impacted on each teacher. Major influences impacting on the development of an alternative curriculum included the content pitch of the curriculum, time and assessment. Minor influences, which caused the alteration of a teaching strategy or activity, included mathematical language, digital technology, and textbooks and other materials. Analysis of the process of curriculum interpretation suggests that the purpose of the Curriculum into the Classroom units was not met, since they were developed with the intention of supporting schools to decrease the time required for teacher planning. The difference that the Curriculum into the Classroom units engendered was an altered starting point for the development of the planned curriculum. Rather than commence planning with the intended curriculum, in this

case the Australian Curriculum, teachers felt compelled to plan from the Curriculum into the Classroom units. Recommendations provided for education systems, schools and teachers suggested recognition of the value of teacher curriculum planning, closer alignment of curriculum materials to teachers' needs, adequate time to engage with curriculum change, consideration of the influences on teacher curriculum planning and enactment as a determinant of teacher curriculum support, and professional learning focused on the intended curriculum as integral to curriculum planning.

Rationale for the project

Rationale statement

The purpose of this study is to examine and compare key elements of the actions that state-level policymakers are using to implement the Australian Curriculum, and what processes and products they are using to facilitate implementation of this innovation. A rubric derived from a diagnostic tool, developed by two national education organisations involved in supporting states in the USA implement the Common Core State Standards, was used to analyse the strength of the strategies employed by states and territories to implement the Australian Curriculum. The diagnostic tool is based on a delivery framework used by policymakers in American education systems to implement the Common Core State Standards. The analysis of state-level implementation focused on the initial phase of organising to implement the Australian Curriculum, and the two actions of aligning instructional practices to the Australian Curriculum, and providing professional development to train educators on the Australian Curriculum.

The significance of this study lies in providing detailed information about the importance of aligned instructional practices and trained educators as key variables in current efforts to implement the Australian Curriculum. The study builds on the findings of a previous study, in which Watt (2015) used the diagnostic tool to evaluate key elements of the actions that states in the USA and Australia took to implement the Common Core State Standards or Phase One of the Australian Curriculum, and what processes and products they used to facilitate implementation of these innovations. The present study extends the previous study by including an evaluation of the implementation of Phases Two and Three of the Australian Curriculum.

The findings of this study will provide national, state and local policymakers, education officials, school administrators, curriculum specialists, publishers, professional development providers, educators and other interested people with a reference document to examine implementation strategies within state and territory education systems. The findings may assist researchers to extend interpretations about the role of ACARA, and state and territory education agencies or curriculum, assessment and certification boards in policymaking within the arena of federal-state relationships.

Objectives

From these assumptions, four objectives for the study follow below. The first objective was to trace and analyse the requirements of decision-making involved in the development of the Australian Curriculum, the review of the Australian Curriculum, and monitoring and evaluation of the Australian Curriculum on its implementation by states and territories. The second objective was to trace and analyse the process undertaken by each state and territory to implement the Australian Curriculum within the context of its educational reform policy, and its administrative and supervisory structure. The third objective was to rate the capacity of each state and territory to implement the Australian Curriculum in terms of its delivery approach. The fourth objective was to identify evidence that a delivery approach is practised within the education system of each state and territory.

Description of the report

The report consists of five chapters. The first chapter, Introduction, discusses policy issues that underpin the Australian Curriculum, the scope of the innovation encompassed by the Australian Curriculum and presents a rationale for the study. The second chapter, Methodology, sets out the research design, the diagnostic tool, and the methods of data collection and analysis. The third chapter, Implementation by States and Territories, presents profiles describing implementation strategies used by eight Australian states and territories. The fourth chapter, Capacity for Implementation, discusses the results of the study in relation to the application of the diagnostic tool to rate states' and territories' capacity to implement the Australian Curriculum. The fifth chapter, Conclusion, discusses the implications of the findings of the study in relation to the objectives.

CHAPTER 2

METHODOLOGY

The purpose of this chapter is to set out the methods and procedures used in the study to evaluate state-level implementation of the Australian Curriculum. The methodology applies a model of the implementation process defined by national education organisations in the USA to facilitate states' implementation of the Common Core State Standards. The lack of attention by education organisations in Australia to define a model of the implementation process to facilitate states' implementation of the Australian Curriculum led to a decision to apply this model across state and territory jurisdictions in Australia. Application of the model to judge the strength of each state's capacity to implement the Australian Curriculum is dependent on using various research methods to collect and analyse data incorporated in each state and territory profile.

Research design

Since the study examines and compares key elements of the processes and products that states and territories are using to implement the Australian Curriculum, educational literature on implementing innovations of this type was reviewed. The aim of reviewing this body of literature was to determine criteria to assess the implementation actions reported in each state and territory profile.

Searches on the websites of organisations involved in implementing the Common Core State Standards focused attention on work undertaken by the Partnership for Assessment of Readiness for College and Careers. In June 2011, the Partnership for Assessment of Readiness for College and Careers began hosting institutes to assist state and district leaders tackle challenges faced in implementing the Common Core State Standards by providing a forum for cross-state problem solving, efficient discussion of resources, and access to national experts. The first institute held in June 2011 at National Harbor, Maryland, focused on providing over 200 participants from 20 states with a framework for assessing capacity and planning the next steps in implementing the Common Core State Standards and transition to the consortium's assessments based on a workbook developed by Achieve and the U.S. Education Delivery Institute.

Achieve and the U.S. Education Delivery Institute, which operated from 2010 to 2016, combined the approach developed by Sir Michael Barber in 2001 to deliver specific targets, set by Prime Minister Blair's government in the United Kingdom, with Achieve's content knowledge to develop a workbook for states in the Partnership for Assessment of Readiness for College and Careers to facilitate implementation of the Common Core State Standards. The workbook was read and found to be effective for the purpose of determining criteria to assess states' implementation actions.

In the workbook, Achieve and the U.S. Education Delivery Institute (2012) present a diagnostic tool for state education agencies to determine areas of success and challenge in a state's implementation strategy. State education agencies use the

results of the assessment to organise the implementation process as a set of implementation actions, and then monitor progress and sustain momentum. The diagnostic tool helps a leadership team assess a state education agency's capacity to implement the Common Core State Standards by setting out guideposts for 'weak' and 'strong' performance and types of evidence to consider in rating the state's capacity on a scale from 1 for 'weak' to 4 for 'strong'.

Diagnostic Tool

The diagnostic tool is used to rate attributes relating to a preliminary phase ('Organise to implement'), six implementation actions (I. Align instructional materials to the Common Core State Standards; II. Train educators on the Common Core State Standards and related assessments; III. Transition technology and assessment system; IV. Transition accountability and data reporting system; V. Align teacher preparation, evaluation and licensing; and VI. Inform student transitions to higher education) and a supplementary phase ('Establish routines to monitor performance and solve problems').

The preliminary phase, 'Organise to implement', consists of seven building blocks. First, set an aspiration, which describes the expected impact that the Common Core State Standards and related assessments will have on student learning. Second, form an internal leadership team, led by a deputy or associate commissioner or a project management team, to determine the timeline, assign responsibility and monitor progress. Third, the leadership team sets an implementation timeline incorporating steps from 'Organise to implement' to each of the implementation actions. Fourth, a budget is set by following a sequence of seven steps. Fifth, the leadership team conducts a gap analysis of the state's standards and the Common Core State Standards using Achieve's Common Core Comparison Tool. Sixth, a guiding coalition consisting of a state legislator, a key business person, a leader of a professional association, a head of an education faculty in a university, an official of a teachers' union and a vocal parent, should be formed to exert influence and offer advice. Seventh, a team of communication specialists from the governor's office, the state education agency, the higher education system, the business community, and advocacy organisations, should be assembled. Initially, the communications team should communicate internally by publicising messages defining the issue, outlining the problem and explaining the solution. Then, the communications team identifies key stakeholders, who have the capacity to affect successful implementation. Critical information about the transition needs to be communicated to particular groups, such as district administrators and teachers, parents and community members, or policymakers. In addition to the communications team and the guiding coalition, ambassadors within key stakeholder groups should be used to communicate messages to their constituents.

Each of the implementation actions described below is prefaced by a set of three critical questions. What are our strategies to achieve success? How will the strategies be implemented through the field to the classroom? How will we connect strategies to expected outcomes?

Implementation Action I: The leadership team should appoint a working group to coordinate the alignment of instructional materials to the Common Core State Standards. The working group should develop a delivery plan to identify how aligned materials are distributed across the state. The degree of state authority over the adoption of materials, the level of content expertise in districts and economies of scale will influence the application of various activities in the plan. The state education agency could convene a committee to compare materials to the Common Core State Standards. In states where districts adopt materials, the state education agency could release a list of model materials that have been determined to be aligned, develop a list of recommended materials that districts could examine when determining alignment, share comparisons that leading districts have completed with other districts in the state, or develop a rubric to aid in the selection process. The state education agency could create a policy for selecting and adopting open educational resources, develop prototype model lesson plans, curricula and pacing guides, acquire supplemental materials, or create a mechanism for developing open educational resources. Once a vision for aligned materials has been determined, the state education agency could initiate contacts with other states to create efficiencies and influence publishing companies about the materials they produce or draw on the model content frameworks that the assessment consortia have developed. Then, the working group determines a delivery chain for distributing aligned materials. The working group needs to articulate success measures for monitoring teachers' use of aligned materials, user satisfaction with the materials, and the impact on student outcomes.

Implementation Action II: The leadership team should appoint a second working group to develop an effective professional development system to train educators about the Common Core State Standards and related assessments. The working group should use the gap analysis to identify which grades, content areas and curriculum strands need immediate attention and consider the capacity of each district. The working group prioritises strategies in the state's professional development system by identifying and supporting high quality or promising providers, moulding the quality of current providers, and exiting poor performing providers. The working group determines a delivery chain for training educators based on whether professional development is provided directly through a state-led model or indirectly through the marketplace. The working group needs to articulate success measures for monitoring teachers' participation in professional development aligned to the state's model, user satisfaction in terms of aiding student learning, changes in classroom practices and the impact of professional development on student outcomes.

Implementation Action III: The leadership team should work closely with technology leaders at the state level to identify a state readiness team that will be responsible for transitioning technology for the new assessments. The team identifies gaps in the maximum number of test-takers that can be supported by the infrastructure, the network, devices, and staff knowledge in each school. Once the gap analysis has been completed, the data can be used to determine the size of the gap that needs to be closed to reach readiness in each area. Once the areas of strength and weakness have been identified for each district, the degree of support can be identified and a member of the readiness team assigned to assist the district reach readiness. The main strategies around filling the gaps for infrastructure, network

capacity and devices depend on using various funding streams to purchase the relevant technologies. Existing staff will also need to be trained to transition to the new assessments using a range of strategies. The readiness team determines a delivery chain for technology readiness by identifying strategies for each district. A plan is developed for reaching readiness by the first year that the assessments will be administered state-wide. The levels of infrastructure, broadband, devices, and staff knowledge can be plotted on the plan for any given time. The plan should provide regular routines to review progress.

Implementation Action IV: The leadership team should consider the purpose, design and implementation of a new accountability system as the state transitions to the Common Core State Standards and the new assessments. The intent of the new accountability system should focus on improvement in college- and career-readiness, include new measures that incorporate longitudinal data and growth measures, and apply performance goals based on college- and career-readiness measures. The leadership team should involve stakeholders in identifying state-wide student performance goals, a system for differentiating and classifying districts and schools based on student performance outcomes, a system of supports and interventions for all districts and schools, and data reporting systems to share data on college- and career-readiness with stakeholders. These decisions should inform state education agency assessment and accountability staff on designing new indicators that measure course participation and success, achievement, and attainment outcomes. Development and implementation of the new accountability system needs to involve stakeholder engagement and communications, governance and management of the accountability system needs to be clear, data collection, management and analysis needs to be planned carefully, and a continuous improvement process needs to be incorporated into the accountability system. A set of state-wide student performance goals can serve as a driver for the state's accountability system by clarifying aspirations, specifying indicators, and setting routines to monitor and drive programs. A differentiation and classification system to distinguish overall school and district performances should also incorporate indicators to identify districts and schools in greatest need of intervention and provide an incentive for districts and schools to close achievement gaps, particularly for low socioeconomic and ethnic subgroups. Data-reporting plays a critical role in a new accountability system by driving continuous improvement at all levels. State officials can go beyond reporting by connecting data reports to clear actions. The plan for reporting data should involve engaging policymakers, educators, parents, business and community leaders in the process of publicising data reports to ensure clarity and use.

Implementation Action V: The original intention of the developers of the workbook was to include an implementation action, Align teacher preparation, evaluation and licensing, but a chapter on this action was never published.

Implementation Action VI: The leadership team should create a collaborative working team consisting of representatives from higher education and schools to align post-secondary course expectations to the Common Core State Standards. The working team should conduct a series of vertical and horizontal alignment initiatives to ensure that first-year courses are aligned to the Common Core State Standards. Once alignment is completed, professional development needs to be provided to increase

the understanding of content and teacher preparation faculty responsible for training pre-service teachers. Higher education faculty should also be involved in developing professional development modules for in-service training of practising teachers.

Once planning for implementation has been completed, the implementation team commences the supplementary phase, 'Establish routines to monitor performance and solve problems'. Initially, the nature of a review and the data to be collected need to be determined. An assessment framework can be used to judge the quality of data for each component of the plan. Once problems are identified through this process, they need to be prioritised according to severity and complexity, and staff resources assigned to them accordingly. Various measures can be used to intervene in restoring the implementation process. The implementation team can sustain the momentum of the implementation process by following several actions. A compelling and effective message should be delivered to key audiences. The guiding coalition should take a proactive role in building public support. Key leaders in the delivery chain need to be empowered. The state effort needs to be related to progress in other states. The guiding coalition should use current performance data to reinforce the purpose of the implementation effort.

Adaptation of the Diagnostic Tool

As state education agencies or curriculum, assessment and certification boards commenced implementing the Australian Curriculum with implementation actions I and II, the researcher decided to limit the analysis of data reported in the state and territory profiles to assessing the strength of each state's or territory's role in the 'Organise to implement' phase and implementation actions I and II. Furthermore, it was recognised that few states and territories would have formulated policies for the remaining implementation actions during the time frame, in which the study was conducted.

While compiling data reported in the state and territory profiles, the researcher found that the scope of Implementation Action I was too narrow to encompass the full range of activities undertaken to implement the Australian Curriculum. Consequently, Implementation Action I was renamed 'Align instructional practices to the Australian Curriculum', although aligning instructional materials to the Australian Curriculum forms a key element within the scope of Implementation Action I.

The diagnostic tool in the workbook sets out guideposts for 'weak' and 'strong' performance based on a scale from 1 for 'weak' to 4 for 'strong'. The researcher concluded that there was a need to extend the guideposts by establishing descriptors for each of the four segments on the scale. In June 2014, the researcher contacted a staff member of the U.S. Education Delivery Institute to validate whether this approach would be acceptable. The staff member stated that the original intention of the authors of the workbook was to leave the diagnostic tool deliberately vague to aid facilitated conversation among members of each state's leadership team about the extent and quality of the current implementation plan, but that, for the purpose of this analysis, descriptors could be defined for each segment. This information led the researcher to develop descriptors for each of the four segments for the 'Organise to implement' phase and for implementation actions I and II.

Data reported in each state profile are judged against the descriptors set out in Table 1. Table 1 presents the descriptors for assessing the performance of each state or territory on the seven building blocks involved in 'Organise to implement' the Australian Curriculum.

TABLE 1

DESCRIPTORS FOR ASSESSING 'ORGANISE TO IMPLEMENT' BY BUILDING BLOCK AND DESCRIPTOR
(Adapted from Achieve and U.S. Education Delivery Institute, 2012)

Building Block
Aspiration: 1. = No aspiration is defined for why the Australian Curriculum is important. 2. = The state education agency is developing an aspiration for how the Australian Curriculum will change classroom practice. 3. = The state education agency has defined an aspiration for how the Australian Curriculum will change classroom practice. 4. = In addition to '3', the state education agency has secured wide buy-in for the aspiration internally and externally.
Internal leadership team: 1. = Ownership of implementation is haphazard or unclear. 2. = The state education agency has specified a clear point or multiple points of accountability internally. 3. = The state education agency has specified a clear point or multiple points of accountability internally and with external stakeholders. 4. = In addition to '3', the internal leadership team has the leverage to coordinate the effort.
Timeline: 1. = A timeline has not been defined. 2. = The state education agency has articulated a timeline, but it is vague. 3. = The state education agency has articulated an ambitious, but realistic timeline that credibly prepares for implementation of aligned assessments. 4. = In addition to '3', the timeline defines key areas of work and milestones for each, which should enable tracking of implementation on a monthly or quarterly basis.

TABLE 1

CRITERIA FOR ASSESSING 'ORGANISE TO IMPLEMENT' BY BUILDING BLOCK AND DESCRIPTOR
(Adapted from Achieve and U.S. Education Delivery Institute, 2012)
(cont.)

Building Block
Budget: 1. = A cost estimate may have occurred, but little or no thinking has been done about how various state and federal funds will be used to provide sufficient funds. 2. = The state education agency has identified some relevant state and federal funds that can be used to fund implementation. 3. = The state education agency has identified most or all relevant state and federal funds that can be used to fund implementation. 4. = In addition to '3', the state education agency has built a comprehensive budget for implementation that allocates all costs to relevant funding sources and takes into account the restrictions on each.
Gap analysis: 1. = Little effort has been made to compare the state's curriculum to the Australian Curriculum. 2. = The state education agency has performed a gap analysis. 3. = The state education agency has performed a detailed gap analysis that shows where new state outcomes were added and where existing state outcomes were augmented, moved or dropped. 4. = In addition to '3', the state education agency has used this analysis to identify high-priority subject areas or year spans according to the size of the gaps.
Guiding coalition: 1. = There is no deliberately identified group of external stakeholders, which can drive change at each level. 2. = There is a deliberately identified group of external stakeholders, but this group is limited in its scope or duration. 3. = At least 7 to 10 change leaders from key backgrounds share a consistent understanding and are supportive of the aspiration and strategies for implementation. 4. = In addition to '3', the state education agency consistently consults and works with this group to guide implementation and communicate to the field.
Communications: 1. = Communication efforts regarding the Australian Curriculum are sparse, uncoordinated and one-way. 2. = Communication efforts regarding the Australian Curriculum are frequent, coordinated and two-way. 3. = The state education agency has a clear communications plan for implementation that details the message and objective, audiences, modes of communication, frequency or timing of communication, and messengers. 4. = In addition to '3', the communications plan includes five-year strategies for on-going communications with all audiences to maintain support.

The diagnostic tool in the workbook specifies that aligning instructional materials to the Common Core State Standards involves three critical actions: strategies to achieve success; understanding how the strategies will be implemented through the field to the classroom; and connecting strategies to expected outcomes. Data reported in each state profile are judged against the descriptors set out in Table 2. Table 2 presents the descriptors for assessing the performance of each state or territory on the three critical actions involved in aligning instructional practices to the Australian Curriculum.

TABLE 2

**CRITERIA FOR ASSESSING 'ALIGN INSTRUCTIONAL PRACTICES' BY
CRITICAL ACTION AND DESCRIPTOR
(Adapted from Achieve and U.S. Education Delivery Institute, 2012)**

Critical Action
Strategies to achieve success: 1. = No specific activities have been identified. 2. = Specific activities have been identified, but activities are uncoordinated and siloed. 3. = The state education agency and external stakeholders have identified and laid out a balanced and coordinated set of activities. 4. = In addition to '3', activities are benchmarked against best practices both within and outside the state.
Understanding how the strategies will be implemented through the field to the classroom: 1. = The state education agency has not yet articulated how the reform strategy will reach the field. 2. = The state education agency has articulated a partial and incomplete delivery chain. 3. = For all relevant activities, the state education agency has explicitly laid out a delivery chain that runs from the state through regions and local education agencies to schools and classrooms. 4. = In addition to '3', the delivery chain consists of strong relationships that create a credible path to reach the field, or the state education agency has identified weaknesses in the chain and has a plan for addressing them.
Connecting strategies to expected outcomes: 1. = Metrics and targets for success have not been identified or are not meaningfully connected to the overall aspiration. 2. = Initial work on setting metrics has been undertaken, or metrics do not define success. 3. = The state education agency has identified a range of metrics that define success and set annual targets for each metric. 4. = In addition to '3', the targets and metrics provide feedback on whether the aspiration is being achieved on time and whether the right steps are being taken to achieve it, and activities are sequenced to show how achieving implementation milestones will help the state education agency hit the outcome targets.

The diagnostic tool in the workbook specifies that training educators on the Common Core State Standards involves three critical actions: strategies to achieve success;

understanding how the strategies will be implemented through the field to the classroom; and connecting strategies to expected outcomes. Data reported in each state profile are judged against the descriptors set out in Table 3. Table 3 presents the descriptors for assessing the performance of each state or territory on the three critical actions involved in training educators about the Australian Curriculum.

TABLE 3

CRITERIA FOR ASSESSING 'TRAIN EDUCATORS' BY CRITICAL ACTION AND DESCRIPTOR
(Adapted from Achieve and U.S. Education Delivery Institute, 2012)

Critical Action
Strategies to achieve success: 1. = No specific activities have been identified. 2. = Specific activities have been identified, or activities are coordinated and not siloed. 3. = The state education agency and external stakeholders have identified and laid out a balanced and coordinated set of activities. 4. = In addition to '3', activities are benchmarked against best practices both within and outside the state.
Understanding how the strategies will be implemented through the field to the classroom: 1. = The state education agency has not yet articulated how the reform strategy will reach the field. 2. = The state education agency has articulated a partial and incomplete delivery chain. 3. = For all relevant activities, the state education agency has explicitly laid out a delivery chain that runs from the state through regions and local education agencies to schools and classrooms. 4. = In addition to '3', the delivery chain consists of strong relationships that create a credible path to reach the field, or the state education agency has identified weaknesses in the chain and has a plan for addressing them.
Connecting strategies to expected outcomes: 1. = Metrics and targets for success have not been identified or are not meaningfully connected to the overall aspiration. 2. = Initial work on setting metrics has been undertaken, or metrics do not define success. 3. = The state education agency has identified a range of metrics that define success and set annual targets for each metric. 4. = In addition to '3', the targets and metrics provide feedback on whether the aspiration is being achieved on time and whether the right steps are being taken to achieve it, and activities are sequenced to show how achieving implementation milestones will help the state education agency hit the outcome targets.

Method of data collection

Initially, information was collected and the first draft of the report was compiled based on available literature. Educational literature, referring to the development,

review and implementation of the Australian Curriculum, was identified from a range of sources.

Searches of the Australian Education Index and the Educational Resources Information Center provided key sources for identifying journal articles and other documents referring to the implementation of the Australian Curriculum. From these sources, five journal articles, which were identified on policymaking and the implementation of the Australian Curriculum, were reviewed. In addition, Trove, a website maintained by the National Library of Australia, was searched to identify eight theses referring to the implementation of the Australian Curriculum. Seven theses, which were accessible online, were reviewed.

The websites of the Education Council, the Australian Government Department of Education and Training, ACARA, each state and territory education agency, and curriculum, assessment and certification boards in New South Wales, Queensland, Victoria and Western Australia were accessed to identify information and documents relating to the development, review, monitoring and implementation of the Australian Curriculum. These resources included policy documents, annual reports, curriculum guides, implementation guides, reports on evaluative studies, reports and videos on meetings, webinars and news articles.

After sections of the first draft were written, additional data were collected from personal communications with officials and experts, who reviewed sections of the draft. A state official in each state education agency or curriculum, assessment and certification board was contacted and invited to review sections of the draft relevant to his or her state. Officials, who reviewed drafts at several junctures during the drafting process to confirm their accuracy, are acknowledged in the Preface. Considerable reliance was placed on the comments of these officials in drafting the report.

Data analysis methods

The procedure for analysing information contained in educational literature involved following a sequence of steps. In the first step, content analysis method was used to summarise the subject matter contained in relevant documents. Reporting the results involved preparing summaries of educational literature, organising the summaries chronologically, and incorporating them into state and territory profiles. The second step involved defining descriptors to classify the implementation actions undertaken by each state and territory during the change process. These descriptors were used to classify the strength of a state's or territory's capacity to undertake implementation actions associated with implementing the Australian Curriculum. As each state or territory profile was developed from an analysis of educational literature, the descriptors were used to rate the strength of the state's or territory's capacity in particular implementation actions.

Limitations of the methodology

Two main constraints affected the study. Limitations influencing the methodology related to difficulties associated with accessing relevant information about the implementation of the Australian Curriculum on the websites of some state education agencies, and using several descriptors to form judgments about whether states or territories met the criteria set out in tables 1, 2 and 3.

Problems associated with accessing information on the websites of some state education agencies were an important factor impeding development of comprehensive and accurate profiles. Notable instances of such hindrances pertained to the websites of the Northern Territory Department of Education, the Queensland Department of Education and Training, the Tasmanian Department of Education and the Western Australian Department of Education. These agencies restrict access by placing resources relating to the Australian Curriculum on portals only accessible to personnel by means of a password. In the most critical case, staff of the Northern Territory Department of Education was contacted to provide current information necessary to document this agency's activities in implementing the Australian Curriculum.

Difficulties in applying several of the descriptors to form judgments about whether a state or territory met criteria were usually associated with problems identifying relevant information on the websites of state education agencies and curriculum, assessment and certification boards. For the 'Organise to implement' phase, data relating to states' budgets for implementing the Australian Curriculum were not available in the annual reports of state education agencies and curriculum, assessment and certification boards. In most instances, information about guiding coalitions had to be inferred from sources of information outside state education agencies and curriculum, assessment and certification boards. For implementation actions I and II, data referring to 'connecting strategies to expected outcomes' were difficult to identify on the websites of most state education agencies and curriculum, assessment and certification boards. Judgments in respect to 'connecting strategies to expected outcomes' for aligning instructional practices and training educators were usually based on aggregated characteristics.

CHAPTER 3

IMPLEMENTATION BY STATES AND TERRITORIES

The purpose of this chapter is to describe the process that each state and territory used to implement the Australian Curriculum, taking account of the policy context prevailing in the particular jurisdiction. Each state or territory profile may encompass activities associated with aligning instructional practices to the Australian Curriculum and providing professional development for practising teachers. The state and territory profiles are organised alphabetically in the report.

Australian Capital Territory

Educational Reform Policy

Strategic plan

Following appointment as Director General in July 2009, James Watterston outlined his vision for education and training in the *Strategic Plan 2010-2013: Everyone Matters*. The plan set out priorities and performance measures for four actions: learning and teaching; school environment; student pathways and transitions; and leadership and corporate development. In 2013, the Education Directorate released the *Strategic Plan 2014-2017 - Education Capital: Leading the Nation*. The plan sets out five priorities: quality learning; inspirational teaching and leadership; high expectations, high performance; connecting with families and the community; and business innovation and improvement. Strategies for each priority are delineated to guide planning, and indicators are specified for setting annual action plans detailing specific initiatives and identified actions to work towards achieving the priorities.

Future of Education

In February 2017, Yvette Berry, the Minister for Education and Early Childhood Development, announced the Future of Education conversation consisting of three phases: conducting a community conversation to discuss and generate ideas; testing key themes with the community; and creating the policy direction. A small group of community partners was formed to provide advice to the Minister and the ACT Education Directorate, and a group of experts was established to facilitate the conversation with school communities. Over 4,500 responses were submitted during the first phase, held in April and May of 2017, by school communities, parents, teachers, students, community organisations and the public. Analysis of the feedback identified nine themes: learning for the future; transitions; individualised learning; consistency between schools; real life skills; opportunities and pathways for all; what we should be measuring and evaluating; collaboration and support to meet student need; and valuing educators. A tenth theme, relating to inclusion, was identified during previous consultations with stakeholder groups.

Beginning in February 2018, the second phase will involve a series of workshops to test the key themes with the community.

Administrative and supervisory structure

In September 2010, the Chief Minister, Jon Stanhope, commissioned Allan Hawke, a former public servant and diplomat, to conduct a comprehensive review of the effectiveness, capacity and structure of the ACT Public Service to ensure its configuration remains appropriate for meeting the Government's needs and delivery of its agenda into the future. Hawke (2011) recommended that all existing administrative units should be abolished and the ACT Public Service restructured as a single department with the previous departments designated as directorates.

A major outcome was that the ACT Education and Training Directorate, formed in May 2011, was structured into four divisions: School Improvement; Strategy and Coordination; Corporate Services; and Tertiary and International Education. In 2012, the four divisions were renamed Learning Teaching and Student Engagement, Strategy and Coordination, Tertiary Education and Performance, and Corporate Services. In 2014, the four divisions were amalgamated into two divisions: Education Strategies; and Organisational Integrity. In 2016, the ACT Education and Training Directorate was renamed the Education Directorate. In 2017, the two divisions were restructured into three divisions: System Policy and Reform; School Performance and Improvement; and Business Services.

The Education Directorate has organised the public education system into four networks: Belconnen; North Gungahlin; South Weston; and Tuggeranong.

Organisation to implement the Australian Curriculum

The Education and Training Directorate defined an aspiration for how the Australian Curriculum will change classroom practices and secured wide support for the aspiration internally and externally.

The Education and Training Directorate formed an internal leadership team to support implementation of the Australian Curriculum. The team formed the Learning and Teaching branch in the School Improvement division. After the amalgamation of the four divisions in 2014, the Learning and Teaching branch formed part of the Education Strategy division. Since restructure into three divisions in 2017, the Learning and Teaching branch forms part of the School Performance and Improvement division.

The ACT Curriculum Advisory Group updates and publishes a new timeline annually. The first timeline was released in 2010 by the ACT Cross Sectoral Australian Curriculum Implementation Committee, as the ACT Curriculum Advisory Group was known then, in the bridging document published by the Australian Capital Territory Department of Education and Training (2010). The timeline indicated that implementation began in 2011 for English and Science in kindergarten to year 7 and year 9, Mathematics in years 7 and 9, and History in year 7.

Implementation began in 2012 for English and Science in years 8 and 10, Mathematics in kindergarten to year 6, years 8 and 10, and History in kindergarten to year 6 and year 9. Implementation began in 2013 for History in year 10. In 2016, the ACT Curriculum Advisory Group released a timeline specifying four implementation stages: familiarisation and engagement; consolidation; implementation; and reporting. The timeline organises implementation of Phases Two and Three of the Australian Curriculum into four stages. Implementation of Geography in kindergarten to year 10 commenced with familiarisation and engagement in 2013-2014, consolidation in 2014-2015, implementation in 2015-2016, and reporting in 2016. Implementation of the Arts in kindergarten to year 10 commenced with familiarisation and engagement in 2014-2015, consolidation in 2015, implementation in 2015-2016, and reporting in 2016. Implementation of Languages, and Health and Physical Education in kindergarten to year 10 commenced with familiarisation and engagement in 2015, consolidation in 2015-2016, implementation in 2016-2017, and reporting in 2017. Implementation of Civics and Citizenship in years 3 to 10, and Economics and Business in years 5 to 10 commenced with familiarisation and engagement in 2015-2016, consolidation in 2016-2017, implementation in 2017-2018, and reporting in 2018.

The Education Directorate presents financial statements in its annual reports, but these statements do not include a separate budget for implementing the Australian Curriculum.

The Australian Capital Territory Department of Education and Training (2010) published a gap analysis between essential learning achievements in the *Curriculum Framework for ACT Schools*, published by the Australian Capital Territory Department of Education and Training (2007), and content descriptions in the Australian Curriculum. The gap analysis correlated the bands in the *Curriculum Framework for ACT Schools*, identified content in essential learning achievements replaced by content descriptions in the Australian Curriculum, and matched essential learning achievements to content descriptions in the Australian Curriculum for portions of content in Mathematics, Science and History.

In the Australian Capital Territory, there is no guiding coalition of political, education and business leaders, who can provide forceful advocacy for reform, thereby building public understanding and will to sustain support for the Australian Curriculum during implementation. The ACT Curriculum Advisory Group consists of representatives from the Education Directorate, Board of Senior Secondary Studies, Association of Independent Schools of the ACT, Catholic Education Archdiocese of Canberra and Goulburn, Australian Education Union, NSW-ACT Independent Education Union, ACT Council of Parents and Friends of ACT Schools, and Catholic School Parents Archdiocese of Canberra and Goulburn. The ACT Curriculum Advisory Group may perform the role of a guiding coalition to a limited extent by providing advice about implementation of the Australian Curriculum to the chief executive officers of the three education sectors and through them to the Minister for Education and Early Childhood Development.

The Education Directorate engages in various activities to communicate information about implementation of the Australian Curriculum. It maintains a Media and Communications team, which communicates news articles about the implementation

of the Australian Curriculum. The ACT Curriculum Advisory Group issued an online newsletter, which was published biennially to keep educators informed about the development of the Australian Curriculum and its implementation in Australian Capital Territory schools. The newsletter was discontinued at the end of semester two in 2014.

Implementation action for aligning instructional practices

Curriculum requirements

Under the Education Act 2004, the Director General determines the curriculum requirements for students attending public schools from preschool to year 10. The school board develops, maintains and reviews the school's curriculum plan. The school's staff develops instructional programs that address the requirements of the curriculum, and decides how to organise the curriculum to maximise opportunities for students. The curriculum requirements policy is supported by procedures for curriculum planning, pedagogy and assessment, requirements for preschool to year 6, and requirements for year 7 t0 10.

Implementation process

As Phase One of the Australian Curriculum was being developed, the ACT Cross Sectoral Australian Curriculum Implementation Committee was formed in 2008 to guide implementation of the Australian Curriculum. The Committee, now known as the ACT Curriculum Advisory Group, oversaw development of the bridging document, published by the Australian Capital Territory Department of Education and Training (2010). The bridging document sets out a timeline for developing the Australian Curriculum, its content and structure, a strategy for implementing the Australian Curriculum in the Australian Capital Territory, a gap analysis and examples of units of work, support for schools, and frequently asked questions.

Transition to the Australian Curriculum began in November 2010, when schools were selected to lead the implementation process. Lead schools were allocated additional staff to run professional development sessions and provide resources and units of work to be shared with other schools. In 2011, principals led whole-school planning to implement the Australian Curriculum, and teachers developed and aligned units of work to the Australian Curriculum. In 2012 and 2013, principals and curriculum coordinators supported engagement and implementation, and teachers shared units of work.

In January 2015, five high schools from South Weston Network collaborated on a project designed to embed best practice in curriculum and assessment. Over 200 teachers worked together in their discipline areas and formed professional learning groups to support teachers implement the Australian Curriculum with a focus on the inclusion of learning differences and an examination of different units of work to improve their understanding of the achievement standards.

In February 2017, an evaluation of the implementation of the Australian Curriculum achievement standards was completed. Recommendations from the evaluation informed the development of an initiative to improve implementation by strengthening curriculum leadership as well as teachers' knowledge and skills in using the achievement standards. Curriculum consultants work with school leaders on curriculum development activities to meet the specific needs of schools.

The Education Directorate reached an agreement with Queensland Department of Education and Training to use Curriculum into the Classroom materials in public schools across the Australian Capital Territory.

Implementation action for training educators

In December 2010, the Department of Education and Training held a professional development session, at which 145 curriculum coordinators from public, Catholic and independent schools underwent train-the-trainer coaching. In 2011, the curriculum coordinators conducted professional development sessions in their schools. In 2012 and 2013, the Education and Training Directorate continued professional development sessions and lead schools provided professional learning for other schools.

As each learning area is implemented in schools, the Education Directorate facilitates professional learning workshops to build capacity to implement the Australian Curriculum and use online materials to support student learning. Held at the Hedley Beare Centre for Teaching and Learning, the series of workshops is repeated each term. Principals are also able to request site delivery of the workshops, if they require delivery for the school's whole staff. The Education Directorate also delivers workshops on the Australian Curriculum tailored to particular schools' needs. These workshops may run for as short as one hour, offer a full-day intensive program or form a series of workshops.

New South Wales

Educational Reform Policy

Strategic plan

In 2011, the executive team of the New South Wales Department of Education and Communities consulted staff, customers and key stakeholders to develop the Strategic Plan for 2012 to 2017. Structured around the concept of strong partnerships for a better future, the strategic plan set out a vision, priorities and outcomes for early childhood, school, tertiary education, and communities. The vision of a highly educated, skilled, vibrant and inclusive New South Wales supported three priorities: quality teaching and leadership; high expectations, closing the gaps; and new and better ways of doing business.

In 2017, the Department of Education initiated the Education for a Changing World project to build an evidence base about the challenges and opportunities presented

by artificial intelligence and how education responds. A series of background papers and analytical reports were commissioned from leading academics, and the Education for a Changing World symposium was held in Sydney in November 2017 to broaden the discussion.

The Education for a Changing World project shaped development of the Strategic Plan for 2018 to 2022. Launched in January 2018, the strategic plan sets out a vision, purpose, goals, values and performance measures. The vision to be Australia's best education system and one of the finest in the world establishes the purpose to prepare young people for rewarding lives as engaged citizens in a complex and dynamic society. Ten goals are reinforced by six values: excellence; equity; accountability; trust; integrity; and service. The strategic plan's ten goals are assessed by ten performance measures.

Reform priorities

Following election of the Liberal and National parties in March 2011, the New South Wales Government embarked on a series of reforms of the education system. The reform agenda was targeted at structural changes to raise educational performance across all education sectors as well as sector-specific reforms and targeted reforms that address persistent problem areas.

Great Teaching, Inspired Learning

In July, the New South Wales Government (2012) released a discussion paper to promote conversation across the education community about policies and strategies needed to develop and support quality teaching and learning in New South Wales schools. Following a three-month consultation, in which 98 formal submissions and 577 comments were submitted, the New South Wales Government (2013a) released a report analysing the feedback under five themes: inspired learning; initial teacher education; entry into the profession; develop and maintain professional practice; and recognise and share outstanding practice. In March, the New South Wales Government (2013b) published a blueprint for action based on the five themes.

In August 2013, Adrian Piccoli, the Minister for Education, announced funding to provide greater support to novice teachers in public schools. The measures included providing novice teachers with mentoring for the first two years, Teach.Rural scholarships for pre-service students to teach in rural and remote schools, a cadetship program for pre-service students to work as part-time para-professionals in classrooms and an internship program for pre-service students to work as para-professionals in classrooms. Principals would also be given stronger powers to manage underperforming teachers. A quicker process to remove teachers, whose performance remains unsatisfactory, would be introduced to dismiss them. In mid-2014, the new procedures commenced for managing performance issues.

Beginning in 2014, several initiatives set out in the blueprint for action were implemented by the Department of Education and Communities. The Centre for Education Statistics and Evaluation (2014a) published the first annual report on initial teacher education and the teaching workforce in public, Catholic and independent schools. An integrated leadership strategy was designed culminating in a new leadership credential. A series of online coaching modules was prepared and trialled in schools. A new role, principal school leadership, was created to mentor principals on high-quality planning processes. The Department of Education and Communities contracted a documentary company to video classroom practice to help schools show short videos to teachers and share with other schools.

In 2015, the Department of Education and Communities reached agreements with pre-service teacher education providers to ensure high quality professional experiences in schools and placement procedures. In addition, 23 professional experience hub schools were established to work with 12 teacher education providers to develop, demonstrate and share professional practice.

In 2016, the Department of Education launched an online resource, Strong Start, Great Teachers, to support novice teachers and a new website, Teaching Standards in Action, to support the teaching standards, highlight critical messages and link teachers to relevant policy information. In October 2016, the Department of Education released the *Performance and Development Framework for Principals, Executives and Teachers in NSW Public Schools*. The framework sets out a performance and development process requiring each teacher to develop professional goals, implement strategies to achieve the goals, undertake a mid-year self-assessment, and participate in an end-of-year formal review and feedback. In November 2016, MyPL, a platform for educators to manage their professional learning and supervisors to report the professional learning records of their staff, was launched to meet requirements for 100 hours of professional development needed to maintain teacher accreditation.

In 2017, the Department of Education released the school leadership strategy aimed at providing quality leadership preparation and development, strengthening collegial support for school leaders, and improving the quality of services and support to schools. The Centre for Education Statistics and Evaluation designed the website, Effective Practices in Teaching and Learning, to provide school leaders and teachers with research findings. In 2015, the Department of Education and Communities commenced an evaluation of mentoring and release time for permanent and temporary beginning teachers by surveying principals, permanent and temporary beginning teachers, and other teachers, reviewing relevant documents and analysing administrative data. Finn, Gould, Goodall and Watkins (2017) found there is evidence that not all teachers were receiving beginning teachers support funding release time and mentoring allocations in full, suggesting that the policy has not been fully implemented as planned.

In January 2018, the Proficient Teacher Accreditation Policy, administered by the NSW Education Standards Authority, came into effect requiring conditionally and provisionally accredited teachers to complete requirements for proficient accreditation within three years for full-time teachers and five years for part-time and casual teachers.

Local Schools, Local Decisions

In March 2012, Premier Barry O'Farrell and Minister Piccoli announced the Local Schools, Local Decisions reform intended to shift decision-making authority from the central office to schools, provide a new resource allocation model to fund schools, delegate responsibility for managing school budgets and filling staff vacancies to principals, provide salary progression based on attainment of professional standards, and provide a single school plan, annual report and budget, all linked to student learning outcomes.

In July 2012, Minister Piccoli announced a new resource allocation model based on student needs, which was tested and refined in 2013 in schools participating in the Empowering Local Schools National Partnership. In October 2013, Minister Piccoli announced the phased implementation of resource allocation model beginning in 2014.

Rural and Remote Education Blueprint

In November 2013, the New South Wales Government announced a plan to improve student learning outcomes in rural and remote communities. The Rural and Remote Education blueprint for action allocated funds to strengthen early childhood education, broaden the range of curriculum opportunities for students, provide new incentives to attract and retain teachers and school leaders, and better support schools to meet local needs by establishing 15 specialist centres offering health and well-being services.

In February 2015, Aurora College, the state's first virtual school commenced by blending residential school classes and online courses for students in rural and remote areas so they can remain in their local schools. The Department of Education and Communities also developed a series of master classes for students in rural and remote areas to enrich the study of mathematics, science and agriculture. A state-wide secondary literacy leaders network was begun to support teachers to build leadership capacity in literacy and secondary curriculum. In 2015, a technology and applied studies leaders network was established to provide mentoring and support to teachers in rural and remote schools. In addition, seven lighthouse schools were established to facilitate teaching about agriculture and primary industries. In May 2016, the first Rural and Remote Education conference was held at Bathurst to support professional collaboration about instructional practices in rural and remote areas.

In 2015, the Department of Education and Communities commenced an evaluation of the implementation and impact of actions contained in the blueprint by interviewing stakeholders, conducting case studies of four education networks, surveying stakeholder groups, analysing administrative data and reviewing relevant documents. Mazurki, Finn, Goodall and Wan (2016) found that implementation was progressing as intended. There was evidence that some actions were already achieving their objectives, although most actions were experiencing some

challenges. Analysis of performance indicators showed that there were small gains in attendance, increased retention of students from years 10 to 12, but the gap between metropolitan and rural and remote students had increased in reading and numeracy.

Connected Communities

In October 2011, the Department of Education and Communities commenced a consultation process with communities and stakeholder groups to develop a strategy to improve outcomes for Aboriginal children and young people living in disadvantaged communities across the state. Meetings held with stakeholder groups led to the formulation of five key messages: flexible staffing, school organisation and curriculum; leadership, the key to success; culturally inclusive curriculum embedded with an Aboriginal languages and cultural stream; local governance structures; and integrated service delivery at the local level. The key messages were incorporated into the Connected Communities discussion paper released for public review in February 2012. Feedback from stakeholder groups and an analysis of 45 written submissions showed strong agreement with the key messages, but identified a range of potential challenges.

The feedback was used to design the Connected Communities Strategy consisting of nine features: cultural awareness delivered locally; teaching Aboriginal language and culture; community partnerships leader; early years focus through to further learning and employment; personalised learning plans for all students; schools as a hub for service delivery; early intervention and prevention focus; partnership and co-leadership with the Aboriginal community; and partnership with a university and an institute of technical and further education. In May 2012, the New South Wales Government launched the Connected Communities Strategy in partnership with the Aboriginal Education Consultative Group at 15 schools selected by the Department of Education and Communities.

In 2014, the Department of Education and Communities undertook an interim evaluation of the Connected Communities Strategy to assess its implementation and effectiveness in order to support continuous improvement. The methodology involved consulting stakeholders in each of the 15 communities, analysing relevant documents, surveying students, parents and teachers in each community, and analysing student performance data. Goodall (2015) found that in spite of delays in recruiting executive principals, senior leaders and leaders in community engagement, the strategy had led to many positive outcomes. All of the schools were implementing local Aboriginal language programs, delivering cultural awareness training to most staff, and attempting to incorporate Aboriginal content into mainstream units of work. However, some communities were experiencing challenges in using their schools as service hubs, school reference groups were not delivering intended impacts due to lack of role clarity, and the roles of senior leaders and leaders of community engagement were still embedding, and it was too early to make judgment about the benefits of these roles. It was too early to conclude whether he strategy was having any impact in raising student academic outcomes.

School Excellence Framework

The Centre for Education Statistics and Evaluation (2014b) undertook a review of school improvement frameworks to identify elements, for which there is strong evidence. This evidence base established the foundation for the School Excellence Framework that classifies the extent to which the school is delivering, sustaining and growing, or excelling in 14 elements across three dimensions: learning; teaching; and leading. The learning domain consists of five elements: learning culture; well-being; curriculum and learning; assessment and reporting; and student performance measures. The teaching domain consists of five elements: effective classroom practice; data skills and use; collaborative practice; learning and development; and professional standards. The leading domain consists of four elements: leadership; school planning, implementation and reporting; school resources; and management practices and processes.

Each year, schools assess their practices against the School Excellence Framework to develop their plans in consultation with school communities, report progress in their annual reports and have their self-assessment validated by a panel every five years. In 2015, all public schools undertook their first self-assessment using the School Excellence Framework. A representative sample of 89 public schools participated in a pilot for an external validation process. The results of the pilot will be used to inform the first cycle of validations to be undertaken between 2016 and 2020.

In 2016, the Department of Education released the School Excellence policy providing direction for school personnel to undertake ongoing improvement through planning, self-assessment, annual reports and external validation. The Department of Education also launched a website, the School Excellence Self-assessment Evidence Guide, to support school personnel undertake self-assessments using the School Excellence Framework.

In 2017, the School Excellence Framework was revised in response to analysis of self-assessment and external validation data, feedback from schools, interviews with school administrators, consultation with stakeholders, and new evidence from research. The revision involved fitting descriptors into a progression, identifying core concepts for each thematic thread, clarifying language and reducing overlap between elements.

Supported Students, Successful Students

In March 2015, Minister Piccoli announced the Supported Students, Successful Students initiative to fund comprehensive support for public schools over four years to enhance the well-being of students. The initiative includes additional school counselling positions, scholarships to boost the recruitment of school counselling staff, additional student support officers, resources to support Aboriginal students and their families, and support for refugee students, who have experienced trauma.

In May 2015, the Department of Education and Communities released the Well-being Framework for Schools to support schools create instructional conditions that

enable students to be healthy, happy, engaged and successful. The framework sets out a planned approach, which public schools are required to install, consisting of six elements: teaching and learning; behaviour, discipline and character education; learning and support; professional practices; effective leadership; and school planning. In June 2017, the Department of Education released the Well-being Self-assessment Tool to assist school personnel understand well-being by engaging with the Well-being Framework for Schools. The self-assessment tool enables school personnel to assess their schools' approaches by following a sequence of four steps: engage with the Well-being Framework for Schools through professional learning; identify current and future approaches or programs using a mapping scaffold; evaluate how current and future approaches or programs support students to connect, succeed and thrive; and connect well-being and school excellence.

Literacy and Numeracy Strategy

In June 2011, Minister Piccoli appointed the Ministerial Advisory Group on Literacy and Numeracy to provide expert advice on early literacy and numeracy. The Advisory Group prepared an initial framework for the Literacy and Numeracy Action Plan, developed the Action Plan, reported on the performance of the Action Plan, and oversaw an independent evaluation of the Action Plan. In 2012, the New South Wales Government funded the State Literacy and Numeracy Action Plan, which was implemented in 448 disadvantaged schools over a five-year period from 2012 to 2016 to meet the needs of kindergarten to year 2 students. The targeted schools were provided with resources to assess students' learning needs on entry to kindergarten, provide professional development for teachers, adopt a three-tiered response to interventions for children needing additional attention, and use instructional leaders in literacy and numeracy.

In 2013, Erebus International was contracted to evaluate the Action Plan. The design for the evaluation was guided by an evaluation plan setting out three key research questions and nine contributing questions. The methodology involved annual document analyses of school and sectoral data, annual stakeholder interviews with representatives of the three education sectors, longitudinal case studies in six schools, interviews and focus groups in a sample of schools, online surveys of instructional leaders and principals, analysis of student literacy and numeracy data, and an attitudinal survey of year 3 students. Erebus International (2017) reported the findings relating to the three key research questions: to what extent had student literacy and numeracy performances improved; what factors led to achievement of the outcomes; and to what extent were the achieved outcomes cost effective. The data on student outcomes collected during the evaluation provided a mixed view of the impact of the Action Plan. Different approaches taken in the three sectors reflecting differing contexts, resources and background experiences, changes in literacy and numeracy instruction resulting from the Action Plan, changes in principals' leadership in implementing the Action Plan, the changing use of paraprofessionals, the contribution of target setting for literacy and numeracy, and increased teacher collaborative planning were factors affecting the outcomes. The most frequent uses of Action Plan funds across the three sectors was for hiring additional staff, purchasing materials and implementing specific programs. Calculation of Action Plan allocations and expenditures showed that the

annual per student expenditure across all schools amounted to $1,737, which could be described as a moderate to high cost approach. Calculation of achieved growth showed that the Action Plan contributed to an average growth of about 2.4 months, which was beneficial, but of low impact.

In September 2016, the New South Wales Government funded the Literacy and Numeracy Strategy 2017 to 2020 concentrating on five elements. Continued focus on intervention in early childhood education involves placing instructional leaders in 673 schools across the three sectors. Guidance in explicit instruction and better diagnostic assessments involves trialling the National Literacy and Numeracy Progressions and the Best Start Kindergarten Assessment in 673 schools, replacing the Literacy Continuum and the Numeracy Continuum with the National Literacy and Numeracy Progressions and introducing online literacy and numeracy assessments. More support for literacy and numeracy in secondary schools involves introducing a Best Start Year 7 Assessment on entry to high school, and strengthening the teaching of writing across all learning areas by providing additional resources and professional development opportunities for secondary teachers. Training pre-service teachers involves strengthening teacher education programs to ensure pre-service teachers are better prepared to teach literacy and numeracy, and providing support materials and a guide to existing materials. Conducting evaluations focusing on what works involves commissioning an independent review of the strategy, as well as specific literacy and numeracy programs.

Administrative and supervisory structure

New South Wales Department of Education

Following election of the Liberal and National parties in March 2011, the New South Wales Government integrated Children's Services and Communities within the Department of Education and Training. The amalgamation led to the formation of separate offices of education and communities, which consisted of five divisions: Schools, TAFE and Community Education; Strategic Relations and Communication; Workforce Management and Systems Improvement; and Finance and Infrastructure. In 2012, the Office of Education realigned the central office divisions, and replaced the regional model with a different structure. In July 2014, TAFE and Community Education separated to operate as a separate agency. As a result of changes in New South Wales Government portfolios following the election held in March 2015, State Training Services transferred to the Department of Industry, Skills and Regional Development and the Office of Communities, except for Aboriginal Affairs, transferred to the Department of Family and Community Services. From July 2015, the new Department of Education consisted of five divisions: Strategy and Evaluation; Aboriginal Affairs; External Affairs and Regulation; and Corporate Services. In 2017, the Department of Education was restructured into seven divisions: Strategy and Evaluation; Aboriginal Affairs; External Affairs and Regulation; School Infrastructure; School Operations and Performance; Educational Services; and Corporate Services.

In July 2015, the Department of Education replaced ten school regions supported by 78 school education groups, established in 2004, by a new structure consisting of

four operational directorates and 64 principal networks. Macquarie Park operational directorate includes 14 principal networks. Tamworth operational directorate includes 18 principal networks. Ultimo operational directorate includes 15 principal networks. Wagga Wagga operational directorate includes 17 principal networks.

Board of Studies New South Wales

Recommendations from reports on system-wide management and curriculum reform, and a ministerial policy statement on the core curriculum led to the enactment of the Education Act 1990, which established the Board of Studies New South Wales in June 1990. The Education Act 1990 provided the Board of Studies with statutory authority to develop and endorse syllabuses for use in New South Wales schools.

Board of Studies, Teaching and Educational Standards

In September 2013, the New South Wales Government announced that the Board of Studies and the New South Wales Institute of Teachers would be amalgamated to form a new entity, the Board of Studies, Teaching and Educational Standards (BOSTES), with a mission to implement the recommendations presented in the Great Teaching, Inspired Learning blueprint for action.

Commencing operation in January 2014, BOSTES was responsible for developing the curriculum, administering the Higher School Certificate and the Record of School Achievement, registering and accrediting schools, approving schools to deliver courses to overseas students, administering the numeracy and literacy tests, administering home schooling, and administering assessments of the Australian Music Examinations Board. BOSTES implemented four reforms in the blueprint for action: tougher entry standards for teaching degrees; a literacy and numeracy test for teacher education students; strengthened professional experience requirements; and accreditation requirements for all teachers.

Review of the Board of Studies, Teaching and Educational Standards

In March 2016, Minister Piccoli commissioned a panel to review the current role, membership, functions, and structure of BOSTES. Initially, the panel released an issues paper, which identified four areas for discussion with stakeholders. The panel received 43 submissions from stakeholders, conducted approximately 70 meetings with stakeholders, and collected 4,722 responses from educators, parents and students by an online survey. The feedback identified that amalgamation of BOSTES had not integrated the functions of the two organisations. There was a need for a clearer curriculum review process, greater clarity about requirements for syllabus implementation, better support for teachers, and clearer articulation of national and state roles. There was general agreement that the Higher School Certificate is a rigorous exit credential. There was a general view that the approaches used for school registration and home schooling were burdensome administratively. Most respondents believed that the process for teacher

accreditation was cumbersome, there were insufficient professional development courses, and initial teacher education was inconsistent with national requirements. Most respondents believed the governance structures of BOSTES and its committees should be reformed.

Louden, Paul and Lambert (2016) concluded that reform of BOSTES should be guided by four core themes: shift the regulatory focus to one that is outcomes and risk-based; direct effort to areas that will have the greatest impact on student outcomes; improve strategy and agility; and ensure clearer accountability and decision-making. The panel concluded that the objectives, role and functions of the organisation should focus on its core responsibilities. The panel recommended that the organisation should be guided by an annual ministerial letter of expectation and the organisation's name should be changed to the NSW Educational Standards Authority.

The panel concluded that governance arrangements should be changed to provide greater clarity in relation to roles and responsibilities, and provide clearer delegation of functions. The panel recommended that the new entity should be governed by a board led by a part-time chair, a charter for the board should be based on the ministerial letter of expectation, the board's work plan should give equal status to teaching quality, curriculum and assessment, and a chief executive should be appointed. The board should consist of 12 to 14 members, half drawn from the three school sectors and half drawn from stakeholder groups. The committee structure should be revised to reduce complexity and provide greater clarity in relation to the functions that are delegated from the board. The panel recommended that the current committee structure should be replaced by five regulatory committees: a Quality Teaching Committee; a Curriculum Committee; an Assessment Committee; a School Registration Committee; and an Initial Teacher Education Committee. Advice should be provided to the board by two committees: a Finance, Audit and Risk Committee; and a Research and Technical Committee.

The panel concluded that the input-focused and paper-based process for registering schools should be replaced by a more outcomes-focused approach, supported by a stronger risk management framework. The panel recommended that a more rigorous and risk-based approach should be taken to school registration focusing on the determinants of student learning instead of minimum levels of compliance. There are opportunities to extend the risk-based approach to school registration by random audits and a wider range of mechanisms to address the risk of compliance failure. Thematic reviews should be undertaken in priority areas in a sample of schools across the three sectors. Processes for teacher accreditation should be improved with clear decision-making and accountability, particularly accreditation at the proficient level. Furthermore, suspension or revocation of a teacher's accreditation status should be the responsibility of the new entity. The panel recommended that the effectiveness and efficiency of the regulatory process for teacher accreditation should be improved by clarifying the roles of teacher accreditation authorities and the new entity, streamlining the processes for maintenance of accreditation at the proficient level, and assigning sole responsibility for suspension or revocation of a teacher's accreditation to the new entity. The panel recommended that there should be greater consistency of legislative arrangements that support accreditation of initial teacher education programs.

The panel concluded that the new entity should engage more constructively in national collaboration on the curriculum, which would reduce the need for an exhaustive syllabus development process. The panel recommended that the new entity should produce a plan to engage with development and review of the Australian Curriculum, publish a curriculum review and implementation schedule that would remove duplicative efforts and shorten the syllabus development timeline. The panel recommended that the new entity should specify a smaller amount of essential content in syllabuses and provide advice on the level of flexibility for implementing syllabuses, because an over-crowded curriculum is inhibiting teachers from delving deeply into the content.

The panel concluded that greater emphasis should be placed on formative assessment in improving student achievement. A new approach is needed for accrediting providers of professional development by targeting efforts to priority areas, simplifying existing processes and supporting the role of teachers in assessing quality. The panel recommended that high levels of scrutiny should be applied to the approval of providers in the areas identified as state priorities, the approval process should be simplified for other providers, a user-rating system should be implemented, and risk-based auditing of providers should be based on teacher feedback. The panel concluded that the new entity should support teaching and learning by providing expert advice on curriculum, assessment, school regulation and teaching quality. The panel recommended that the new entity should strengthen collaboration with the Department of Education's Centre for Education Statistics and Evaluation to support the provision of expert advice in these areas. Streamlining regulatory processes would free up resources that could be directed to support areas that warrant greater attention. The panel recommended that resources should be directed to support the primary curriculum and the expansion of teacher accreditation to all teachers.

The panel concluded that the organisational structure for the new entity should be determined by the chief executive, once governance changes have been agreed. The panel recommended that a principle of alignment should be adopted in reconciling regulatory and corporate functions and an internal champion should be appointed to reduce red tape.

NSW Education Standards Authority

Established in January 2017 under the Education Standards Authority Act 2013, the NSW Education Standards Authority (NESA) is governed by a Board appointed by the Minister for Education. The Board's first task was to prepare a charter, which was approved by the Minister for Education in May 2017. The charter states that NESA's mission is to support the teaching profession through quality assurance of professional learning, developing curriculum, assessing student knowledge and capabilities, and fostering improvement in the quality assurance system for schools. At its first meeting in March 2017, the Board established regulatory and administrative committees to perform delegated functions and give advice to the Board. The Board developed a NESA Strategy and NESA Strategic Plan for 2017-2021 based on six priorities in the Minister's statement of expectations: address the

recommendations of the BOSTES review; develop an education strategy for New South Wales up to 2025; focus on the Premier's and state's priorities of increasing student performance and improving STEM and languages education; conduct a review of secondary education; undertake an assessment of New South Wales students' performance in international assessments of educational achievement; and complete the first thematic review into the teaching of writing. NESA came into operation with five divisions: Strategy and Delivery; Corporate Governance and School Standards; Quality Teaching; Curriculum Standards; and Assessment Standards.

Syllabuses for the Australian Curriculum

Curriculum Planning, Programming, Assessing and Reporting to Parents

Following the introduction of outcomes assessment and reporting in New South Wales public schools, John Watkins, the Minister for Education and Training, commissioned an evaluation of the impact that different approaches have on the workload of primary teachers. Information was collected from site visits to schools, a review of approaches used in other states and countries, a survey of principals, teachers and parents, verbal and written submissions by stakeholders, and discussions with experts in assessment and testing practices. In the report on the evaluation, the New South Wales Department of Education and Training (2003) presented sets of recommendations for adjusting curriculum demands, assisting schools, building effective assessment and reporting strategies, tracking and retaining data on students' progress, supporting teachers, and the teaching profession.

In response to these recommendations, *Curriculum Planning, Programming, Assessing and Reporting to Parents K-12*, was developed to clarify for teachers what is required in curriculum planning, programming, assessing and reporting to parents. Released in 2004, the policy document sets out requirements in the curriculum and allocation of time for curriculum planning and programming, assessing students, and reporting student achievement to parents.

Development of the syllabuses

Judgments made about the efficiency and effectiveness of the curriculum development process used and the suitability of the documents produced by ACARA to the specific needs of New South Wales schools led the Board of Studies to develop syllabuses and support materials for the Australian Curriculum through detailed and comprehensive consultation with the education community.

In February and March of 2011, the Board of Studies prepared directions for developing new syllabuses for English, Mathematics, Science and History in kindergarten to year 10 based on the Australian Curriculum. Commencing in March, the draft syllabuses were developed with the Mathematics, Science and History syllabuses being released for public review in June 2011 and the English syllabus being released for public review in August 2011. Feedback was collected by an

online survey and from more than 1,000 participants, who attended meetings across the state. Following revisions of the first drafts based on the feedback, second drafts were released for public review involving an online survey and meetings held across the state between February and April of 2012. After final revision of the second drafts, the English syllabus (Board of Studies New South Wales, 2012a), Mathematics syllabus (Board of Studies New South Wales, 2012b), Science syllabus (Board of Studies New South Wales, 2012c) and History syllabus (Board of Studies New South Wales, 2012d) were published in October 2012. Soon after publication of the syllabuses, the Board of Studies released a set of guides to highlight new features in the syllabuses and assist teachers to plan for implementation by listing support materials. The Board of Studies also conducted briefing meetings with school systems to outline the nature of the syllabuses, how they differ from existing requirements, and to explain the support materials to be provided.

In December 2012, the Board of Studies released an online *Parents' Guide*, an online kindergarten to year 6 *Schools' Guide* and an online year 7 to 10 *Schools' Guide*. At the same time, the Board of Studies released support materials to guide instruction. *Planning for effective learning and assessment* sets out guidance for teachers to determine whether teaching, learning and assessment are appropriate to the syllabus outcomes being addressed. *Designing effective learning and assessment* sets out guidance for teachers to select activities that develop students' knowledge, understanding and skills, and provide opportunities for evidence of learning to be gathered. *Differentiated programming* sets out guidance for teachers to match instruction to students' varying abilities, learning styles, interests and needs. *Sharing learning and assessment intentions* sets out guidance for teachers to share information with students about these issues. *Integrating ICT capability* sets out guidance for teachers to use information and communication technology in the classroom. Sample scope and sequence documents for each syllabus show the order of units within a year for stages 1 to 5, and the syllabus outcomes addressed in each unit. A sample unit for each stage in each syllabus presents a model to assist teachers in planning implementation of each syllabus.

In January 2013, the Board of Studies New South Wales (2012e) launched a guide listing literary and informational texts suggested for use with the English syllabus. Educators from across the state suggested texts, or reviewed previous lists of texts, in compiling the guide. In the first part, the suggested texts were organised by genre: fiction; picture books and graphic novels; poetry; film; non-fiction; drama; and media, multimedia and digital texts. The second part presented publication details, suggested stage, a summary review, genre, and relevant themes for each text. An appendix listed winners of major book awards for children and young adults held in the USA, UK and Australia.

In April 2013, the Board of Studies launched the Program Builder, an online tool to assist teachers create scope and sequence, and units. The Program Builder allows teachers to create a program, list and schedule units, and add syllabus outcomes. Multiple scope and sequences within one program can be created for different classes, subjects and across stages. A program can also be edited using the Program Builder. As a program is created, a unit can be developed individually. Within the unit, syllabus content, instruction and assessment activities can be added

to the unit. A unit can also be edited using the Program Builder. A template can be used to customise components of a unit. In June 2014, features were incorporated into the Program Builder to integrate resources from the Schools Online Teaching and Learning Environment (Scootle), and identify syllabus outcomes and content covered in programs and units. By June 2014, over 50,000 teachers had registered to use the Program Builder.

In May 2013, BOSTES began developing a draft Geography syllabus for the Australian Curriculum, which was released for public review in July 2014. Feedback was collected in the form of 94 responses to an online survey, 23 written submissions, a curriculum committee meeting, a meeting with stakeholders, a meeting with a special education focus group, and eight meetings held across the state with educators. Following revision based on responses to the review, the Geography syllabus for kindergarten to year 10 was released in July 2015 (Board of Studies, Teaching and Educational Standards, 2015). Soon after the publication of the Geography syllabus, BOSTES released a guide to the new syllabus, assessment advice and strategies, and programming advice and samples.

In 2016, BOSTES developed a draft Languages K-10 Framework to guide the development of 15 language syllabuses. In March 2016, the draft was released for public review by an online survey, consultation meetings and written submissions. Feedback from the review was used to produce the Languages K-10 Framework, which was adopted by the board in June 2016. In August 2016, draft syllabuses for Chinese and Japanese were released for public review by an online survey, consultation meetings and written submissions. Feedback from the review, reported in consultation reports (NSW Education Standards Authority, 2017a; NSW Education Standards Authority, 2017b), was used to develop the syllabuses for Chinese and Japanese, which were released in June 2017 (NSW Education Standards Authority, 2017c; NSW Education Standards Authority, 2017d). In June 2017, draft syllabuses for French, German, Indonesian, Italian, Korean and Spanish were released for public review by an online survey, consultation meetings and written submissions. Feedback from the review, reported in consultation reports (NSW Education Standards Authority, 2018a; NSW Education Standards Authority, 2018b; NSW Education Standards Authority, 2018c; NSW Education Standards Authority, 2018d; NSW Education Standards Authority, 2018e; NSW Education Standards Authority, 2018f), was used to develop the syllabuses for French, German, Indonesian, Italian, Korean and Spanish, which were released in March 2018 (NSW Education Standards Authority, 2018g; NSW Education Standards Authority, 2018h; NSW Education Standards Authority, 2018i; NSW Education Standards Authority, 2018j; NSW Education Standards Authority, 2018k; NSW Education Standards Authority, 2018l). A *K-6 Guide, Years 7-10 Guide* and a *Parent Guide* were released to support implementation of each syllabus.

When the Science syllabus was released in 2012, the Australian Curriculum for Technologies had not been adopted by the Education Council. BOSTES initiated development of a draft Science and Technology syllabus for kindergarten to year 6 to include content from Design and Technologies and Digital Technologies. BOSTES also developed a draft Mandatory Technology syllabus for years 7 and 8, and a draft Personal Development, Health and Physical Education syllabus for kindergarten to year 10. In February 2016, BOSTES commenced work on reviewing

the existing syllabuses and engaged stakeholders in the syllabus development process by collecting data from online surveys, meetings of board curriculum committees, consultation meetings, student voice meetings and written submissions. Feedback from the consultations was used to develop the draft syllabuses, which were released for public review in March 2017. Feedback from the public review, reported in consultation reports (NSW Education Standards Authority, 2017e; NSW Education Standards Authority, 2017f), was used to develop the syllabuses for Science and Technology and Mandatory Technology, which were released in December 2017 (NSW Education Standards Authority, 2017g; NSW Education Standards Authority, 2017h).

In 2017, the NSW Education Standards Authority commenced development of the Creative Arts syllabus for kindergarten to year 6 by specifying Draft Directions for Syllabus Development to provide a blueprint for developing the draft syllabus. Setting out three options for the draft syllabus, the Draft Directions for Syllabus Development were released in June 2017 for review at meetings and by an online survey. Feedback from more than 500 people was used to inform development of the Creative Arts draft syllabus.

In November 2017, NESA initiated a review of the syllabus development process to identify models that would deliver a streamlined process. Education officials, school administrators, teachers and members of the public were invited to respond to an online questionnaire focused on reviewing the subjects' previous engagement with the process, methods of feedback and expectations of NESA, when responding to feedback. In November and December of 2017, 1,010 people completed the survey.

Organisation to implement the syllabuses for the Australian Curriculum

The Board of Studies and the Department of Education and Communities defined an aspiration for how the Australian Curriculum will change classroom practices and secured wide support for the aspiration internally and externally.

The Board of Studies formed an internal leadership team to develop the syllabuses for the Australian Curriculum. In NESA, the team forms a directorate, Curriculum and Assessment Standards, within the Learning Standards branch. The team is responsible for coordinating the development of the syllabuses for the Australian Curriculum. The Department of Education formed an internal leadership team to implement the syllabuses for the Australian Curriculum. In the Department of Education, the team forms a directorate, Learning and Teaching, within the Educational Services branch. The team consists of state advisers responsible for supporting educators implement the syllabuses for the Australian Curriculum.

In August 2012, the Board of Studies released a timeline for implementing the syllabuses, which was developed in consultation with the Department of Education and Communities, the Catholic Education Commission of New South Wales and the Association of Independent Schools of New South Wales. The timeline provided a year for familiarisation in 2013. For kindergarten to year 6, the English syllabus was fully implemented in 2014, the Mathematics and Science syllabuses were fully

implemented in 2015, and the History syllabus was fully implemented in 2016. The syllabuses for English, Mathematics, Science and History were fully implemented in years 7 and 9 in 2014 and in years 8 and 10 in 2015. In July 2015, BOSTES released a timeline, which provided a year for familiarisation in 2016, for implementing the Geography syllabus. For kindergarten to year 7, the Geography syllabus was implemented in 2017. For years 8 and 10, the Geography syllabus is being implemented in 2018. In June 2017, NESA released a timeline, which provided 18 months for familiarisation and planning in 2017 and 2018, prior to implementation of the Chinese and Japanese syllabuses in kindergarten to years 7 and 9 in 2019 and years 8 and 10 in 2020. In March 2018, NESA released a timeline, which provided nine months for familiarisation and planning in 2018, prior to implementation of the French, German, Indonesian, Italian, Korean and Spanish syllabuses in kindergarten to years 7 and 9 in 2019 and years 8 and 10 in 2020.

BOSTES presented financial statements in its annual reports, but these statements do not include a separate budget for developing the syllabuses for the Australian Curriculum. The Department of Education presents financial statements in its annual reports, but these statements do not include a separate budget for implementing the syllabuses for the Australian Curriculum.

BOSTES did not conduct a gap analysis comparing outcomes in the New South Wales syllabuses to outcomes in the syllabuses for the Australian Curriculum.

In New South Wales, there is no guiding coalition of political, education and business leaders, who can provide forceful advocacy for reform, thereby building public understanding and will to sustain support for the Australian Curriculum during implementation.

NESA and the Department of Education engage in various activities to communicate information about the development and implementation of the syllabuses for the Australian Curriculum. NESA maintains a Communications, Media and Events directorate within its organisational structure, responsible for publishing a weekly electronic newsletter, *NESA News*, presenting information about current news and events, which is distributed to over 29,000 subscribers. The Department of Education developed a global experience framework for transforming its websites to make web content more consistent and reduce duplication over time. In September 2016, the Department of Education launched a new website providing curriculum information and resources. Department of Education advisers publish regular subject-based newsletters presenting information about current news and events.

Implementation action for aligning instructional practices

Beginning in 2013, the Department of Education and Communities initiated strategies to build awareness about the syllabuses for the Australian Curriculum and conducted projects to refine syllabus content and develop curriculum materials to support implementation of the syllabuses for the Australian Curriculum.

English textual concepts

A challenge arising from the initial implementation of the English syllabus was the emphasis placed on the subject's core ideas expressed through the outcomes and content. Although this emphasis encouraged teachers to analyse the syllabus, and shifted the focus to a more conceptual approach, it resulted in various interpretations. This situation led to the need for clarification and consistency in understandings about the core concepts of the syllabus. In January 2014, the Department of Education and Communities and the English Teachers Association of New South Wales collaborated on a project to develop an English Concept Continuum for early stage 1 to stage 5 describing a progression of concepts of English both stated in and implied by the English syllabus. English advisors developed concept progression statements, processes through which each concept is taught and rubrics describing the concept from the content and outcomes of the English syllabus.

In February and March of 2015, the Department of Education and Communities and the English Teachers Association of New South Wales held meetings at Sydney, Liverpool, Wollongong, Port Macquarie and Dubbo to consult curriculum leaders and teachers from a representative sample of schools across the state. In addition, meetings were held with Department of Education and Communities staff, BOSTES officers and directors, and higher education faculty. At the meetings, the participants were guided through and discussed the concept descriptions, concept progressions and processes, and scope and sequence models in the draft English Concept Continuum. Following the meetings, the draft resource was refined, and the participants at the meetings trialled scope and sequence models with units of work in their schools and shared them with teachers from other schools.

Feedback collected from the trial was used to produce textual concepts and learning processes. Core knowledge as stated or implied in the English syllabus comprises 15 textual concepts: argument; authority; character; code and convention; connotation, imagery and symbol; context; genre; intertextuality; literary value; narrative; perspective; point of view; representation; style; and theme. Each textual concept is demonstrated by engagement with texts, outcomes and assessment through six learning processes: understanding; engaging personally; connecting; engaging critically; experimenting; and reflecting.

In 2016, the final documents were published as an online resource on the English Textual Concepts website at www.englishtextualconcepts.nsw.edu.au. In August and September of 2016, the Department of Education offered professional learning for teachers on the English textual concepts through five sessions: using the English textual concepts processes to design learning; experimenting; identifying texts for concepts; annotation on a unit of learning; and English textual concepts and NAPLAN.

Numeracy Skills Framework

In 2014, the Department of Education and Communities designed the *Mathematics K-10 Continuum of Key Ideas* describing the content to be developed at each stage of learning for each content strand and process strand. The Department of

Education and Communities used the Learning Framework for Number to develop the *Numeracy Continuum K-10*, which outlines a progression of learning that can be used when observing students working on problems in mathematics. The *Numeracy Continuum K-10* consists of seven aspects: counting sequences and numerals; counting a problem-solving process; pattern and number structures; multi-unit place value; multiplication and division; fraction units; and measurement. The *Numeracy Continuum K-10* was published on the Numeracy Continuum K-10 website at www.numeracycontinuum.com.

In 2015, the Department of Education and Communities developed the *Numeracy Skills Framework* to guide planning and programming to embed numeracy across key learning areas. Mathematics advisers analysed the syllabuses for the Australian Curriculum for every outcome and content, and collated numeracy skills for each stage. The *Numeracy Skills Framework* is organised into five focus areas: mental computation and numerical reasoning; patterns and algebraic reasoning; spatial visualisation, geometric reasoning and mapping; measurement and time calculations; and graphical representation and data analysis. Focus area 1 contains six aspects of numeracy: understanding mathematical information in texts and tasks; applying whole number concepts; estimating and problem-solving; applying addition, subtraction, multiplication and division; understanding fractions, decimals, percentages, rates, ratios; and understanding money and finance. Focus area 2 contains one aspect of numeracy: patterning generalisations algebraic reasoning. Focus area 3 contains three aspects of numeracy: applying concepts of 3D objects; applying concepts of 2D shapes; and understanding position, maps and grid references. Focus area 4 contains four aspects of numeracy: understanding and applying length concepts; understanding and applying area concepts; understanding mass, volume and capacity; and understanding time and time zones. Focus area 5 contains two aspects of numeracy: interpreting and analysing data; and representing data in graphs and timelines. At the end of each focus area, there is a key learning area application and consideration section listing some applications within the curriculum area. Each focus area lists the numeracy skills for each stage from preschool to year 10.

Following its development, printed copies of the *Numeracy Skills Framework* were distributed to all public schools across the state. The digital version, available on the Numeracy Skills Framework website at numeracyskills.com.au, is regularly updated with courses and support materials.

In August 2015, the Department of Education initiated the Stage 3 and 4 Mathematics Transition Project to support communities of schools develop projects that promote sound pedagogical practices based on the Mathematics Continuum of Learning Outcomes in the Mathematics syllabus by incorporating research into effective transition models. Each participating secondary school, together with feeder primary schools, developed an action plan that brought primary and secondary teachers together to discuss teaching programs. Teachers developed common areas for focus, extrapolated a timeline of milestones for the project, and used assessment and observational data to identify common areas of need. The curriculum plan was implemented in both primary and secondary schools in each community. Conducted over a year commencing in October 2015, the Stage 3 and 4 Mathematics Transition Project led eight school communities to publish final reports.

Science, technology, engineering and mathematics initiatives

The Department of Education initiated several projects to deliver STEM education in public schools by fostering quality teaching and leadership in STEM, illustrating innovative ways of delivering STEM education, and raising expectations and enhancing student learning in STEM. In June 2016, the Department of Education launched a STEM website at www.stem-nsw.com.au to showcase the locally developed units offered by schools participating in the stage 3 and stage 4 integrated STEM projects.

During 2015 and 2016, 27 secondary schools participated in the Stage 4 Integrated STEM Project, which aimed to promote an interdisciplinary approach to teaching STEM through project-based activities involving integrated instructional practices, inquiry learning and design thinking. In 2016, the Department of Education established seven secondary STEM action schools to mentor and share innovative STEM practices and programs with other schools. In March 2016, the Department of Education convened the STEM Action Schools Conference in Sydney, at which teachers from the participating schools presented workshops about their programs. In June 2016, the Department of Education convened the Secondary Schools STEM Showcase in Sydney, at which teachers from the participating schools presented their locally developed units. Teachers from each of the seven secondary STEM action schools gave presentations describing how they would support effective STEM education. In November 2016, the STEM action schools delivered mentoring workshops to interested schools. In December 2016, the Department of Education invited rural and remote schools to participate in the Rural and Remote STEM Action School Mentoring Project by submitting expressions of interest. In 2017, rural and remote schools, selected for the project, participated in a STEM action school mentoring workshop.

During 2016, 35 primary schools participated in the Stage 3 Integrated STEM Project. In February 2016, teachers from 20 schools, which had submitted successful expressions of interest, attended an initial Primary STEM Conference held in Sydney, where they participated in workshops to develop knowledge and understanding around the pedagogies of working mathematically, working scientifically and working technologically. Each school developed and implemented a unit to develop learning experiences through the use of project-based learning strategies, improve student learning through pedagogical change, provide schools with the opportunity to evaluate instructional practices, and trial integrated STEM programs in schools. In November 2016, the Department of Education convened the Primary Schools STEM Showcase in Sydney, at which teachers from the participating schools presented their locally developed units. In 2017, the Department of Education established eight primary STEM action schools to mentor and share innovative STEM practices and programs with other schools. In May 2017, primary schools were invited to submit expressions of interest to receive mentoring from a primary STEM action school.

Instructional materials

Collections of instructional materials, intended to be downloaded and adapted by teachers, were developed by state advisers in collaboration with teachers to support implementation of the syllabuses for the Australian Curriculum.

In 2017, the Department of Education appointed six creative arts project officers to develop materials for the new Creative Arts syllabus due for publication in 2018.

In 2012, teachers from schools across the state, who met to explore and develop approaches for implementing the English syllabus, facilitated the development of three sample units each for stages 4 and 5. Each unit, which consists of a unit of work and a set of resources and activities, was published in 2013. *Are you talking to me?*, which uses a novel to facilitate students learning resilience strategies to assist them cope with change, hardship and bullying, is designed to be used as an initial unit in year 7. *iSpace*, which focuses on autobiographical representations of lived experiences, is intended to be used early in stage 4. *From page to game: multimodal narratives*, which focuses on visual literacy and comprehending art narratives, is intended to be used in stage 4. *Documenting our world*, which encourages students to engage with documentary films by responding to two documentaries and composing a documentary in a small team, is intended to be used in stage 5. *In their position*, which examines representations of refugees and asylum seekers in global, national and personal contexts, is intended to be used in stage 5. *Representations of school*, which explores students' perceptions of school, teachers and the role of a student in historical and contemporary settings in a wide range of texts, is intended to be used in stage 5.

Human Society and its Environment state advisers worked with the Aboriginal Studies Association, the Australian Association for Environmental Education and the Asia Education Teachers' Association to develop teachers' materials for the cross-curriculum priorities to support implementation of the History and Geography syllabuses. *Aboriginal and Torres Strait Islander histories and cultures*, a cross-curriculum teacher's material for early stage 1 to stage 5, provides activities and links to resources to integrate key concepts of country, culture and people. *Sustainability*, a cross-curriculum teacher's material for early stage 1 to stage 5, provides ideas to embed the cross-curriculum priority for sustainability through learning snapshots and links to resources across a range of topics. *Asia and Australia's engagement with Asia*, a cross-curriculum teacher's material for early stage 1 to stage 5, provides learning snapshots for each stage with case studies that include the diversity of Asia, achievements and contributions of peoples of Asia.

In 2017, the Languages and Culture team began developing new materials or adapting existing materials for the Chinese and Japanese syllabuses, which were then checked by language teachers. *Around town* and *Weather and travel* are sample units for Chinese at stage 5 intended to teach students a range of language that can be used when communicating about organising outings and the weather. *Go Nihongo!* is a series of videos with supporting activities for learners of Japanese across stages 3 to 6. *Waking up in Japan* embeds the use of online collaboration tools and 21st century learning skills to support students at stages 4 and 5 work collaboratively to research a topic of cultural interest in Japan and make a presentation that demonstrates their learning.

The Department of Education recommends that teachers should use various instructional materials that the agency has published to teach knowledge, skills and understanding in mathematics. Activities in *Developing efficient numeracy strategies*, published in 2002, can be used to teach number and algebra, measurement and geometry, and statistics and probability strands in the Mathematics syllabus at stages 1 and 2. Activities in *Fractions, pikelets and lamingtons*, published in 2003, can be used to develop a conceptual understanding of fractions. Activities in *Talking about pattern and algebra*, published in 2010, can be used to teach number patterns and number relationships. Activities in *Teaching measurement: early stage 1 and stage 1*, published in 2003 but updated in 2017, can be used to teach length, area, volume, capacity and mass. Activities in *Teaching measurement: stage 2 and stage 3*, published in 2004 but updated in 2017, can be used to teach units and the structure in measurement. Activities in *Teaching about angles: stage 2*, published in 2003, can be used to assist students identify, describe and compare angles. Activities in *Teaching measurement: stage 4*, can be used to teach length, area, volume, time and Pythagoras' theorem. *Shaping statistics in stage 4* is designed to help teachers engage students in stage 4 statistics and probability sub-strands: data collection and representation; and single variable data analysis. *Shaping statistics in stage 5* is designed to help teachers engage students in stage 5 statistics and probability sub-strands: single variable data analysis; and bivariate data analysis.

In 2013, four primary schools were involved in developing units for the Science syllabus to cater for the local context of their school communities. Putney Public School developed a unit based on the Material World sub-strand for early stage 1. Leumeah Public School developed a unit on light and sound, and pushes and pulls within the Physical World sub-strand for stage 1. Melrose Park Public School developed a unit based on the Material World sub-strand for stages 2 and 3. Lugarno Public School developed a unit on the built environment for stage 3, which was created in response to student concerns. Each unit consists of components for planning the unit, the unit of learning, and resources. *Locating the earth's shadow zone*, developed by teachers from schools in Orange, is designed for students in stage 4 to model observations that scientists made when analysing earthquake waves and interpreting the information to propose the internal structure of the earth. *To move or not to move*, developed by teachers from schools in Illawarra, is designed for students to simulate five scenarios for mining minerals.

Implementation action for training educators

Beginning in 2013, the Department of Education and Communities offered professional development opportunities to teachers through a series of Syllabus Plus webinars, online professional learning courses and a collection of professional learning resources.

In mid-2013, the Department of Education and Communities began the first of several series of Syllabus Plus webinars intended to provide teachers with information about the syllabuses for the Australian Curriculum and their implementation in the classroom. The first series, which was held in May and June

of 2013, examined changes in content and pedagogy within the syllabuses. The four sessions for English focused on designing programs, learning across the curriculum, grammar approaches and resources, and digital texts. The four sessions for Mathematics covered number and algebra, statistics and probability, measurement, and statistics and probability. The four sessions for Science examined the nature, development, use and influence of science, integrating Working Scientifically outcomes, inquiry based lessons, and sample units of work. The four sessions for History covered the essentials and building capacity, integrating cross-curriculum priorities and general capabilities, patterns of study and differentiated learning, and assessment and professional learning. The second series, which was held in September and October of 2013, explored teaching strategies for English as an additional language or dialect learners, and integrating digital technology. The four sessions for English focused on learners of English as an additional language, the Literacy K-10 Continuum, comprehension strategies, and learners of English as an additional language or dialect. The four sessions for Mathematics examined differentiating the curriculum for learners of English as an additional language, teaching at stage 5, integrating digital technology in stage 4, and integrating digital technology in stage 5. The four sessions for Science examined differentiated curriculum in science and life skills, assessment to inform instruction, learning across-the-curriculum content, and integration of information and communication technology. The four sessions for History covered the Quality Teaching Framework, the Literacy K-10 Continuum and learners of English as an additional language, integrating digital technology, and differentiating the curriculum. The third series, which was held from February to April of 2014, focused on providing teachers with in-depth knowledge and skills for implementing the English and Mathematics syllabuses. The four sessions for English focused on life skills and visual design, each covered over two parts. The four sessions for Mathematics examined financial mathematics, reasoning, measurement and geometry, and implications for designing programs. The fourth series, which was held in May and June of 2014, focused on providing teachers with new syllabus content, pedagogy, teaching ideas and resources for implementing the Mathematics syllabus. The four sessions for Mathematics examined using GeoGebra to teach statistics, using the Literacy K-10 Continuum in mathematics, learning across the curriculum in the mathematics classroom, and using Scootle to find resources for mathematics. The fifth series, consisting of eight sessions held in May and June of 2015, focused on teaching English in primary classrooms with an emphasis on English concepts.

In 2014, the Department of Education and Communities provided a series of online professional learning courses designed in each key learning area for use by individual teachers or collaborative groups, such as the whole-school staff, a faculty or a stage. *The learner and the new curriculum*, a two-hour course, focuses on diverse learning needs in the 21st century and introduced the syllabuses for the Australian Curriculum. *Teaching for the new curriculum*, a two-hour course, assists schools to implement the syllabuses for the Australian Curriculum by exploring planning, instruction and assessment practices. *Your school and the new syllabuses* consist of five-hour courses examining each syllabus for the Australian Curriculum by analysing needs and formulating implementation plans in each key learning area: English, kindergarten to year 10; Mathematics, kindergarten to year 10; Science and Technology, kindergarten to year 6; Science, years 7 to 10; History, kindergarten to year 6; and History, years 7 to 10. *Programming for quality teaching*

and assessing, a ten-hour course, provides a guided approach to curriculum planning, instruction and assessment. *A process for programming a unit of learning* are five-hour courses providing a more contextualised guide to planning units in each key learning area: English, kindergarten to year 10; mathematics, kindergarten to year 10; science and technology, kindergarten to year 6; science, years 7 to 10; and history, kindergarten to year 10. Four other courses became available later in 2014. *Integrated learning*, a five-hour course, focuses on understanding and applying processes that support an integrated approach to learning in the context of the syllabuses for the Australian Curriculum. *Differentiated learning*, a five-hour course, focuses on understanding and applying processes that support a differentiated approach to learning in the context of the syllabuses for the Australian Curriculum. *Using literacy K-10 continuum*, a four-hour course, focuses on the Literacy K-10 Continuum in the context of the syllabuses for the Australian Curriculum. *Using numeracy K-10 continuum*, a four-hour course, focuses on the Numeracy K-10 Continuum in the context of the syllabuses for the Australian Curriculum. Three courses for Geography became available in 2016 and 2017. *Your school and the Geography K-10 Syllabus*, a three-hour course, provides activities, which will develop teachers' capacity to use the syllabus. *Planning to teach geography K-10*, a three-hour course, focuses on the planning process specifically tailored to geography. *Programming for geographical inquiry K-10*, a three-hour course, guides teachers in programming geographical inquiry that embeds the geographical inquiry process. Four courses for Languages, which became available in 2017, were delivered in a sequence; *Languages and numeracy* in term 1; *Languages and differentiation* in term 2; *Languages and literacy* in term 3; and *Languages and digital engagement* in term 4.

A collection of professional learning resources, intended to be downloaded locally and used for professional learning, was developed to build teachers' capacity to understand new or challenging aspects of the syllabuses for the Australian Curriculum. The sets for each learning area contain links to videos, web-based resources, professional resources, lesson plans, and instructional materials. Six resources were developed to support implementation of the English syllabus. *Using digital and multimodal texts K-6* assists teachers implement the English syllabus using digital and multimodal texts. *Exploring composing K-6* assists teachers to consider the process of composing written, spoken or visual texts set out in the English syllabus. *Engaging personally with texts in K-6* assists teachers identify the needs of students in engaging personally with texts. *Exploring new text requirements, 7-10 English* assists teachers identify and utilise the distinctive features of Asian texts and multimodal texts as specified in the English syllabus. *Teaching grammar in years 7-10* assists teachers contextualise the teaching of grammar as required by the English syllabus. *Spelling, punctuation and comprehension* assists secondary teachers impart the essential requirements of spelling, punctuation and comprehension as specified in the English syllabus. Five resources were developed to support implementation of the Mathematics syllabus. *Teaching fractions: a primary concern* explores the link between fraction units, fraction notation and the restraints on area models in the Mathematics syllabus. *Teaching data stage 3: dot plots* supported primary teachers' understanding of data concepts through the provision of lesson plans and practical teaching ideas. *Using the Numeracy Continuum with the new Mathematics K-10 syllabus* explores the connection between the Numeracy K-10 Continuum and the Mathematics syllabus.

Shaping statistics in stage 4 supports secondary teachers' understanding of stage 4 statistics' concepts in the Mathematics syllabus through the provision of sample lesson plans and practical teaching ideas. *Shaping statistics in stage 5* supports secondary teachers' understanding of stage 5 statistics concepts in the Mathematics syllabus through the provision of sample lesson plans and practical teaching ideas. Five resources were developed to support implementation of the Science syllabus. *Working scientifically in K-6* assists primary teachers extend their understanding of the Working Scientifically strand in the Science syllabus. *Working technologically in K-6* assists primary teachers increase their understanding of the Working Technologically strand of the Science syllabus. *Working scientifically* assists teachers clarify their expectations of stage 3 outcomes and supports their understanding of the transition of skills through to stages 4 and 5 in the Science syllabus. *An inquiry approach: a model explored* demonstrates the application of an inquiry approach, the 5E instructional model developed by the Biological Sciences Curriculum Study, for instruction to develop students' understanding of science ideas and concepts. *The nature, development, use and influence of science* provides teachers with the opportunity to become more familiar with aspects related to the development of new understandings in science, how this is used by society, and its influence on society. Six resources were developed to support implementation of the History syllabus. *Historical concepts and skills* supports primary teachers to understand the increasing sophistication of historical concepts and skills. *Historical inquiry in the primary classroom* builds primary teachers' capacity to appreciate and utilise historical inquiry as a discipline-based approach. *Building historical narrative using sources* builds primary teachers' capacity in using sources to develop historical narrative. *World history approach* builds the capacity of secondary teachers to understand and respond to the requirements of the world history approach reflected in the History syllabus. *Overviews and depth studies* explains the nature and purpose of overviews and depth studies as defined in the History syllabus. *Patterns of learning* guides secondary teachers through the process of planning a scope and sequence of themes and depth studies that will extend learning across stages 4 and 5.

The Languages and Culture team engaged in other activities to facilitate professional development for languages teachers. In August 2017, a project was initiated to create networks across the state for teachers to access professional learning and support from state office. By January 2018, network leaders had been appointed to 12 networks: Mid North Coast; Illawarra; South Western Sydney; Greater Western Sydney; Central West; Riverina; Sydney East; Sydney North; Sydney South; Central Coast; Northwest; and Newcastle Hunter. A pilot project was also initiated to appoint virtual head teachers for French and Indonesian to provide online curation of materials, offer language-specific advice, and deliver professional learning and networking services. In week four of each term, the Languages and Culture team offers a state-wide network meeting held on a web conferencing platform to provide language teachers with curriculum and project updates. Following release of the syllabuses for French, German, Indonesian, Italian, Korean and Spanish in March 2018, the Languages and Culture team offered a range of professional learning opportunities, including a blended learning module, Languages K-10 Syllabus Familiarisation.

Northern Territory

Educational Reform Policy

Strategic plan

The Northern Territory Department of Education's executive consulted educators and key stakeholders to develop the first strategic plan for 2013 to 2015. Structured around the concept, Creating Success Together, the strategic plan set out five principles: education drives social and economic advancement; resourcing decisions are based on evidence-based practices; service quality and efficiency are enhanced through flexible delivery models; decisions are best made closest to the point of service delivery in schools; and autonomy is balanced by system-wide effort and accountability. Launched in September 2013, the strategic plan specified five goals, strategies and key actions for each goal that were measured in progress reports released in December 2014 and June 2015.

Following feedback from educators and stakeholders, an updated strategic plan for 2016 to 2018, Growing Success Together, was launched setting out five goals, strategies and key actions for each goal that were measured in a progress report released in December 2016. More than 1,000 stakeholders, who attended community forums at Nhulunbuy, Katherine, Tennant Creek, Darwin, Alice Springs and Palmerston, participated in consultation meetings and responded to an online survey. Feedback from the meetings and the survey was used to produce the Strategic Framework for 2018 to 2022. Launched in November 2017, the Strategic Framework sets out five focus areas: school leadership; quality teachers; differentiated support; community engagement; and data and accountability.

Indigenous Education Review

In July, 2013, Peter Chandler, the Minister for Education and Children's Services, commissioned education consultant, Bruce Wilson, to review programs and initiatives for Indigenous education and provide the Northern Territory Government with recommendations to optimise education and training outcomes for Indigenous students. The methodology involved analysing documents, interviewing officials and stakeholders, holding meetings with organisations, visiting 32 schools, and conducting an online survey, which received more than 400 responses. Following the release of a draft report in February 2014, consultation forums were held at Katherine, Yirrkala, Nhulunbuy, Alice Springs, Darwin, Maningrida, Tennant Creek and Ali Curung to seek feedback on the findings and recommendations.

Wilson (2014) concluded that difficulties associated with introducing secondary education to remote and very remote communities had failed. The challenges faced by the Department of Education in providing education to Indigenous children, who enter school in remote and very remote communities with little English, requires a change in direction. The report recommended that the Department of Education should take a lead role in delivering an integrated and comprehensive approach to social and economic problems that influence Indigenous education. An analysis of student data indicated that schools should be classified into three categories based

on factors of disadvantage and need. The review identified that a variety of initiatives, short timelines and changes in direction could be better managed by developing a ten-year strategic plan for Indigenous education. Ineffective efforts to engage with local communities could be overcome by developing a new community engagement charter. The review supported extending Families as First Teachers, which provides early childhood learning, parent capacity building, literacy and numeracy at home and transition to school, to more communities. The review concluded that ensuring all Indigenous children gain English literacy by direct instruction should be the priority of primary education. The review concluded that for remote and very remote students secondary education should be provided in urban schools. The review found that poor school attendance should be addressed by establishing regular patterns of attendance for children in early childhood and primary levels. The review identified that problems associated with student behaviour should be addressed by the Behaviour Management Taskforce developing a social and emotional learning curriculum. The review found that the participation of Indigenous teachers and principals should be raised by designing a comprehensive workforce plan. The review found that poor management, distribution, targeting and timing of funds should be addressed by allocating funds according to goals reflected in a strategic plan.

Following presentation of the report in May 2014, the Northern Territory Government designed a ten-year Indigenous education strategy for 2015 to 2024. Launched by Minister Chandler at Warruwi School on Goulburn Island in May 2015, the strategy sets out principles and five elements: the education system takes the opportunity to directly shape education outcomes from the start of a child's life; literacy and numeracy are essential for subsequent success in school; successful completion of secondary education provides options and choices for young adults; the best results are achieved when students are engaged with their learning and attend school regularly; and a high quality and stable workforce improves student learning outcomes. A vision, target and measure underpin each element. The strategy is designed in four stages comprising three-year implementation cycles and a final evaluation in the tenth year.

Implementation of the first stage of the strategy included projects to expand the Families as First Teachers program into remote communities, implement a mandated curriculum and assessment framework in selected schools that provides a consistent approach to teaching literacy and numeracy, establish a transition support unit to support families negotiate their children's secondary pathway options, engage communities to improve outcomes in student attendance, well-being and achievement, and implement a workforce plan with a focus on ensuring educators in remote schools are well equipped to deliver improved student outcomes. Acil Allen Consulting has been commissioned to evaluate the first stage.

An evaluation report assessing the strategy's implementation progress, which was released in mid-2016, informed development of the implementation plan for the second stage from 2018 to 2020. It focuses on local decision-making to give communities the opportunity to lead in planning and delivering education services in their schools. Between March and May of 2017, key stakeholders were consulted to inform the plan's development.

Middle School Review

Following a review of secondary education in 2003, two distinct stages of secondary schooling commenced in the Northern Territory in 2006. The new model saw the introduction of middle schools to cater for years 7 to 9 and senior secondary schools for years 10 to 12 in urban and regional centres with some remote comprehensive schools tailoring education for middle years students through internal restructures. The new structure brought changes to the way in which the curriculum and professional development are delivered to schools.

In May 2014, Minister Chandler commissioned Zbar Consulting, an education consulting firm based in Melbourne, Victoria, to review the current structural framework, current pedagogical models, curriculum delivery, assessment practices, and the learning environment in middle schools in the Northern Territory. The consultant reviewed student performance data and school policy documents, and conducted site visits in six middle schools at Darwin, Palmerston and Alice Springs, and held teleconferences with the principals of four comprehensive schools at Katherine, Nhulunbuy, Taminmin and Tennant Creek. Zbar (2014) found that student enrolment, retention and attendance in the schools were variable, and there was lack of available data on student performance. A vision for middle schooling was lacking, the quality of leadership varied across the schools, and organisational structures within some of the schools did not facilitate a positive learning environment. In some schools, teachers lacked the capacity to improve literacy and numeracy outcomes. Although curriculum support was available in most of the schools, it was often directed to capable teachers. Furthermore, the curriculum needed to be rebalanced to an interdisciplinary project approach. There was a lack of consistency in assessment practices across the schools.

The Northern Territory Government addressed the recommendations from the report through a three-year strategy, Work like the Best: Middle Years Teaching and Learning Strategy 2016 to 2019. The strategy is aimed at raising middle years' education to best practice in six provincial middle schools and four comprehensive schools. The strategy focuses on implementing actions in these schools that lead to four outcomes: every student becoming a successful learner; quality leaders, quality educators and quality learning; coherent and capable organisation; and productive partnerships. Progress towards meeting these outcomes is measured through biennial reports provided to the Department of Education's Education Strategic Reform Committee.

Administrative and supervisory structure

In the Northern Territory, 73 per cent of public schools are located in remote or very remote areas with 46 per cent of students enrolled at these schools. There is a diverse student population with Aboriginal children making up 44 per cent of the total enrolment. To meet these challenges, the Northern Territory is organised into six regions: Alice Springs; Arnhem; Barkly; Darwin; Katherine; and Palmerston and Rural. To support schools and local communities across the six regions, the Department of Education is organised into six divisions: School Education;

Education Partnerships; Corporate Services; Strategic Services; Early Childhood Education and Care; and the Office of the Chief Executive. The Accountability and Performance Improvement Framework is used to align the Department of Education's organisation across all levels to the goals of the strategic plan.

Difficulties in recruiting and retaining teachers in remote and very remote schools are being met by a strategic workforce plan for 2016 to 2018. The plan consists of a Teacher and Educator Attraction and Recruitment Strategy involving communication and marketing strategies and an Indigenous Employment and Workforce Strategy aimed at increasing the number of Aboriginal employees from 14 percent of employees in 2017 to 20 percent of employees by 2020.

Organisation to implement the Australian Curriculum

The Department of Education defined an aspiration for how the Australian Curriculum will change classroom practices and secured wide support for the aspiration internally and externally.

The Department of Education maintains a team of curriculum and assessment consultants in the School Support Services division. The team provides targeted curriculum support and professional development workshops for school leaders and teachers.

Following adoption of Phase One of the Australian Curriculum, the Northern Territory Australian Curriculum Advisory Group recommended a timeline to the executive group of the Department of Education and Training and the Northern Territory Board of Studies for implementing English, Mathematics, Science and History. Released in February 2011, the timeline specified that English and Mathematics would be piloted in 2011 and implemented in 2012, and Science and History would be piloted in 2012 and implemented in 2013. In October 2015, the Board of Studies released a timeline for implementing Phases Two and Three of the Australian Curriculum. Economics and Business, Civics and Citizenship, the Arts, Health and Physical Education, Languages and Technologies were implemented in 2016.

The Department of Education presents financial statements in its annual reports, but these statements do not include a separate budget for implementing the Australian Curriculum.

The Department of Education and Training conducted a gap analysis during the course of the pilot studies to compare the outcomes in the Northern Territory Curriculum Framework to the content descriptions in the Australian Curriculum.

In the Northern Territory, there is no guiding coalition of political, education and business leaders, who can provide forceful advocacy for reform, thereby building public understanding and will to sustain support for the Australian Curriculum during implementation. The Northern Territory Australian Curriculum Advisory Group may perform the role of a guiding coalition to a limited extent by providing advice to the

Board of Studies and the Department of Education's executive about implementation of the Australian Curriculum.

The Department of Education engages in various activities to communicate information about implementation of the Australian Curriculum. It maintains a Media Unit within the Corporate Services division, which communicates news articles about the implementation of the Australian Curriculum.

Implementation action for aligning instructional practices

Curriculum, Assessment and Reporting Policy

Early in 2012, the Curriculum Policy Review Working Group, consisting of representatives from stakeholder groups, was established to review the curriculum, assessment and reporting policy and guidelines for transition to year 9. The drafts for the policy and guidelines were released in May 2013 for review by educators through an online survey. Following revision based on feedback from the review, the policy and guidelines were endorsed by the Board of Studies in August 2013. The *Curriculum, Assessment and Reporting Policy: Transition to Year 9* supports schools during the transition from the Northern Territory Curriculum Framework to the Australian Curriculum by establishing a policy for curriculum, pedagogy, assessment, reporting, and student diversity. The *Curriculum, Assessment and Reporting Guidelines: Transition to Year 9* presents advice to educators about implementing curriculum, pedagogy, assessment, reporting, and curricular resources. The *Curriculum, Assessment and Reporting Policy: Transition to Year 9* requires public schools to develop and implement a whole-school curriculum and assessment plan that documents the intended curriculum throughout the year, and how instruction and assessment are aligned.

The whole-school curriculum and assessment plan provides a framework for planning the teaching of literacy and numeracy, meeting the needs of individual student cohorts, and allowing for the delivery of English and Mathematics curriculum content. The Northern Territory Scope and Sequence and the Multiple Year Level Scope and Sequence were developed for schools to align curriculum, instruction and assessment represented in the whole-school curriculum and assessment plan. The Northern Territory Scope and Sequence describes the intended curriculum using content descriptions, organised by year levels, across terms by units of work. The Multiple Year Level Scope and Sequence adopts the sequence of the Northern Territory Scope and Sequence to ensure the alignment of curriculum content across year levels to support instruction in composite classes, multi-age and multiple year level classes. Schools are expected to use either the Northern Territory Scope and Sequence or the Multiple Year Level Scope and Sequence to inform whole school, year level and classroom plans.

Pilot Studies

In 2011, 22 schools piloted the Australian Curriculum to provide advice to the Department of Education and Training about supporting implementation in all

schools across the Northern Territory. The pilot study involved 16 schools implementing English, 18 schools implementing Mathematics, five schools implementing Science, and six schools implementing History. A set of training materials was developed and supported by regional professional learning workshops for curriculum leaders. At the planning meeting of the pilot schools, focus groups on assessment and reporting, early years (transition to year 2), primary years (years 3 to 6), middle years (years 7 to 9), and year 10 were formed consisting of representatives from each of the 22 schools to examine instruction and assessment, professional learning, transition between phases of learning, and diversity of learners. The focus groups gathered data through discussions, shared piloting experiences, identified school and teacher needs for implementation, and informed planning for territory-wide implementation of English and Mathematics in 2012. *Teaching for Learning with the Australian Curriculum* support materials were field-tested with groups of teachers late in 2011, and published on the Learning Links portal. Launched in 2011, the Learning Links portal houses information and resources to support schools and teachers implement the Australian Curriculum. Features include electronic newsletters, and Learning area e-News distributed by Department of Education learning area consultants to a subscribed list of recipients.

In 2012, the Department of Education and Training continued piloting History and Science using separate studies investigating a whole-school approach and a teacher engagement approach. In the whole-school approach, Department of Education and Training staff worked with each school's principal and pilot coordinator to develop a transition plan, provide online professional learning opportunities and network forums, collect whole-school and classroom resources, and publish materials and resources collected during the project. In the teacher engagement approach, Department of Education and Training staff worked with selected teachers through an initial training workshop, online forums and video conferencing to research, develop and field-test school-based resources, which were published on the Learning Links portal. In 2012, the Department of Education and Training reached an agreement with the Queensland Department of Education and Training to use Curriculum into the Classroom materials in public schools across the Northern Territory.

Full Implementation

During the implementation phase, Department of Education staff worked with regional curriculum staff to assist schools transition to the Australian Curriculum using information and resources collected during the pilot studies. Support for implementation is delivered by a Curriculum T-9 Team, a Middle Years Team, a Senior Years Curriculum Team, and a Literacy and Numeracy Projects Team. These teams provide teachers with professional development through workshops and online materials. Specialist support is also provided through central support and regional partnerships for English-as-a-second language pedagogy.

For year 10, the Department of Education developed subject summaries for the English and literacy curriculum, Mathematics and numeracy curriculum, Science curriculum and History curriculum. Based on the Australian Curriculum, each subject summary includes a summary of the course content, programming and

teaching requirements, advice about pedagogy, an overview of assessment, and learning and assessment plan templates.

Literacy and Numeracy Essentials

A goal of element 2 of the Indigenous education strategy's implementation plan for the first stage supports implementation of a literacy and numeracy program at the primary level based on the Australian Government's Flexible Literacy Learning for Remote Primary Schools program or the Northern Territory's Literacy and Numeracy Essentials program, which was developed in response to a recommendation of the Indigenous Education Review to ensure that Aboriginal students in remote and very remote schools can improve English language, literacy and numeracy proficiency.

The Literacy and Numeracy Essentials program consists of three components: a developmental curriculum allowing students to develop literacy skills necessary to meet the Australian Curriculum achievement standards; an instructional model based on teachers identifying and building on what students already know; and the use of recommended literacy and numeracy programs. In 2016, the core components of the program were trialled in ten remote schools, where student mobility and attendance have a significant impact. In 2017, 40 remote and very remote schools began implementing the Literacy and Numeracy Essentials program with another 39 schools starting the program in mid-2017. To support implementation of the program, teachers from 28 schools were trained in Darwin and Alice Springs on using *Read Write Inc.*, a phonics literacy program developed by Ruth Miskin, a British literacy adviser.

Languages education

In 2013, the Board of Studies established a Languages Stakeholder Reference Group to provide advice on issues relating to the implementation of the Australian Curriculum for Languages. Concurrently, an Indigenous Languages and Cultures Reference Group was formed to provide advice on issues relating to Indigenous languages and cultures. The Languages Stakeholder Reference Group was charged with investigating practices in languages education to identify programs that work in order to frame recommendations for a policy planning day held in March 2015.

The Northern Territory Board of Studies (2015) reported that a series of research tasks were conducted to provide an evidence base from which languages policy and implementation plans could be framed. The Languages Stakeholder Reference Group concluded that targets and measures for successful languages education should be based on quality instead of student enrolment, participation and course completion. A review of policy documents on languages education indicated that policymaking has shifted from a multicultural orientation in the 1980s to a strategic orientation that accounts for economic, trade and political interests shaped by Australia's place in the world. An analysis of state-level policies for languages education identified that policies in Queensland, South Australia, Tasmania and Western Australia focus on curriculum requirements, but those in the Australian

Capital Territory, New South Wales and Victoria extend to other areas, such as community, workforce, partnerships and resources. A review of policies for languages education in the Northern Territory identified that it is a prominent issue for policymakers and community leaders, but the visionary statements and curriculum requirements set out in policy documents are not met in the quality of languages education in schools in terms of delivery and impact. Furthermore, policies of the Australian Government have had a major impact through funding to increase student participation in learning Asian languages. While federal funding supported a range of projects, there was a lack of lasting impact on participation rates, quality and provision. The establishment of the Darwin Languages Centre in 1997 has overcome problems arising from inconsistency in system-level support for languages education, contributed to policy development and improved the provision and quality of languages education. Provision of a suitably qualified and proficient languages teaching workforce, which is a major challenge, has been addressed by scholarships, sister schools and exchange programs. Case studies on language programs offered by Darwin High School, Kormilda College and the Alice Springs Languages Centre identified that support by school administrators in promoting and integrating languages education, opportunities for teachers to discuss and monitor languages programs, initiatives that enable students to practice languages with native speakers, and teachers' satisfaction about their language programs, are key factors. Surveys conducted by the Board of Studies in 2013 identified that 48 percent of schools offered languages programs, while in 2014, it was found that students based in Darwin and Alice Springs had access to continuous languages programs across all levels, but public schools in the Katherine region did not offer languages programs. Opportunities for languages education across all levels are inconsistent, and some languages programs focus on building cultural knowledge rather than language acquisition. Support for languages education is provided by six agents: the Languages Stakeholder Reference Group; the Darwin Languages Centre; the Alice Springs Languages Centre; the Schools North principal consultant for languages; the senior teacher consultant Australian Curriculum Languages; and the senior teacher consultant senior years.

In 2015, the Department of Education launched the Northern Territory International Education and Training Strategy for 2014 to 2024 to strengthen the Northern Territory's position as a gateway between Australia and Asia through education. This strategy involves aligning Asian languages taught in schools with priority initiatives to ensure pathways for Chinese, Japanese and Indonesian, identifying gaps and establishing baseline data for these languages, and including Asian languages in pre-service teacher education. Partnerships exist with the SACE Board of South Australia, Charles Darwin University, the Language Teachers' Association of the Northern Territory, as well as the Confucius Institute, Japan Foundation and the Indonesian Consulate to provide opportunities for enhancing languages education in Northern Territory schools.

In 2016, the Board of Studies reconvened the Indigenous Languages and Cultures Reference Group to develop a policy for teaching Indigenous languages and cultures. The Indigenous Languages and Cultures Reference Group reviewed literature and analysed data to ascertain past and present policies and practices in teaching Indigenous languages and cultures and visited schools to identify current practices. Although the use of Indigenous languages was repressed before 1972, a

large proportion of schools have offered courses in Indigenous languages and cultures since 1973. In 2016, 50 schools were teaching 28 Indigenous languages and more than 1,000 students were assessed in these courses. Case studies on successful programs in Indigenous languages and cultures, operating in five schools, identified common factors. In considering these factors, the Indigenous Languages and Cultures Reference Group defined five principles for programs in Aboriginal languages and cultures.

The Northern Territory Board of Studies (n.d.a) discussed the implications of each principle and presented sets of recommendations. Strong ownership is characterised by recognising Indigenous world views, knowledge and processes held by elders, consulting with the Indigenous community to develop a shared process and documenting agreements to work together. Strong programs are developed in partnership with Indigenous communities, incorporate the knowledge of elders, use a whole-school approach to curriculum, instruction and assessment negotiated, planned and documented with the Indigenous community, and based in the Indigenous Languages and Culture component of the Northern Territory Curriculum Framework and the Framework for Aboriginal Languages and Torres Strait Islander Languages adopted by the Education Council in December 2011. Strong teaching, strong learning is best achieved through teaching teams, supported by specialists at the system, regional and school levels, sustained by accredited training and professional learning for teachers, accomplished through the use of locally-developed materials, and informed by consistent assessment and reporting practices. Strong pathways include curriculum options across all levels from pre-school to further education and work, and the use of age-appropriate programs developed and delivered through partnerships with various community organisations and providers. Strong futures, strong plans are created by recognising and valuing Indigenous languages and cultures as academic subjects, allocating resources, providing continuing professional development, and collecting student achievement data for measuring success. The discussion paper concluded by presenting a framework for Indigenous languages and cultures in Northern Territory schools based on five principles.

The discussion paper provided a foundation for the Board of Studies to create a plan for Indigenous languages and cultures in collaboration with stakeholders. The Northern Territory Board of Studies (n.d.b) presented a rationale statement, a vision and a goal for the plan, and set out strategies for each of the five principles that connect measures, indicators and milestones used to track improvement. Strong ownership is defined by two strategies: a culture that promotes the teaching and learning of Indigenous languages and cultures; and coordinated partnerships. Strong programs are defined by two strategies: collection and analysis of data; and systematic curriculum delivery. Strong teaching, strong learning is defined by two strategies: expert teams; and effective practices. Strong pathways are defined by two strategies: differentiated provision; and coordinated partnerships. Strong futures, strong plans are defined by two strategies: planned use of resources; and an improvement agenda. Based on the Northern Territory Curriculum Framework and the Framework for Aboriginal Languages and Torres Strait Islander Languages, the plan proposes a curriculum framework consisting of cultural knowledge and content, and four learner pathways. Cultural knowledge and content is organised into three strands: country and land; people and kinship; and natural environment.

The first language pathway is designed for Indigenous students to maintain communicative competence, but may constitute a bilingual program. The second language pathway provides an opportunity for all students to learn an Indigenous language as a second language. The language revival pathway is designed for Aboriginal students to learn an Indigenous language that may no longer be spoken on a daily basis. The language and cultural awareness pathway provides an opportunity for all students to increase intercultural capability by learning about an Indigenous language and culture.

Following approval by the Board of Studies, the plan was launched at Sanderson Middle School in April 2017. Late in 2016, more than 3,000 students were enrolled and assessed in an Indigenous language and culture program as part of the plan. Guidelines are being developed to help schools, local communities, elders and language custodians with decision-making about learner pathways that can be taught in schools, pedagogy and assessment.

Science, technology, engineering and mathematics strategy

In 2017, the Department of Education collaborated with the Board of Studies to develop a STEM strategy. In August 2016, a skills 2021 expo was held where students learnt about new technologies and future careers in the digital industry. Code clubs were established in ten public schools, and students learnt coding using the Hour of Code website. In January 2017, a two-day workshop, Code and Create, was held for students in years 7 to 9 to learn how to code. In August 2017, a camp for more than 160 girls in years 5 to 12 was held to inspire them to become involved in STEM activities.

Implementation action for training educators

In 2013, the Department of Education introduced Visible Learning Plus, a professional development program derived from John Hattie's analysis of research studies on factors affecting student learning. Visible Learning Plus provides guidance and support to schools to create the conditions necessary to improve student achievement. The program involves monitoring changing teaching practice within schools together with measuring student growth, progress and achievement. Professional learning is provided by school leaders and supported by impact coaches, who work with leadership teams and teachers to support implementation of school improvement plans. First implemented in 50 schools across the Alice Springs and Barkly regions in 2013, the program showed significant improvements in practice and student engagement in learning. In 2014-2015, professional development activities were conducted to train impact coaches, leaders and teachers, who support staff in schools. In 2015, all schools across Arnhem, Darwin, Katherine and Palmerston regions commenced implementing Visible Learning with more than 1,500 educators participating in workshops held in Darwin, Palmerston, Katherine, Gunbalanya and Ramingining. In 2015-2016, more than 1,400 staff participated in Visible Learning professional development activities. In 2016-2017, 785 staff participated in Visible Learning professional development activities.

In 2016-2017, the Department of Education provided professional development to enhance teachers' capacity to deliver STEM in schools. Thirteen SPARK coding workshops were held across the Northern Territory allowing almost 70 teachers to participate in face-to-face sessions and webinars on coding applications and robotics. RoboCup coding workshops were held at Darwin and Alice Springs to assist teachers support students participating in RoboCup competitions. Workshops on digital technologies, offered by the University of Adelaide, were attended by almost 100 teachers from 27 schools. Workshops on computational thinking and algorithmic design were delivered in partnership with Education Services Australia to teachers in Alice Springs, Darwin and Katherine.

Queensland

Educational Reform Policy

Strategic plan

The Department of Education and Training revises its strategic plan on a regular basis. The strategic plan for 2017 to 2021 sets out strategies to deliver services that will engage early with families and children to give them the best start, lift educational outcomes for every student, prepare students for the world of tomorrow today, support Queenslanders to skill and reskill for the changing world, and transform the way of doing business.

The strategic plan is supported by *Every student succeeding: state schools' strategy 2018 to 2020*, which provides an overview of the improvement agenda and identifies key elements used to enhance improvement across the education system. It sets out a vision, an action plan and seven focus areas: collaborative improvement; successful learners; teaching quality; principal leadership and performance; school performance; regional support; and local decision-making.

Advancing Education

In October 2015, Premier Annastacia Palaszczuk and Minister for Education, Kate Jones, launched an action plan and a discussion paper on coding and robotics in public schools. Queenslanders were invited to comment on what actions in the plan would make the most difference, how can students be supported to be ready for jobs of the future, how can Queenslanders work together to deliver the action plan, and how should communities, training providers, business and industry be involved in the action plan. In November 2015, community forums were held at Brisbane North, Brisbane South, the Gold Coast, the Sunshine Coast, Logan, Rockhampton, Townsville, Cairns, Toowoomba, Mackay, Ipswich, Maryborough, Bundaberg, Charleville, Longreach, Roma and Mt Isa. More than 1,000 educators, parents, community members, education stakeholders and representatives of industry participated in two online surveys, and 11 organisations presented written submissions.

The Queensland Department of Education and Training (2015) reported the findings of the consultation under seven themes in the action plan. More than 13 per cent of respondents supported the focus on a confident start through increasing participation in early childhood education. More than 18 per cent of respondents supported providing students with opportunities to study STEM subjects and digital technologies, and increasing teacher capabilities to deliver these subjects. Educators stressed the importance of embedding coding and robotics into current subject offerings. Almost six per cent of respondents supported initiatives to prepare students to engage in the new opportunities provided by a connected and global economy by expanding the study of languages. Almost 27 per cent of respondents supported actively promoting and marketing teaching as a profession, designing innovative pathways into teaching, and retaining and investing in existing quality teachers. More than 10 per cent of respondents supported initiatives to invest in schools, ensure the delivery of resources and sharing best practices and research about school improvement. Almost 23 per cent of respondents supported plans to raise student learning outcomes through literacy and numeracy, learner-centred opportunities, and providing for students' well-being. More than eight per cent of respondents supported the pivotal role of schools in developing senior schooling pathways and maximising student engagement with vocational education and training.

The action plan was revised in response to the feedback, and supporting plans for coding counts and global schools through languages were developed and released in June 2016. Each of the seven actions in the plan will be monitored, and progress in delivering them will be reported to Queenslanders. A confident start will provide a preparatory year for all children from 2017 by offering age-appropriate learning in the preparatory year, engaging more children with disabilities in early learning, and investing in new integrated early year services in areas of need. Schools of the future will fast-track the implementation of the Digital Technologies curriculum, coding and robotic programs, establish STEM virtual academies, and prepare the next generation of information technology entrepreneurs. Global schools through languages will expand the study of cultures and languages, and market Queensland's education system internationally. Senior schooling pathways will introduce a new senior assessment and tertiary entrance system, and expand the number of vocational education and training options in schools. Supporting student learning will establish a state-wide reading centre to provide specialist advice, create an autism hub in partnership with experts, and provide additional guidance officers and mental health coaches. Investing in schools will develop models for resourcing public schools based on need, increase funds, introduce an efficient system for school maintenance, and integrate planning for new schools. Partnering for success will provide active partnerships between public schools and universities or industries, place successful partnerships at the centre of the school improvement agenda, and revitalise the *Parent and Community Engagement Framework*. Valuing our teachers and educators will establish a professional learning centre to strengthen teaching excellence, place an additional 2,500 teachers in public schools, and transform human resource management to attract and retain the best teachers.

In 2015, the Queensland Government commissioned a review of STEM in public schools to investigate the ways in which STEM is taught and how to improve the

connections between research, best practice and existing school practices. Researchers from Griffith University reviewed international research into STEM education and principals in more than 900 public schools were surveyed to identify STEM practices. The results of the review, reported by the Queensland Government (2016), found that female and Indigenous students need to participate to a greater extent in STEM education, more research needs to be conducted into the emerging areas of engineering and computer programming in schools, external STEM partnerships need to be formed between schools, industry, universities and education organisations, and more professional development in STEM needs to be provided to primary teachers. The findings of the review formed the basis for creating a strategy for STEM education in Queensland public schools released in June 2016.

In response to the report of the Education and Innovation Committee (2013), the Queensland Government commissioned the Australian Council for Educational Research in July 2013 to review the systems for senior assessment and tertiary entrance. Reviewers from the Australian Council for Educational Research consulted the education sectors, further and higher education providers and professional associations, conducted an online survey, collected written submissions and conducted four stakeholder forums in addition to meeting with stakeholders. Based on a review of the existing assessment and selection processes as well as the feedback, Matters and Masters (2014) recommended that the systems for senior assessment and tertiary entrance should be redesigned by revitalising school-based assessment, introducing an external assessment, designing a new moderation procedure, and introducing a 60-point scale for reporting students' results. In August 2015, the Queensland Government announced that new senior assessment and tertiary entrance systems would be developed by a Senior Secondary Assessment Taskforce for implementation in 2019. The outcome of the Taskforce's meetings led the Queensland Government to release a final position statement on the new senior assessment and tertiary entrance systems in June 2016. The Queensland Curriculum and Assessment Authority (QCAA) is developing the new senior assessment system through redevelopment of senior syllabuses by aligning them to the Australian Curriculum and reflecting the new assessment model, trialling external assessments in particular subjects at selected trial schools, and trialling processes for improving the quality and comparability of school-based assessments.

Several initiatives relating to schools of the future were fulfilled in 2016. In March 2016, the Centre of Excellence in Automation and Robotics, a joint project of the Department of Education and Training and the Queensland Resources Council, was opened at Alexandra Hills State High School. The Centre aims to provide students in years 7 to 12 enrolled at the school with access to learning opportunities in coding, automation and robotics. In March 2016, the Department of Education and Training launched the Queensland Coding Academy to provide online learning for teachers and students to develop their knowledge, understanding and skills in coding and computational thinking. Resources are made available on the Learning Place, an online repository of digital materials available on the Department of Education and Training's website. In March 2016, the Department of Education and Training held the first STEM Girl Power Camp to coincide with the annual World Science Festival in Brisbane. Attended by 22 high-achieving year 10 girls from

public schools across Queensland, the participants engaged in a range of STEM experiences and were invited to become STEM ambassadors in their schools. In March 2017, 60 high-achieving year 10 girls from public schools across Queensland attended the second STEM Girl Power Camp and participated in a Students Performing Advanced Research Queensland laboratory experience, a range of World Science Festival sessions and networked with scientists at the University of Queensland's Diamantina Institute. The Department of Education and Training launched an online STEM hub providing information about resources, STEM careers and pathways, the value of STEM, the Peter Doherty Awards for Excellence in STEM education, and news and events.

An initiative relating to supporting student learning was fulfilled in 2016. Based at Woolloongabba in south-eastern Brisbane, the Department of Education and Training founded an Autism Hub and Reading Centre in February 2016. Overseen by a governance committee of education officials and external stakeholders, and supported by two advisory groups of experts, the Autism Hub and Reading Centre offer an advisory service. The Autism Hub supports autism coaches located in the state's seven regions and reading coaches based in the Reading Centre. The autism coaches offer local workshops to support identified needs in their communities, and the Reading Centre holds workshops focusing on systematic curriculum delivery, effective pedagogical practices, analysis and discussion of data, and differentiated instruction, in which the Australian Curriculum is embedded in the context for learning and Curriculum into the Classroom units are used to model planning processes for reading. In 2017, the Reading Centre partnered with Supporting People Experiencing Learning Difficulties Queensland to pilot an assessment and intervention service for students with dyslexia and a Guided Functional Behaviour Assessment Tool was piloted in preparation for launch online.

Several initiatives relating to schools of the future were fulfilled in 2017. Support for implementing the Australian Curriculum for Digital Technologies was provided to 72 public schools. Approximately, 2,000 teachers participated in the Queensland Coding Academy's professional learning activities. The Entrepreneurs of Tomorrow program was delivered to 116 public schools to support implementation of innovative projects focused on digital solutions including coding and robotics. The Queensland virtual STEM academies commenced providing opportunities for collaboration between students from 102 schools.

Several initiatives relating to global schools through languages were fulfilled in 2017. Full-time regional champions were appointed to support school leaders expand the study of languages and cultures. The Department of Education and Training supported innovation and improvement in language education including language immersion programs and a trial of online delivery of languages in the preparatory year. Curriculum resources were developed for Japanese, French, German and Chinese to assist implementation of the Australian Curriculum for Languages.

Administrative and supervisory structure

Queensland Department of Education and Training

In May 2009, the first stage of a realignment of the central office commenced to highlight the accountability of each area to deliver key priority areas. In January 2010, the Department of Education and Training implemented a new regional service delivery model with education, training and early childhood education services being integrated into seven new regions: Far North Queensland; North Queensland; Central Queensland; North Coast; Darling Downs and South West; Metropolitan; and South East. Following the election of the Liberal National Party to government in March 2012, employment was added to the Department bringing about greater alignment in the three areas of education, training and employment. Following election of the Australian Labor Party to government in January 2015, the employment portfolio was dropped from the Department. The Department of Education and Training is organised into five divisions: Early Childhood and Community Engagement; State Schools; Training and Skills; Policy, Performance and Planning; and Corporate Services.

Queensland Studies Authority

In November 1992, the Labor Government appointed a four-member panel to review the curriculum. The Review of the Queensland School Curriculum (1994) recommended that the structures for managing the curriculum should be changed, new syllabuses should be based on the national statements and profiles, and student learning outcomes should be incorporated into the new syllabuses. Although the Labor Government established the Queensland Curriculum Council to design a strategic plan based on these recommendations and the Queensland School Curriculum Office to implement the strategic plan, these two bodies were merged by the succeeding National-Liberal Government to form the Queensland School Curriculum Council in December 1996. Following a decision taken by the Labor Government in September 2001, the Queensland Parliament legislated in February 2002 to amalgamate the Queensland School Curriculum Council, the Queensland Board of Senior Secondary School Studies, and the Tertiary Entrance Procedures Authority to form a new agency. QSA commenced operations in July 2002.

Queensland Curriculum and Assessment Authority

An inquiry into assessment methods used in years 11 and 12 provided the incentive for a review of QSA. In February 2013, the Queensland Parliament asked the Education and Innovation Committee to investigate and report on the methods used in Queensland schools to assess mathematics, chemistry and physics in years 11 and 12. The Committee held three public hearings, conducted an expert advisory forum, received 288 submissions from stakeholders, travelled to New South Wales and Victoria, and met with ACARA staff. The Education and Innovation Committee (2013) concluded that problems arising from current approaches to assessment could be attributed to a decline in enrolments, a decline in performance by Queensland students, excessive workloads for teachers and students, an inability of teachers, students and parents to understand the standards as written, standards are an inappropriate means for assessing basic skills, and standards require English literacy for communication that disadvantages some student population groups. An

analysis of the submissions identified that many teachers raised concerns about aspects of the assessment procedures, while representative organisations tended to support the existing assessment procedures. Consideration of the complexity of these issues led the Committee to present 16 recommendations to address shortcomings in assessment procedures.

Following the inquiry, the Minister for Education, John-Paul Langbroek initiated a review of the Education (Queensland Studies Authority) Act 2002 and an examination of QSA's legislative powers, functions and structure. Based on the findings of the review, Minister Langbroek introduced legislation in October 2013 to establish QCAA. Following enactment of the Education (Queensland Curriculum and Assessment Authority) Act 2014 in February 2014, QCAA was established by regulation in July 2014 with a priority to develop resources to support implementation of the Australian Curriculum, raise students' literacy and numeracy achievement, revitalise assessment in years 11 and 12, and use new technologies to transform instruction. QCAA came into operation as three divisions: Curriculum Services; Assessment and Reporting; and Corporate Services.

Organisation to implement the Australian Curriculum

QSA and the Department of Education and Training defined an aspiration for how the Australian Curriculum will change classroom practices and secured wide support for the aspiration internally and externally.

QSA formed an internal leadership team to support the education sectors implement the Australian Curriculum. This team formed the Australian Curriculum branch within the Curriculum Services Division, but the team has since been subsumed within the K-12 Resources branch. This team is responsible for developing guidelines, advice and resources and providing professional development opportunities for teachers to support implementation of the Australian Curriculum. The Department of Education and Training formed an internal leadership team to facilitate implementation of the Australian Curriculum in Queensland schools. The team, which forms the Curriculum, Learning and Teaching branch within the State Schools division, is responsible for supporting educators to implement the Australian Curriculum through the Curriculum into the Classroom project.

In June 2010, the Minister for Education and Training, Geoff Wilson, announced a staged implementation of Phase One of the Australian Curriculum in preparatory to year 10: familiarisation of English, Mathematics and Science in 2011; implementation of English, Mathematics and Science and familiarisation of History in 2012; and implementation of History in 2013. Staged implementation of Phase Two of the Australian Curriculum in preparatory to year 10 was planned according to a timeline: familiarisation of Geography in 2013; and implementation of Geography in 2014. An outcome of the review to determine a Core P-10 Australian Curriculum in 2016 allows each public school from 2017 to determine an implementation timeline in consultation with the school community that will lead to full implementation of the Core P-10 Australian Curriculum by the end of 2020.

QCAA presents financial statements in its annual reports, but these statements do not include a separate budget for implementing the Australian Curriculum. The Department of Education and Training presents financial statements in its annual reports, but these statements do not include a separate budget for implementing the Australian Curriculum.

During the initial implementation of the Australian Curriculum, QSA has not conducted a gap analysis comparing the Queensland Essential Learnings and Standards to the content descriptions in the Australian Curriculum.

In Queensland, there is no guiding coalition of political, education and business leaders, who can provide forceful advocacy for reform, thereby build public understanding and will to sustain support for the Australian Curriculum during implementation. During preparation for implementation of the Australian Curriculum, QCAA chaired the Transition to the Australian Curriculum Steering Committee consisting of representatives from the Department of Education and Training, the Queensland Catholic Education Commission, Independent Schools Queensland and the Queensland representative on the board of ACARA. This Committee may have performed the role of a guiding coalition to a limited extent by providing advice about implementation of the Australian Curriculum in Queensland to QCAA, the chief executive officers of the three education sectors and through them to the Minister for Education.

QCAA engages in various activities to communicate information about the implementation of the Australian Curriculum. It maintains a Publishing Unit within the Corporate Services Division, which is responsible for publishing several newsletters. A fortnightly email update, *QCAA news for schools*, presents information about initiatives, professional development activities and events. The *P-10 Australian Curriculum newsletter*, produced by the K-12 Resources branch, presents information about new resources and professional development opportunities. The Department of Education and Training maintains a Media Unit, which communicates news articles about the implementation of the Australian Curriculum.

Implementation action for aligning instructional practices

Advice, guidelines and resources

In mid-2009, the Transition to the Australian Curriculum Steering Committee was formed. In 2010, the Committee endorsed a framework developed by QSA for use by all sectors to plan for implementation of the Australian Curriculum. The framework has five key areas: guidelines and advice; resource development; professional development; communications; and information and communications technology infrastructure. This framework identifies the minimum resources that would need to be developed and delivered to complement the Australian Curriculum content descriptions and achievement standards, and build capacity of school leaders and teachers to implement the Australian Curriculum.

In June 2010, QSA began a project in collaboration with the education sectors to develop an initial resource to support Queensland schools implement the Australian Curriculum for English and Mathematics in preparatory to year 10. The exemplar project engaged teachers from across preparatory to year 10 from the three sectors, who worked collaboratively to develop draft year-level programs using the draft Australian Curriculum. The outcome of this project was a collection of resources, including advice for planning with the Australian Curriculum, advice for planning for whole-school, year-level and unit overview programs at single years and multiple-year levels, a whole-school plan (template and exemplar), year-level plans for preparatory to year 10 English and Mathematics (template and exemplars), and unit overviews to exemplify one unit from each of the year-level plans for English and Mathematics (template and exemplars). Since publication of these resources on QSA's website in January 2011, they have been supplemented by resources for all learning areas and subjects across preparatory to year 10. These resources formed the basis for development of the Department of Education, Training and Employment's Curriculum into the Classroom project.

QSA continued to produce guidelines and advice, as well as additional resources to support implementation of the Australian curriculum. Guidelines and advice focus on nine aspects: assessment, standards and reporting using the Australian Curriculum achievement standards; time allocations and entitlement for the Australian Curriculum; preparatory to year 2 curriculum planning, assessment and reporting; Australian Curriculum entitlement and particular considerations related to year 10; development of curriculum programs for year 7 in the primary setting; implementing the Australian Curriculum for History and Studies of Society and the Environment subsequently replaced by planning options for Humanities and Social Sciences; a starting point for planning with the general capabilities; planning with the cross-curriculum priorities; and information on the three dimensions of the Australian Curriculum.

Resources cover five aspects: standards elaborations for preparatory to year 10 in English, Mathematics, Science, History and Geography; assessment advice and guidelines for specific learning areas; assessments that align to the exemplar project; inclusive strategies to support catering for diversity when planning with the Australian Curriculum; and resources to support planning learning experiences embedding the Aboriginal and Torres Strait Islander histories and cultures cross-curriculum priority, accompanied by a database of suggested resources. Early in 2013, the resources for implementing the Australian Curriculum for English, Mathematics, Science, History and Geography, were redesigned as a comprehensive, fully searchable online resource organised as curriculum that directly links to the Australian Curriculum, assessment and reporting advice, and resources. Additionally, all curriculum, assessment and reporting advice and guidelines were combined into a unique document for each year level and learning area titled *Australian Curriculum in Queensland.*

Following its foundation, QCAA produced guidelines, advice and resources to support implementation of the Australian Curriculum. Curriculum materials were developed to support the Aboriginal and Torres Strait Islander Languages Framework, Civics and Citizenship, Economics and Business, Heath and Physical

Education, Languages, Technologies and the Arts. Webpages for Phases Two and Three learning areas were designed.

Core P-10 Australian Curriculum

In December 2015, Kate Jones, the Minister for Education, announced that QCAA would work with the education sectors and stakeholders to identify a Core P-10 Australian Curriculum for Queensland schools in response to teachers raising concerns about workload pressures arising from an overcrowded curriculum. In February and March of 2016, QCAA held forums at Toowoomba, Brisbane, Ipswich, the Gold Coast, Cairns, the Sunshine Coast, Rockhampton, Roma, Townsville and Mackay, as well as three webinars, to collect feedback from around 500 principals, curriculum leaders and higher education faculty about implementation of the Australian Curriculum and strategies to reduce an overcrowded curriculum. Feedback from the consultation indicated that an overwhelming majority considered the Australian Curriculum to be too extensive for implementation in the time available to schools. Approximately, half of the educators considered there is insufficient clarity in the Australian Curriculum about what should be taught and assessed, or what timelines for implementation are appropriate.

In the report, the Queensland Curriculum and Assessment Authority (2016) provided the Minister for Education with a preferred approach to address an overcrowded curriculum by identifying core and discretionary content in each learning area, except for English, Mathematics, and Health and Physical Education. Furthermore, QCAA suggested providing educators with professional learning and resources to support implementation of the Australian Curriculum for students with disabilities. Modification of the curriculum would be accompanied by revised advice about time allocations. QCAA presented six recommendations for a change in approach to the implementation of the Australian Curriculum. First, support should be given for the proposal to define a Core P-10 Australian Curriculum. Second, QCAA should publish clear statements about the nature of the learner and the priorities for learning within each phase of learning. Third, QCAA should streamline its range of resources and develop new resources to support implementation of a Core P-10 Australian Curriculum. Fourth, teachers of students with disabilities should be provided with professional learning and resources. Fifth, teachers should be given clear advice about the minimum time for the Core P-10 Australian Curriculum. Sixth, timelines should be revised for implementing the Core P-10 Australian Curriculum.

United in our pursuit of excellence

Following the inaugural principals' conference held at Brisbane in February 2011, the Department of Education, Training and Employment developed an agenda for improvement from 2012 to 2016. Launched in July 2011, *United in our pursuit of excellence* sets out six core learning priorities: reading; writing, including spelling, grammar and punctuation; numeracy; science; attendance, retention, attainment and transition of students at key junctures of schooling; and closing the gap between attendance and outcomes of Indigenous and non-Indigenous students.

The core learning priorities set out in *United in our pursuit of excellence* are supported by two frameworks launched at the inaugural principals' conference. The *Learning and Well-being Framework* sets out guidelines for optimising well-being within a school context covering practices in four domains: learning environment; curriculum and pedagogy; policies and procedures; and partnerships. The *P-12 Curriculum, Assessment and Reporting Framework* specifies requirements for each public school to implement the enacted curriculum, develop a curriculum plan and use Curriculum into the Classroom materials, comply with policy statements for developing a pedagogical framework and meeting the needs of student cohorts, comply with a policy statement for administering assessments, and comply with a policy statement for reporting student achievement against learning expectations to parents. In 2016, the Department of Education and Training revised the *P-12 Curriculum, Assessment and Reporting Framework* to outline new requirements for public schools as they implement the Core P-10 Australian Curriculum by the end of 2020. The revised *P-12 Curriculum, Assessment and Reporting Framework*, released in June 2017, specifies requirements for each public school to implement the Australian Curriculum by the end of 2020, ensure every year 10 student has completed a senior education and training plan, provide health and well-being education, develop and maintain a year or band plan for each learning area, administer formative assessments, maintain an assessment folio for each student and administer summative assessments, develop and maintain a whole-school approach to moderation, and report on student achievement.

Two frameworks were launched at the second principals' conference held at Brisbane in February 2013. The *Parent and Community Engagement Framework* sets out five key elements for parent and community engagement: communication; learning partnerships; community collaboration; decision-making; and participation. The *Pedagogical Framework*, which forms a component of the *P-12 Curriculum, Assessment and Reporting Framework,* requires each school to develop a framework based on six core principles: student-centred planning; high expectations; alignment of curriculum, pedagogy and assessment; evidence-based decision-making; targeted and scaffolded instruction; and safe, supportive, connected and inclusive learning environments.

Curriculum into the Classroom

To support the priorities set out in *United in our pursuit of excellence*, the Department of Education, Training and Employment initiated a project, Curriculum into the Classroom, based on the resources developed by QSA. In February 2011, teams of experienced teachers began developing unit plans containing lesson plans and resources for English and Mathematics. In May 2011, a team of teachers commenced developing unit plans containing lesson plans and resources for Science. Subsequently, the unit plans were reviewed by panels of teachers across the state through web conferencing and by a technical panel to ensure alignment to the Australian Curriculum. Then, the lesson plans were disseminated to schools for implementation by teachers. Later, other resources that provide examples of how to differentiate instruction and how to plan for the multi-level classroom were developed. In October 2011, the first set of unit plans for English, Mathematics and

Science was launched on OneSchool, an instructional improvement system developed and implemented over three phases between 2007 and 2012. OneSchool provides a platform to copy unit plans for adaptation to students' needs, scheduling topics, assessment tasks and excursions, sequencing the unit plans across the year, and entering and reporting student assessment data.

A conference was held on the Sunshine Coast in November 2011 to train more than 30 advisers, who were based in the seven regions across the state in March 2012 to provide professional development through regional workshops and online presentations to assist principals, curriculum coordinators and teachers use the unit plans in their schools. In July 2012, the unit plans were revised to take account of feedback received from teachers and aligned to the updated version of the Australian Curriculum. Revised and refined unit plans for English, Mathematics and Science were published in 2012. The unit plans were also produced in a printed format for use by distance education teachers based in schools of distance education located at Brisbane, Cairns, Capricornia (Rockhampton and Emerald), Charleville, Charters Towers, Longreach and Mount Isa. Unit plans for History were published in 2013 and unit plans for Geography were published in 2014. Unit plans for Civics and Citizenship, Economics and Business, Health and Physical Education, the Arts and Technologies were published in 2015. Unit plans for French and Japanese were published in 2016. In 2016, the Department of Education and Training revised the unit plans to align them to the Core P-10 Australian Curriculum.

Implementation action for training educators

QSA provided professional development to teachers involving the delivery of face-to-face sessions and online modules. In 2011, over 100 workshops were presented about aspects of the implementation of the Australian Curriculum to over 4,500 educators. In 2012, workshops on History were delivered to over 600 educators. In 2013, workshops on Geography were delivered to over 700 educators. An additional 45 sessions were delivered on the Australian Curriculum to approximately 600 participants from professional associations, school clusters and administrators' groups. Online sessions were presented on implementing the Australian Curriculum, and planning for multiple years. Topics included an introduction to the Australian Curriculum and Queensland's implementation, exploring the learning areas of English, Mathematics, Science and History, and standards and assessment. Online sessions have been supplemented by transcripts and a professional development booklet. In 2014 and 2015, QCAA delivered additional workshops and webinars to support implementation of Geography, 45 workshops on aspects of literacy and numeracy learning, and coordinated visits for principals to schools with successful literacy and numeracy programs. In 2016, QCAA delivered 40 workshops on aspects of literacy and numeracy as well as coordinated visits to schools to provide tailored support for implementing the Australian Curriculum. By mid-2017, QCAA had delivered 40 workshops to support aspects of literacy and numeracy, 30 workshops and webinars to support implementation of the Australian Curriculum in the Arts, Humanities and Social Sciences and Technologies, as well as over 100 tailored workshops to support schools implement the Australian Curriculum.

QSA hosted several conferences on the Australian Curriculum. In April 2010, QSA convened a three-day conference, *Shared Vision: an Australian Curriculum P-12*, at which over 2,000 principals, curriculum leaders, teachers and higher education faculty gained an understanding about how the learning areas in Phase One of the Australian Curriculum would be taught and how the new curriculum would influence pedagogy. In April 2011, QSA convened a second three-day conference, *Vision to Reality: Queensland's new education landscape*, at which over 1,800 principals, curriculum leaders, teachers and higher education faculty learnt about the forthcoming implementation of the Australian Curriculum in Queensland schools, quality teaching, school leadership, and assessment. In March 2014, QSA convened a one-day conference, *Australian Curriculum: Aligning Learning Areas*, at which 560 principals, curriculum leaders, teachers and higher education faculty were provided with opportunities to hear about successful approaches to curriculum implementation, curriculum alignment, the learning areas and subjects of Phases Two and Three of the Australian Curriculum, assessment and using the achievement standards, and changes to classroom practice.

The Queensland Education Leadership Institute was established in 2010 to provide professional learning to develop leadership capabilities of school principals, middle leaders and accreditation for coaches. In partnership with Griffith University and Queensland University of Technology, the Queensland Education Leadership Institute provided online and face-to-face professional development courses to over 3,000 public school teachers in 2017 to enhance their knowledge, confidence and capability in delivering STEM curriculum for the Department of Education and Training's STEM initiative. In 2017, the Department of Education and Training offered an online professional development course facilitated by Griffith University to develop teachers' knowledge and understanding about the Australian Curriculum for Technologies and strategies for its implementation. At the completion of the course, participants were expected to have established online community networks with colleagues and the capability to deliver the Australian Curriculum for Technologies within their classrooms.

South Australia

Educational Reform Policy

Strategic plan

In July 2014, the South Australian Department of Education and Child Development released a strategic plan for 2014 to 2017 outlining six priority areas: higher standards of learning achievement; improve health and well-being; improve and integrate child safety; engage children, families and communities; right service at the right time; and build a better system. The South Australian Department of Education and Child Development (2014) supported the strategic plan with a business improvement plan setting out priorities to increase local decision-making, improve support for sites and partnerships, build a high quality workforce, manage assets effectively and improve performance and accountability. In July 2017, the Department of Education and Child Development released a strategic plan, *Education for a Stronger Future*, setting out five priority areas: a great start; high

achievement; fairness for all; learning in partnership; and better futures. Building capability in the priority areas will be achieved in six fundamental areas: expert teachers; quality leadership; engaged parents and communities; stronger services; resourcing and investment; and improvement and accountability.

Expert Advisory Panel

In February 2018, the Department of Education and Child Development appointed a five-member panel of education experts to examine state-wide strategies for literacy and numeracy, school improvement approaches, internationalism of education, Aboriginal education, and early childhood learning and development. The panel was given authority to appoint subject experts to provide advice on specific topics. An initial step will be the appointment of literacy experts to support principals source the most effective, evidence-based approaches when investing funds provided in December 2017 for literacy and numeracy.

Administrative and supervisory structure

In October 2011, the South Australian Government created a new Department of Education and Child Development to provide a range of integrated services for families, children and young people. In 2012, the governance structure was revised to include representation from Families SA and the Women's and Children's Health Network. In 2013, the structure of the central office was revised.

In 2012, the Department of Education and Child Development conducted the Integrated Services Improved Outcomes Project to identify opportunities and benefits of its workforce working together as one agency. The outcome of the project was the replacement of regions by 60 local partnerships in January 2014. In January 2016, 20 local education teams were created to support a portfolio of three local partnerships each.

Commissioned to review the Department of Education and Child Development, KPMG released a report in July 2015 recommending a revised corporate structure and a model of service delivery to position the central office as a more outward-looking, service-driven entity. The new structure to deliver the model of service delivery involved forming five new offices: Chief Executive; Corporate Services; Strategy and Performance; Education and Early Childhood; and Child Protection.

In October 2015, the Office of Education and Early Childhood was formed into five divisions: School and Preschool Improvement; Learning Improvement; Statewide Services and Child Development; and Early Childhood Services. Creation of the Learning Improvement division involved transforming existing directorates into five new directorates: Strategic Design; Early Years Learners; Primary Learners; Secondary Learners; and Professional Practice. The change process involved eliminating the Numeracy and Literacy, Australian Curriculum Implementation and Aboriginal Education, Pedagogy and Leadership, Australian Curriculum Policy and Projects, Early Years, Well-being and Standards, and Student Pathways directorates in the Teaching and Learning Services division by transferring some

positions to the Learning Improvement division and discontinuing other positions. The outcome of these changes was the elimination of the Australian Curriculum implementation teams, primary mathematics and science officer and the Australian Curriculum policy and projects' director.

Transformation of the Department of Education and Child Development's corporate structure involved a series of change projects conducted in 2015 and the formation of a new Department of Child Protection in November 2016. As a consequence of these changes, the Department of Education and Child Development was organised into nine divisions: People and Culture; Learning Improvement; Partnerships, Schools and Preschools; Early Years and Child Development; System Performance; Strategic Policy and External Relations; Information and Communication Technology Services; Finance and Funding; and Infrastructure.

Organisation to implement the Australian Curriculum

The Department of Education and Child Development defined an aspiration for how the Australian Curriculum will change classroom practices and secured wide support for the aspiration internally and externally.

The Department of Education and Child Development formed an internal leadership team to facilitate implementation of the Australian Curriculum in public schools. The team, formed within the Teaching and Learning Services division, comprised two Australian Curriculum implementation teams consisting of 14 primary officers and 10 secondary officers responsible for supporting educators implement the Australian Curriculum. Following creation of local partnerships and restructure of the Learning Improvement division, leadership to facilitate implementation of the Australian Curriculum has shifted to multiple points of accountability in the central office and local education teams.

Following consultation with key stakeholders, the Department of Education and Children's Services released a timeline in November 2010 for implementing Phase One of the Australian Curriculum over two stages. For reception to year 7, familiarisation with Mathematics and Science occurred in 2011 followed by implementation in 2012, and familiarisation with English and History occurred in 2012 followed by implementation in 2013. For years 8 to 10, familiarisation with Mathematics, Science, English and History occurred in 2011. In October 2012, the Department of Education and Child Development released a timeline for implementing Mathematics, Science, English and History in year 8 in 2013, year 9 in 2014 and year 10 in 2015. In June 2013, the Department of Education and Child Development released a timeline for implementing Phases Two and Three of the Australian Curriculum over two stages. For reception to year 10, familiarisation with Geography, Civics and Citizenship, Economics and Business and Languages occurred in 2014 followed by implementation in 2015. For reception to year 7, familiarisation with Health and Physical Education, and Technologies occurred in 2015 followed by implementation in 2016. For years 8 to 10, familiarisation with Health and Physical Education, and Technologies occurred in 2014 followed by implementation in 2015.

The Department of Education and Child Development presents financial statements in its annual reports, but these statements do not include a separate budget for implementing the Australian Curriculum.

The Department of Education and Child Development has not conducted a gap analysis comparing the essential learnings in the South Australian Curriculum Standards and Accountability Framework to the content descriptions in the Australian Curriculum.

In South Australia, there is no guiding coalition of political, education and business leaders, who can provide forceful advocacy for reform, thereby building public understanding and will to sustain support for the Australian Curriculum during implementation.

The Department of Education and Child Development engages in various activities to communicate information about implementation of the Australian Curriculum. It maintains a Media Unit within the System Performance directorate, which communicates news articles about the implementation of the Australian Curriculum. In March 2011, the Department of Education and Child Development began issuing an online newsletter, which was published at regular intervals to keep educators informed about the development of the Australian Curriculum and its implementation in South Australian schools.   The newsletter was discontinued following the formation of the new structure in the central office in October 2015.

Implementation action for aligning instructional practices

Curriculum guidelines

The Department of Education and Children's Services surveyed teachers' needs for support in implementing the Australian Curriculum and consulted stakeholders to develop and publish several policy documents. In 2010, feedback was collected from teachers in over 50 sites about resources that should be developed to support transition to the Australian Curriculum. In 2011, the Department of Education and Children's Services developed resources for English, History and Geography as well as initiating projects in schools. In 2012, the Department of Education and Child Development published *Reporting on Australian Curriculum: guidelines for DECD schools* to support teachers use the Australian Curriculum achievement standards. In 2013, the Department of Education and Child Development published *Guidelines for the implementation of the Australian Curriculum in DECD schools: reception to year 10*, showing principals and leaders how to manage the implementation process, and *Curriculum, pedagogy, assessment and reporting policy for reception-year 10* providing an agreed foundation to guide implementation of the Australian Curriculum.

Implementation process

Initial implementation of Phase One of the Australian Curriculum was facilitated in 2011 by teachers of reception to year 7 continuing to work with the Primary

Mathematics and Science Strategy and resource materials produced by the Literacy Secretariat. In June 2009, Jane Lomax-Smith, the Minister for Education, initiated the Primary School Skills for the Future strategy to provide all primary schools with a one-off primary schools grant, training for each teacher in mathematics and science, minimum teaching times for mathematics, literacy and science, and the promotion of teaching approaches proven to be successful. Part of the Primary School Skills for the Future strategy, the Primary Mathematics and Science Strategy offered professional learning to all primary teachers to improve the quality of teaching in mathematics and science through Primary Science Connections and Maths for All. In November 2011, the Primary Australian Curriculum Strategy, an extension of the Primary Mathematics and Science Strategy, was designed to support implementation of English and History.

In March 2012, members of the primary and secondary Australian Curriculum implementation teams were appointed and assigned to particular regions.   In 2012, the Primary Australian Curriculum Implementation Team focused on using the Primary Australian Curriculum Strategy to train teacher facilitators, provide state-wide and regional workshops and form local professional learning communities, and strengthen leaders' and teachers' capacities to design learning using the South Australian Teaching for Effective Learning Framework. In 2012, the Secondary Australian Curriculum Implementation Team assisted schools to develop local plans for implementing the Australian Curriculum and plan professional development. In 2013, the primary and secondary Australian Curriculum implementation teams focused on deepening teacher engagement with learning design using the Australian Curriculum and the South Australian Teaching for Effective Learning Framework.   In addition, mathematics and science teacher facilitators were assigned to work with the Primary Australian Curriculum Implementation Team to support professional learning for teachers. From 2014, each local partnership was provided with an Australian Curriculum coordinator to support leadership teams and teachers implement the Australian Curriculum through the Primary Australian Curriculum Strategy.   In 2015, the Enriching Year 8 Mathematics project was introduced into 12 schools to support teachers focus on the mathematics proficiencies required by the Australian Curriculum. With the end of the Primary Australian Curriculum Strategy in December 2016, primary schools were surveyed to assess future needs.   A new strategy, Primary Learning Improvement, was initiated in each local partnership from 2017 to 2020 to support numeracy and literacy, STEM and learning design, assessment and moderation.

South Australian Teaching for Effective Learning Framework

The South Australian Teaching for Effective Learning Framework provides a focus on pedagogy for teachers to implement the Australian Curriculum. Beginning in 1999, the Department of Education and Children's Services undertook the Learning to Learn Initiative, intended to inform the way teaching and learning are conceptualised and provided to students.   The Learning to Learn Initiative was conducted in four phases employing a core learning program, learning centres for leaders, and a practicum for school leaders and their staff to reflect on the change process. Development of resources to guide teaching and learning practices in public schools was an important outcome of the Learning to Learn Initiative.

Developed by outstanding teachers and a reference group of academics, the South Australian Teaching for Effective Learning Framework presents two key concepts: leaders support teachers in learning for effective teaching; and teachers develop learning opportunities with students by creating safe conditions for rigorous learning, developing expert learners, and personalising and connecting learning. A guide (South Australian Department of Education and Children's Services, 2010), a review tools' handbook (South Australian Department of Education and Children's Services, 2011), and a Framework DVD were published to support the framework. Beginning in 2011, these resources were distributed to child care centres, kindergartens, primary schools and secondary schools across South Australia as well as education stakeholders.

This process led to a partnership with higher education faculty, subject associations and information, communication and technology companies to develop Leading Learning: Making the Australian Curriculum Work for Us. Launched in June 2013 at www.acleadersresource.sa.edu.au, Leading Learning provides online tools to assist leaders and teachers realise the intent of the Australian Curriculum, develop content and pedagogical knowledge, and design learning using the learning design process. Features on the website include leaders' information, resource support, acknowledgements and the resource, consisting of six components. *Why this approach* presents a series of tools setting out the strategic intent of the Australian Curriculum. *What you value* provides leaders and teachers with resources to identify what they value for students' learning. *Tuning in* provides an online tool, which connects elements within a learning area, year levels, and different learning areas. *Bringing it to life* presents an online tool that connects the content descriptions and achievement standards in the Australian Curriculum to pedagogy. *Learning design* introduces six key ideas of the learning design process. *Into the classroom* presents various examples of the application of these principles in the classroom through a series of workshops designed to support teachers to reflect and build upon current practices. *Co-designing improvement with students* provides teachers with tools to offer opportunities for students to have a voice in their learning, and provides tools for teachers to activate student voice as a means of accelerating improvement at the whole-school level and across local partnerships.

Numeracy and literacy strategy

In 2010, the Department of Education and Children's Services formed the Literacy Secretariat to promote leadership, teaching and learning for literacy improvement. The Literacy Secretariat developed a literacy improvement model, resource papers discussing particular aspects of literacy improvement, professional learning opportunities, a literacy leaders' network, an early literacy strategy, and a program for English as a second language. A review, conducted in 2012 to determine the future needs and directions of the Literacy Secretariat, recommended that a numeracy and literacy strategy should be developed. In October 2012, a discussion paper was distributed to stakeholders to inform development of the numeracy and literacy strategy. In February 2013, the Department of Education and Child Development formed a Numeracy and Literacy Unit.

In April 2013, the Department of Education and Child Development released the *Great Start, Strong Foundations, Powerful Learners: a Numeracy and Literacy Strategy from birth - 18.* The rationale for designing the strategy was based on evidence of inadequate skills in numeracy and literacy among a minority of young children, which poses three challenges. The first challenge is to reduce differences in numeracy and literacy achievement by ensuring all young children are given the support they need to develop language skills. The second challenge is to increase the number of children with basic numeracy and literacy skills in their first four years at school. The third challenge is to increase all young people's ability to use high-level thinking skills and apply what they have learned in new and increasingly complex situations. The success of the strategy in meeting these challenges depends on the efforts of parents, teachers and leaders to work together. The strategy will overcome the first challenge by ensuring provision of targeted referral processes that link families to community support, increasing the number of supported play groups in preschools, developing online and other resources for parents on numeracy and literacy, and developing courses and workshops for parents to support their children's numeracy and literacy development. The strategy will overcome the second challenge by preschools and schools developing annual numeracy and literacy targets, implementing progress indicators to track numeracy and literacy development, implementing a plan to identify support and intervention for failing students, using tests and benchmarks to assess every student's achievement, and supporting teachers to use audit processes to develop consistency of teacher judgment against achievement standards. The strategy will overcome the third challenge by calling on the expertise of teachers in developing instructional practices that lead to successful learning, and by hosting a powerful learning summit.

Teachers, experts, representatives of subject associations, parents and students met at the Powerful Learners Summit to develop action plans and draft achievement standards in literacy and numeracy. The Great Start website, which was designed to house a collection of resources on numeracy and literacy for parents of young children, was launched in 2014. Indicators of preschool numeracy and literacy were developed for identifying, assessing, planning, monitoring and reporting on numeracy and literacy development in preschools. The indicators were trialled in 22 preschool sites prior to implementation in 2016. In 2015, 43 numeracy and literacy coaches were appointed to support teachers. In 2016, the Department of Education and Child Development collaborated with Deslea Konza, a language and literacy expert, to develop a series of best advice papers on teaching of reading.

Aboriginal cultural studies

In response to the State Economic Summit held in 2002, the South Australian Government released South Australia's Strategic Plan consisting of 79 targets in 2004. A Community Engagement Board was formed to involve the public in updating the Plan with new targets in 2007. Revised in 2011 from feedback received from South Australians, the Plan is based on six priorities: our community; our prosperity; our environment; our health; our education; and our ideas. Each priority is organised into visions, goals and targets. Target 27 states: Aboriginal

cultural studies are included in school curriculum by 2016 with involvement of Aboriginal people in design and delivery.

The Department of Education and Child Development was charged with developing a curriculum resource for Aboriginal cultural studies and its alignment to the Australian Curriculum. Following extensive consultation with Aboriginal communities and Aboriginal educators in schools and institutions of higher education, the draft curriculum was aligned with the Australian Curriculum Phase One learning areas. After approval by the Aboriginal Cultural Studies Steering Committee in September 2011, the curriculum resource was launched online. Six public schools with expertise in delivering Aboriginal cultural studies were commissioned to develop digital leader and teacher resources that demonstrate implementation of the Aboriginal and Torres Strait Islander histories and cultures cross-curriculum priority. In 2013, the Department of Education and Child Development developed an online collaborative space for teachers, and conducted workshops and professional development sessions across the state. In 2014, five Aboriginal cultural consultants were appointed to lead implementation of the Aboriginal cultural studies curriculum.

The Aboriginal cultural studies online curriculum resource consists of three components. The curriculum block consists of units of work organised into five levels: reception to year 2; years 3 to 6; middle years; SACE stage 1; and SACE stage 2. In addition, there is a learning design template and unit planner that can be adapted to local contexts. In 2015, the Aboriginal cultural consultants developed nine professional learning modules: literacy; numeracy; connecting to TfEL; using the learning design process to design a unit of work; planning for site driven professional learning; action plans; individual learning plan; using data effectively; and play and inquiry-based learning. The Aboriginal education toolkit, which enables educators to access professional development materials for Aboriginal cultural studies, consists of research and reading prompters, action plans, individual learning plans, transition resources, an Aboriginal education teacher position description, and appropriate terminology for acknowledgement of Aboriginal and Torres Strait Islander peoples.

Science, technology, engineering and mathematics strategy

In November 2016, Susan Close, the Minister for Education and Child Development, released a STEM Strategy for South Australian schools encompassing seven elements. Additional training would be provided to upgrade 500 primary teachers to become specialist STEM teachers. A STEM Play program would be implemented in public preschools. Funds would be provided to upgrade STEM facilities in 139 public schools. Adelaide Botanic High School, due to open in 2019, will provide 1,250 secondary students with a STEM and health sciences focus. Additional professional development opportunities would be provided to school leaders and teachers. Schools, universities and industry would design STEM career pathways for young people to transition to emerging industries. An Aboriginal engagement strategy would be designed to reflect the aspiration of Aboriginal communities and encourage participation in STEM education.

In August 2016, the Department of Education and Child Development commenced the Year 7 and 8 STEM Collaborative Inquiry project focusing on ways to develop strong links between feeder primary schools and their local high schools to improve students' transition experiences. STEM learning projects will be deigned and trialled over two years by five school networks: Morialta; Orion; South East Coast and Vines; Upper Mid North; and Western Shores. Initially, leaders and teachers from 37 schools, participating in the project, met on two occasions to develop and evaluate innovative and evidence-informed STEM approaches in the first session, and then present and share their STEM practices in the second session.

Languages strategy

In October 2017, the Department of Education and Child Development released the languages strategy for public education intended to strengthen languages education from 2018 to 2021 by focusing on four priority areas. First, improve access and participation by identifying, documenting and promoting successful programs, providing grants for schools to develop and trial models of language provision, strengthen provision of languages through the Open Access College and the School of Languages and Ethnic Studies, establish a scholarship program to support students participate in tours, and establish community language schools for Aboriginal languages. Second, support teachers and leaders to provide languages education by developing a professional learning program focused on curriculum, instruction and assessment, provide opportunities to improve linguistic and cultural proficiency, offer four grants for partnerships to provide leadership, and hold a series of leader forums. Third, increase the supply of qualified teachers of languages by conducting workforce planning, recruiting and training Aboriginal language teachers, retraining teachers to become language teachers, and working with universities to strengthen courses for language teachers. Fourth, promote the value of language learning to the broader school community by developing resources, programs and activities and appoint language ambassadors.

Implementation of the languages strategy will be monitored and evaluated through the collection and analysis of participation, retention and achievement data. Two language-focused reviews will be conducted across a sample of schools to collect data on system performance in the first and last years of the implementation of the languages strategy.

Implementation action for training educators

In 2012, the primary Australian Curriculum implementation team facilitated more than 500 professional learning activities across 80 clusters of schools. Focus teachers in each school acted as catalysts for professional learning communities. Beginning in 2012, a mathematician in residence program led to more than 40 workshops being held for groups of teachers in cluster primary schools. In 2013, a scientist in residence program was designed and trialled for implementation in 2014. Beginning in 2014, professional learning in mathematics and science was targeted to the needs of years 7 and 8 teachers. In 2014, the Department of Education and Child Development continued developing professional learning communities in

clusters of primary and secondary schools across South Australia to improve the consistency of teachers' judgments against Australian Curriculum achievement standards.

In February and March of 2012, the secondary Australian Curriculum implementation team held a series of workshops for leaders in secondary schools. The Department for Education and Child Development developed a range of online resources to support school leaders engage teachers in designing learning using the Australian Curriculum and the South Australian Teaching for Effective Learning Framework. Launched in March 2012, the first in a series of three resources, Getting Started, consists of a series of PowerPoints organised into four components: Australian Curriculum; the South Australian Teaching for Effective Learning Framework; learning design; and learning together in professional learning communities. A series of video conferences was held in April 2012 to promote the new resource.

In 2012, the Literacy Secretariat developed an online professional learning course for teachers of years 3 to 10. Introduced in 2013, Literacy for Learning built teachers' knowledge of literacy as a general capability in English and across all learning areas, and the teaching practices needed to scaffold language learning across all learning areas. The course consisted of six three-hour modules interspersed between module activities and readings covering the following topics: language in teaching and learning; talking our way into literacy; reading and viewing; making sense of texts; writing texts that work; language for increasing abstraction and technicality; and planning for literacy improvement. Schools participating in Literacy for Learning identified a facilitator, who was trained over three days in the Education Development Centre at Hindmarsh. Literacy for Learning was delivered in each school by a facilitator, who was supported by a facilitator network. In 2013, Literacy for Learning was delivered to more than 125 schools, sometimes involving a school's whole staff but on other occasions involving targeted groups of teachers. The South Australian Department of Education and Child Development (2013) published case studies on the implementation of Literacy for Learning in ten schools.

In 2014, partnerships were formed to build capacity for the numeracy and literacy strategy by establishing a model for professional learning communities in the South Valley Precinct in collaboration with Flinders University and a data literacy trial was conducted with Le Fevre Partnership. Powerful Learners Numeracy teams provided support to sites and groups across 16 local partnerships by planning and delivering professional learning to leaders and facilitating professional learning communities. The modules for the Leading Numeracy Improvement program, which include online resources and a learning community to build and share practice across local partnerships, were trialled in 2014. Over 75 per cent of preschool and school leaders had accessed the Leading Numeracy Improvement program in 2015. In 2015, Numeracy and Literacy Results Plus for Site Leaders was introduced to provide systemic improvement in student achievement in numeracy and literacy, and improve the effectiveness of leadership and instructional practices. In 2016, professional learning in Numeracy and Literacy Results Plus for Site Leaders involved refresher workshops for 215 leaders, a two-day core module accessed by

1,739 leaders, and a workshop conducted with leadership teams across South Australia over a twelve-week period.

In 2014, an online professional learning tool, the TfEL Compass, was introduced for teachers to reflect on their instructional practices through self-reflection and feedback from students and colleagues. By 2016, more than 4,900 teachers had registered to use the TfEL Compass, more than 16,000 students had provided feedback to their teachers about their instructional practices, and 44 local partnerships were using the TfEL Compass Local Partnership Pedagogic Report to improve teachers' instructional practices at a partnership level.

Beginning in 2013, social and digital media were used to connect teachers and leaders across South Australia to broaden access to professional learning. An iTunes university channel was accessed to provide a series of videos presenting leaders and teachers demonstrating successful practices.

Tasmania

Educational Reform Policy

Strategic plan

In 2011, the Tasmanian Department of Education's executive team consulted educators and stakeholders to develop the first Strategic Plan for 2012 to 2015. Structured around the concept, *Learners First, Connected and Inspired*, the strategic plan set out a vision, mission, values, key drivers, and priorities for the early years, school education, and further education, adult learning and skills.

Based on feedback from stakeholders, an updated Strategic Plan for 2014 to 2017 was released in October 2013. Enabling students to develop 21st century competencies as an integral part of the kindergarten to year 12 curriculum through implementation of the Early Years Learning Framework and the Australian Curriculum is a priority for the strategic plan. In 2016, principals, and services and business units were consulted with regard to defining strengths and opportunities in the strategic plan, which led to an updated version of the strategic plan being released in 2017.

Following consultation with stakeholders, the Strategic Plan for 2018 to 2021 was released in October 2017. Structured around the concept, *Learners First: Every Learner, Every Day*, the strategic plan set outs a commitment, values, goals, priorities and an approach to improvement. The values of aspiration, respect, courage and growth are reflected in four goals: access, participation and engagement; early learning; well-being; and literacy and numeracy. All schools set their own priorities by using inquiry cycles for improvement that contribute to the goals.

Review of years 9 to 12

In May 2014, the Tasmanian Government appointed a taskforce to identify rural high schools that would offer years 11 and 12 in the belief that offering senior secondary education in these schools would encourage young people to remain in education. In 2015, six schools were selected to participate in the extension high school program followed by another six schools in 2016, another 18 schools in 2017 and another eight schools in 2018. In addition, there have been changes in the provision of vocational education and training. Over the past decade, the arrangement of vocational learning in schools and colleges has been subject to a period of ongoing reform and restructure.

In June 2016, the Tasmanian Government commissioned the Australian Council for Educational Research to identify opportunities to improve attendance, retention and attainment outcomes in years 9 to 12 by reviewing student and workforce data, curriculum policy and provision, and design and delivery across the three education sectors. The review team of research fellows from the Australian Council for Educational Research was supported by a cross-sectoral Advisory Group. The review team examined current student data, prepared an issues paper, created a website for public submissions and hosting background papers, conducted online surveys of students, teachers and principals in secondary schools and colleges, interviewed personnel from the education sectors and the University of Tasmania, met with focus groups of stakeholders, visited schools, and reviewed policies, curriculum documents and assessment requirements. The Australian Council for Educational Research (2016) identified a range of factors and challenges affecting student attendance, retention and attainment outcomes. The findings of the review demonstrated that there are major policy issues relating to educational provision for years 9 to 12 students that should be addressed by seven recommendations and additional policy options. First, policymakers should take a holistic approach to system and sector improvements. Second, the Office of Tasmanian Assessment, Standards and Certification should review and update the formal curriculum, assessment and accreditation requirements. Third, policymakers should consider the establishment of multi-campus public schools. Fourth, policymakers should initiate long-term strategies to change public perceptions about the value of school education, and vocational education and training. Fifth, education leaders should implement a development strategy to support the rejuvenation of the workforce and potentially the implementation of multi-campus schools. Sixth, education leaders should improve the status of vocational education and training in schools through community involvement in the development of a future vision and associated implementation strategy. Seventh, education officials should re-evaluate the nature and use of collected data.

Following presentation of the report of the review, Jeremy Rockliff, the Minister for Education and Training approved a plan consisting of 12 steps for implementing the recommendations based on advice provided by the Advisory Group. First, the Advisory Group was re-established as the Years 9 to 12 Steering Committee charged with overseeing implementation of the recommendations, providing direction to the Working Group, and developing a cross-sectoral position paper. Second, the Working Group is responsible for preparing a summary of research findings to inform development of a year 9 to 12 curriculum, determining the components of courses based on the Framework Advisory Council's accreditation framework and the learning area groups' reports, identifying opportunities to work

with other states, considering quality assurance mechanisms, and preparing guidelines for the learning area groups. Third, each learning area group prepares a report outlining current provision in the learning area, revising and updating courses, linking courses across learning areas by learning pathways and subject matter in key employment areas. Fourth, the Office of Tasmanian Assessment, Standards and Certification investigates level 2 subjects and students studying them to understand differences in quality, rigour and parity. Fifth, the Framework Advisory Council develops and implements an accreditation framework that is aligned with the year 9 to 12 curriculum. Sixth, each education sector undertakes community awareness campaigns about the value of education until the completion of year 12. Seventh, the Department of Education develops a set of education outcome measures agreed by the education sectors. Eighth, the Department of Education designs professional development opportunities to support teachers with changes to the new curriculum. Ninth, each education sector refines and improves sector-based approaches to school improvement plans. Tenth, the Steering Committee develops a cross-sectoral position paper that outlines shared goals for aligning career paths with the Professional Standards for Teachers. Eleventh, the Steering Committee undertakes cross-sectoral discussions on succession planning.

Administrative and supervisory structure

In 2012, the organisation of the Department of Education was restructured to align to the strategic plan by creating three divisions: Early Years and Schools; Further Education and Training; and Corporate Services. In 2016, the Department of Education was restructured into three new divisions: Early Years and Schools; Department Services; and the Office of the Secretary. In 2017, the Department of Education was restructured into four new divisions: Learning; Support and Development; Strategy and Performance; and Corporate and Business Services.

The Department of Education has organised the public education system into two learning service areas: Northern region; and Southern region.

Organisation to implement the Australian Curriculum

The Department of Education defined an aspiration for how the Australian Curriculum will change classroom practices and secured wide support for the aspiration internally and externally.

The Department of Education formed an internal leadership team to support implementation of the Australian Curriculum. The team was formed within the Curriculum Services branch in the Early Years and Schools division. After the creation of four divisions in 2017, the Curriculum Services branch forms part of the Support and Development division. The team provides targeted curriculum and pedagogical support for school leaders through principal network leaders, curriculum teacher leaders, literacy and numeracy lead teachers and local networks.

In November 2010, the Department of Education released a timeline consisting of two phases. In 2011, the preparatory phase involved raising awareness,

familiarisation and developing an understanding of the purpose and content of the Australian Curriculum for English, Mathematics and Science. In 2016, the Department of Education released a timeline for implementing Phases Two and Three of the Australian Curriculum. For preparatory to year 6, Humanities and Social Sciences was trialled and implemented by the end of 2017, and the Arts and Technologies will be trialled and implemented by the end of 2018. For years 7 and 8, Civics and Citizenship, and Economics and Business were trialled and implemented by the end of 2017, and the Arts and Technologies will be trialled and implemented by the end of 2018. For years 9 and 10, Work Studies was trialled and implemented by the end of 2016.

The Department of Education presents financial statements in its annual reports, but these statements do not include a separate budget for implementing the Australian Curriculum.

The Department of Education conducted a gap analysis between learning opportunities in the Tasmanian Curriculum and the Australian Curriculum. Draft documents correlating learning opportunities in the Tasmanian Curriculum to the content descriptions in the Australian Curriculum were developed to provide teachers with guidance in transitioning to the Australian Curriculum. Early in 2012, forums were held with teachers to collect feedback to refine these documents.

In Tasmania, there is no guiding coalition of political, education and business leaders, who can provide forceful advocacy for reform, thereby building public understanding and will to sustain support for the Australian Curriculum during implementation.

The Department of Education engages in various activities to communicate information about implementation of the Australian Curriculum. It maintains a Strategic Marketing, Communications and Media team, which communicates news articles about the implementation of the Australian Curriculum. The Department of Education issued an online newsletter, which was published on an irregular basis to keep educators informed about the development of the Australian Curriculum and its implementation in Tasmanian schools. The newsletter was discontinued in 2014.

Implementation action for aligning instructional practices

Curriculum guidelines

In July 2012, the Department of Education published the *Curriculum in Tasmanian Schools K-12 Policy*, a statement outlining requirements set out in the Education Act 1994 to fulfil national obligations and agreements with regard to curriculum provision, and periodic evaluation and review, and defining the roles and responsibilities for delivering the curriculum to Tasmanian schools. In July 2017, the Department of Education published the *Curriculum, Moderation, Assessment and Reporting K-12 Policy*, a statement outlining requirements for implementing appropriate curriculum, moderation, assessment and reporting practices in public schools. In addition, the Department of Education published *Curriculum in Tasmanian Schools K-12 Procedure* setting out the curriculum entitlement for the

Australian Curriculum and the Tasmanian Curriculum in kindergarten to year 10, additional curriculum requirements in kindergarten to year 10, and additional required curriculum areas and curriculum-related programs.

Implementation process

In 2012, the implementation phase for English, Mathematics and Science involved using a state-wide approach to provide a range of activities to support teachers. Extension of the preparatory phase involved raising awareness, familiarisation and developing an understanding of the purpose and content of the Australian Curriculum for History for full implementation in 2013. The Department of Education appointed additional staff and provided information packages to support schools implement the Australian Curriculum.

The Department of Education's curriculum consultants support school leaders implement the Australian Curriculum through key priorities set out in the document, *School Support and Expectations 2013*, which focuses on developing whole-school approaches to literacy and numeracy, actively engaging with departmental support, and using data to support good teaching practice. The curriculum consultants provide targeted curriculum and pedagogical support for school leaders to improve literacy and numeracy outcomes, and develop continuity in each learning area to assist transition and retention from years 9 to 12. In 2013, eight curriculum teacher leaders with specific learning area responsibility across years 9 to 12 were appointed to provide direct school-based support for implementing the Australian Curriculum, including literacy and numeracy.

In 2014, the Department of Education published a series, Good Teaching, consisting of a set of resources distributed to schools across Tasmania to provide practical support for principals and teachers. *A Guide for Staff Discussion* was disseminated for educators to gain a common understanding of good teaching practice. *Differentiated Classroom Practice – Learning for All* describes strategies that educators can use to differentiate learning for students' needs, strengths and interests based on adjustments to content, process, product and learning environment. *Curriculum Mapping and Planning – Planning for Learning* describes processes for using Australian Curriculum scope and sequence documents to align curriculum, instruction and assessment for planning at the whole-school level, year level, unit level and lesson level. *Quality Assessment Practices – Guiding Learning* describes the processes of aligning curriculum, assessment and instruction, formative assessment and feedback, ensuring consistency of teacher judgments, and using summative assessments and reporting to parents. Late in 2013, the Department of Education formed an Inclusion Working Group consisting of representatives from stakeholder groups to investigate better ways to support school communities become more inclusive. The work of the Inclusion Working Group led to the publication of further resources in the Good Teaching series: *Inclusive Schools – Disability Focus*; *Inclusive Schools – Diversity Focus*; and *Inclusive Schools – Aboriginal Focus*.

Resources provided on the Curriculum Support Centre, a portal launched by the Department of Education in 2005, were reorganised to provide teachers with starting

points to explore the Australian Curriculum, assist in planning and teaching, facilitate assessment and reporting student performance, and implement the Australian Curriculum. Beginning in 2015, LINC Tasmania, a branch of the Department of Education, developed an electronic resource containing discussion questions, videos and activities relating to colonial artist, William Buelow Gould (1801-1853), and a website containing the diaries of Dr William Crowther (1887-1981) written during World War I.

Literacy and numeracy framework

In 2012, the Department of Education released *Tasmania's Literacy and Numeracy Framework 2012-2015* to guide the work of schools in improving literacy and numeracy outcomes. Based on the framework, every school has an explicit literacy and numeracy strategy as part of its school improvement plan. Network lead schools and network lead teachers were established to support schools and teachers implement the framework by providing professional learning focused on improving literacy and numeracy as informed by data. Lead teachers also support schools to develop effective whole-school literacy and numeracy approaches and share models of best practice. In July 2014, 25 literacy and numeracy specialist teachers were appointed to support implementation of the revised *Literacy and Numeracy Framework 2015-2017.* After receiving training in literacy and numeracy practice and evidence-based teaching strategies, the specialists work with teachers on strategies to improve attainment of students, whose literacy and numeracy skills fall below national standards. In 2017, four associations of schools were funded to embed improved leadership and instructional practices in literacy for years 4 to 8 focusing on the transition from year 6 to 7. The four associations of schools work with the literacy and numeracy team in Curriculum Services on using evidence-based approaches for teaching literacy, developing professional learning communities, and providing professional learning to leaders and teachers.

Developed to support educators improve literacy and numeracy outcomes, *Supporting Literacy and Numeracy Success: a Teachers Resource for Early Years to Year 12* consists of three sections. An overview of the Department of Education's literacy and numeracy initiatives and their implications for the Early Years Learning Framework and the Australian Curriculum are presented in the first section. The second section sets out seven beliefs and understandings underpinning *Tasmania's Literacy and Numeracy Framework 2012-2015*: conditions of learning; whole-school approach; collaborative learning communities; targeted teaching to address individual needs; effective evidence-based practice; data informed; and community engagement. The third section sets out four key actions for every teacher: know where students are in their learning; know the literacy and numeracy demands and opportunities of the learning area; use effective, evidence-based teaching practices and strategies; and reflect on teaching practice.

My Education

In August 2014, the Department of Education introduced My Education, a kindergarten to year 12 approach to career education and life planning. My

Education assists students identify their aspirations and teaches them how to make decisions about future learning, work and life. It supports school leaders, teachers, parents and community members in their responsibilities to ensure students transition from one level of schooling to the next. In September 2014, a My Education Consultation Group, consisting of representatives from parent, teacher, industry and higher education, was formed to act as an advisory group to the Department of Education and to inform stakeholders about the project's progress. In 2015, further consultation was undertaken to develop a range of resources and professional development opportunities. In December 2015, 70 curriculum resources were released with each group having 11 resources. Aligned to the Australian Curriculum, each resource contains two to three hours of learning activities. In 2016, a small production company produced 30 career videos in schools featuring local people and showcasing industries. In 2017, My Education was implemented across all sites from kindergarten to year 12 with a range of resources being developed for primary schools. A focus is being placed on formalising links with business, higher education and community organisations, which led to an event, Creating My Career, being held at Burnie in May 2017, Launceston in June 2017 and Hobart in August 2017 for students to explore career choices. A self-help evaluation tool was introduced in years 7 to 12 to track how My Education is progressing in secondary schools and identify areas for building capacity. The Department of Education formed a partnership with the Beacon Foundation, an organisation that supports young people transition from school to employment, to work with three schools in a project model that links to My Education to encourage more students to complete year 12 and become job ready.

Agricultural education

In 2010, the Department of Education collaborated with the Department of Primary Industries, Parks, Water and Environment and Hagley Farm School's Centre for Agricultural Education to develop the Tasmanian Agricultural Education Framework: Grow, Make, Protect. Launched in March 2016, the framework sets out priorities for student learning, curriculum, facilities, career connections, leadership, program support and stakeholder partnerships.

Aboriginal education

In response to the Australian Government's National Aboriginal and Torres Strait Islander Education Strategy, the Department of Education developed a strategy, Closing the Gap in Aboriginal Educational Outcomes 2016-2019: a Tasmanian Strategy for Aboriginal Student Success through School Improvement, focusing on a range of school-based actions that address the factors identified by research as being most important for supporting Aboriginal student success. The Department of Education formed Aboriginal Education Services consisting of school-based Aboriginal early years' liaison officers, education officers and education workers. They offer cultural programs to Aboriginal students, maintain communication networks with the Aboriginal community, and offer an Aboriginal sharers-of-knowledge program for Aboriginal cultural educators. As part of this initiative, the Department of Education consulted the Aboriginal community to develop

Tasmania's Aboriginal Education Framework 2016-2017 setting out a vision, mission, outcomes, an approach to teaching and learning, intentions and progress measures. The framework informed the development of curriculum resources for Aboriginal education. In 2017, a series of videos on Aboriginal history and culture was released.

Science, technology, engineering and mathematics strategy

In 2017, the Department of Education completed a STEM Framework. Amplify STEM, an early adopter program, which is supporting schools to develop integrated STEM approaches and resources aligned to the STEM Framework, has been implemented in 16 primary schools and eight secondary schools. Integrated STEM units, which have been developed by schools participating in the project, will be made available on a STEM website.

Implementation action for training educators

The Department of Education collaborated with professional associations, a representative group of principals, and other stakeholders to prepare support for schools to implement the Australian Curriculum. The Department of Education supported the Australian Literacy Educators' Association and the Mathematical Association of Tasmania in holding conferences in May 2012 to examine implementation of the Australian Curriculum.

In 2011, the Professional Learning Institute was created to deliver and broker professional learning for all Department of Education staff. Initially, the Professional Learning Institute offered programs aimed at enhancing school-based leadership before expanding its focus to encompass all units within the Department of Education in 2013. In 2012, the Professional Learning Institute supported principals through six leader workshops, which culminated in a leadership symposium for principals. In conjunction with the Centre for Strategic Education, an organisation based in Melbourne that provides consultancy and advisory services, the Professional Learning Institute began hosting a series of workshops offered by renowned educationalists in 2012.

From 2013, the Professional Learning Institute supported implementation of the Australian Curriculum with professional learning courses relating to the learning areas and cross-curriculum priorities. In 2014 and 2015, the Professional Learning Institute supported implementation of the Good Teaching series of resources. Two courses on differentiated classroom practice, one for novice and the other for experienced practitioners, focused on the principles of differentiation and using strategies for making adjustments to meet the diverse needs of learners within the context of the Australian Curriculum. Two courses on curriculum mapping and planning, one for primary and the other for secondary teachers, focused on processes for planning at the year level, unit level and lesson level, ways of identifying key concepts and the progression of skills across year levels, and how to use the backward design planning process. Two courses on curriculum mapping and planning, one for primary and the other for secondary leaders, focused on how

to use the National School Improvement Tool, processes for leading curriculum mapping and planning in the school context, and how to use *Curriculum Mapping and Planning* to design professional development. Two courses on quality assessment practices, one for novice and the other for experienced practitioners, focused on the principles of assessment and how they align curriculum, pedagogy and assessment through backward mapping from the achievement standards, and formative assessment practices.

In 2015 and 2016, the Professional Learning Institute supported implementation of the *Literacy and Numeracy Framework (2015-2017)* with two courses. State-wide Literacy Focus in grammar and spelling supported teachers develop their knowledge about grammar and spelling along with strategies to apply in the classroom. State-wide Numeracy Focus in decimals and algebra supported teachers develop their understanding about key skills in number and algebra in the Australian Curriculum.

Victoria

Educational Reform Policy

Strategic plan

In October 2015, the Victorian Department of Education and Training launched the Statement of Strategic Intent to support delivery of the Education State reform agenda. The Strategic Intent sets out a vision: together we give every Victorian the best learning and development experience, making our state a smarter, fairer and more prosperous place. The vision is supported by four objectives, and approaches for workforce strategies and practices; partnership and innovation; organisational reform; and service and funding reform.

Based on the Statement of Strategic Intent, Department of Education and Training developed the Strategic Plan for 2017 to 2021. Intended to bring together policy and organisational reform agendas, the Strategic Plan sets out the Strategic Intent, approaches, challenges and risks, and operating environment.

Victoria as a Learning Community

In November 2011, the Minister for Education, Martin Dixon, delivered a lecture at the University of Melbourne titled, *Victoria as a Learning Community*, which presented the Victorian Government's broad vision for school education reform. This lecture formed the foundation for a position paper, published by the Victorian Department of Education and Early Childhood Development (2012), setting out the need to improve the current performance of Victorian schools and students. It argued that reform should be based on three elements that are common to the world's highest performing education systems: professional trust; autonomy; and accountability and support. Professional practice of educators should be founded on a set of clear, high-standard expectations for observation and feedback. Improvement should be based on a compact establishing a new curriculum framework for foundation to year 10, AusVELS, providing a more diverse range of

pathways for students in years 11 and 12, forming specialist schools, providing flexibility on reporting student performance to parents, removing barriers to managing student behaviour in schools, extending autonomy for local decision-making over budgets and staffing schools, creating a new infrastructure and asset management model, and developing new governance models for schools. The accountability system should be strengthened by designing a new student information portal, developing a new school performance framework, introducing a principal evaluation system involving peer review, and establishing an independent review process for low-performing schools. A set of high-quality, evidence-based tools should be created to improve teaching practice, provide a rigorous whole-school curriculum planning approach, establish online assessments, and support new and experienced principals. Advice and guidance should be provided to schools on creating, maintaining and expanding partnerships with other schools.

Following release of the position paper in November 2012, stakeholders were engaged in exploring the details for its implementation. This step led the Department of Education and Early Childhood Development to release an action plan to provide a timeline for implementing initiatives in five areas: shifting the achievement curve; facilitating a self-improving system; supporting collaboration and partnerships; supporting leadership and professional practice; and maximising access and inclusion. Advice to schools on implementing AusVELS and providing a set of online resources, tools and advice, including curricular examples and a strategic paper formed key initiatives for shifting the achievement curve.

Education State

In the lead up to the 2014 election, the Australian Labor Party made a commitment to establish Victoria as the 'education state'. While evidence from international studies on student achievement show that Victoria's education system is strong, educational performance of Victorian students has stalled over the past decade, in spite of increased funding for education. To design a clear plan for the Education State, the Victorian Department of Education and Training (2015a) released a consultation paper intended to guide discussion in the wider community. The consultation paper proposed that discussion should be based on four key ideas: achieving excellence, equity and lifelong learning; valuing expertise; working in partnership with communities and industry; and acting with integrity, accountability and transparency.

Following release of the consultation paper in June 2015, a series of meetings were held across Victoria with stakeholders, discussions were held by groups, and individuals participated in online conversations. The consultation led to 498 individuals participating in 51 discussion groups, state-wide forums led by local members of parliament, 64 online contributions and 194 written submissions. Six key themes emerged from the consultation. Improvement in the quality of teaching is the main variable affecting outcomes for children and young people. The characteristics of a good educator are broader than the capacity to teach literacy and numeracy in a mainstream setting. All students need to have access to high quality education regardless of their demographic characteristics. All students need to perceive clear learning and career pathways, and have access to appropriate

information to make informed choices. Partnerships with communities and businesses help schools to broaden learning experience and develop localised responses to student needs. The progress of student learning and school improvement needs to be monitored consistently.

The feedback from the consultation was analysed to develop Education State targets in four areas: learning for life; happy, healthy and resilient kids; breaking the link; and pride and confidence in our schools. In learning for life, 25 per cent more year 5 students will reach the highest levels of achievement in reading and mathematics by 2020, 25 per cent more year 9 students will reach the highest levels of achievement in reading and mathematics by 2025, 33 per cent more 15 year olds will reach the highest levels of achievement in science by 2025, and 25 per cent more year 10 students will have developed excellent critical and creative thinking skills by 2025. For happy, healthy and resilient kids, 20 per cent more students will report high resilience by 2025, and 20 per cent more students will do physical activity for an hour a day, five times a week by 2025. For breaking the link, 50 per cent fewer students will leave education early by 2025, and there will be a 15 per cent reduction in the gap in average achievement between disadvantaged and other students in year 5 and year 9 reading by 2025. For pride and confidence in our schools, 20 per cent more parents will have a high level of pride and confidence in the public education system by 2025.

James Merlino, the Minister for Education, appointed the Minister's Expert Panel for Schools, consisting of education experts from universities and a policy adviser, to develop seven initiatives. First, assistance should be targeted over four years to struggling students by individual, tailored attention. Second, teachers in public schools should be helped over three years to implement the Victorian Curriculum, including the new subjects of digital coding and respectful relationships. Third, an additional 150 locally-based staff should be appointed for four years to provide operational support and advice so principals can focus on students. Fourth, 200 mathematics and science specialists should be trained to work in 100 most disadvantaged primary schools for four years. Fifth, the number of trained principals should be doubled and training for aspiring principals should be increased over four years. Sixth, lookout education support centres should be established over four years for more than 6,000 school-aged children in out-of-home care. Seventh, students, who have dropped out of school and training, should be re-engaged with help over four years.

In September, the Victorian Department of Education and Training (2015b) released a policy document at the launch of the Education State held at Wellington Secondary College. The policy document set out funding allocations, the Education State initiatives, the Education State targets, the introduction of the Framework for Improving Student Outcomes, professional development for principals through programs for local leaders, future leaders and expert leaders, professional development to train school leadership teams implement the Victorian Curriculum, 60 secondary teachers to become STEM catalysts, 200 primary teachers to become mathematics and science specialists, the design of the Insight Assessment Platform, development of an Aboriginal education strategy, establishment of navigator services to re-engage young people in education and training, and the establishment of lookout education support centres. The policy document

concluded by outlining steps to inform the public about progress, respond to feedback from the education community, and work with the Minister's Expert Panel for Schools.

The implementation strategy underpinning the Education State initiatives employs regional structures, school leaders and teachers in the existing education system to act as change agents in establishing Learning Places, Communities of Practice and Professional Learning Communities. As well as forming the new Learning Places regional model, tech schools, lookout education support centres and navigator form key elements for Learning Places. The Communities of Practice approach creates networks for school leaders to learn and share best practice by participating in professional learning programs offered by the Bastow Institute of Educational Leadership and applying the Framework for Improving Student Outcomes. Professional Learning Communities, which provide the structure that teachers need to collaborate and improve professional practice, are supported by the Victorian Curriculum, the Literacy and Numeracy Strategy and the Insight Assessment Platform.

The construction of ten tech schools forms a key initiative of the Education State. The tech schools, which will provide innovative education programs emphasising STEM skills, are hosted by a university or a technical and further education institute. Each institution, hosting a tech school, forms a partnership with local secondary schools, technical and further education institutes, local government and industries. Schools, participating in local partnerships, are able to enrol students in one of ten tech schools: Ballarat hosted by Federation University; Banyule-Nillumbuk hosted by Melbourne Polytechnic; Bendigo hosted by La Trobe University; Casey hosted by Chisholm Institute; Geelong hosted by Gordon Institute; Gippsland hosted by Federation Training; Monash hosted by Monash University; Whittlesea hosted by Melbourne Polytechnic; Wyndham hosted by Victoria University; and Yarra Ranges hosted by Box Hill Institute. The Tech Schools STEM Future Industries Advisory Panel was formed to oversee implementation of the initiative and ensure that the initiative maintains a focus on STEM education. Marita Cheng, the founder of a robotics company, was appointed tech school ambassador. In April 2016, more than 300 industry representatives, educators and students attended an inaugural Tech Schools Summit at the Melbourne Convention and Exhibition Centre to examine how tech schools will operate in Victoria. In July 2016, a tech schools' curriculum workshop was held to consider the knowledge and skills students will need for programs to build awareness of training, work and career opportunities in years 7 to 10, and enrichment and extension courses in years 11 and 12. In August 2016, a tech schools' design principles and functionality workshop was held to plan development of each tech school through seven stages: planning and site selection; education program focus; tech school design; fit out; curriculum and resources in place; and openings roll-out. In October 2016, tech school committees, consisting of stakeholders, were formed for each tech school. In January 2017, Yarra Ranges Tech School, the first tech school completed, opened as part of the Lilydale Community Education Precinct. Teachers from participating schools received training in February and March of 2017 and students commenced in April 2017. Monash Tech School opened in October 2017 in a temporary facility until 2019, Ballarat and Gippsland tech schools will open early in 2018, and the remaining tech schools will open in mid-2018.

Lookout education support centres are designed to increase the capacity of schools, carers, child protection practitioners, and out-of-home care services to improve educational outcomes for children and young people living in out-of-home care, because research findings indicate that they are at greater risk of poorer educational outcomes. In April 2016, the first lookout education support centre commenced operation in the South West Victoria region followed by establishment of a local implementation group in June 2016. In January 2017, lookout education support centres commenced operation in the North West Victoria, North East Victoria and South East Victoria regions. Lookout education support centre staffs operate as a multidisciplinary team and support schools to monitor and evaluate educational programs of children and young people living in out-of-home care.

In 2016, the Department of Education and Training commenced a two-year Navigator pilot to provide intensive case management support to disengaged learners, aged 12 to 17 years old, and works with them and their support networks to return them to education. The pilot operates in eight areas: Central Highlands; Western Melbourne; Mallee; Hume Moreland; Goulburn; Ovens Murray; Bayside Peninsula; and Southern Melbourne. Anyone can refer a young person to a navigator coordinator, whose role is to handle referrals, work with providers and liaise with local schools. The Navigator pilot providers refer disengaged young people to specialist support services to address barriers to engagement. The support services are provided by community agencies, which work with local schools and area offices. The Department of Education and Training is designing a youth engagement system to capture information on disengaged learners across Victoria. An interim system to meet immediate operating needs for the Navigator pilot, including tracking referrals and reporting outcomes, is already in use. A project is being undertaken to build a more comprehensive system that brings together multiple sources of data and provides multilevel user access for Navigator providers and area offices.

The development of networks through the adoption of the communities of practice approach within geographic areas is a key Education State initiative. Networks operating as communities of practice engage in sharing collective expertise and evidence-based practice, committing to effective peer review to drive improvement, learning through inquiry into the impact of selected interventions, and developing a focus for improvement efforts through joint project work based on six principles. First, promote the intent that students become creative, adaptive and self-directed learners. Second, enrich educational leadership and collaboration. Third, develop higher levels of expertise to improve student outcomes. Fourth, sustain and value professional learning. Fifth, build on collaborative, inquiry-based practice where data are shared and evidence drives outcomes. Sixth, focus on the priorities embedded in the Framework for Improving Student Outcomes. In February 2016, resources and advice were released to help educators form networks based on the communities of practice approach. In March 2016, a new region and area model commenced with each network electing a network chair to provide leadership, promote the communities of practice approach, facilitate opportunities to engage with partners, and collaborate with senior education improvement leaders and multidisciplinary area teams. The senior education improvement leaders worked with the network chairs to evaluate the level of network activity using the

Communities of Practice Self-Assessment Tool. After these assessments, the elements of practice were strengthened to align with the communities of practice approach. In February 2017, a network collaboration website was launched. In April 2017, an acceleration plan for 2017-2018 was developed.

The Bastow Institute of Educational Leadership supports implementation of the Education State reforms by offering three school leadership programs: Wise for principals as system leaders designed for network chairs and senior education improvement leaders; Unlocking Potential designed for high potential leaders aspiring to become principals; and Inspire for local leaders designed for emerging leaders. The content of the Wise program was developed from extensive participation by personnel from regions and schools at a design summit held in May 2016. From July 2016, network chairs were trained through the Wise program at the Bastow Institute of Educational Leadership. The Unlocking Potential program is an eight-month course incorporating an internship experience for participants to work alongside expert principals and an assessment to make judgments about aspiring principals' readiness for the principal role. Aspiring principals apply to participate in the program or senior education improvement leaders nominate suitable candidates. Applicants are selected by a panel of former and current principals. The first four intakes of aspiring principals undertook the course in 2016, the design of the assessment process commenced in November 2016 followed by a trial in September 2017. The Inspire program enables principals and assistant principals to use a train-the-trainer process over seven months to develop the leadership skills of high-potential teachers to become school leaders. Participants are supported by an online portal in developing knowledge and skills about the leadership role. Potential facilitators and participants apply to the Bastow Institute of Educational Leadership. Applicants for facilitator training and participating teachers are selected by area networks. The pilot of the Inspire program involved the first intake of facilitators completing training in June 2016 and the first intake of teachers completing the course in December 2016.

The Framework for Improving Student Outcomes provides a common language to help schools focus their efforts on key ideas that are known to have the greatest impact on school improvement. The framework consists of three components: an improvement cycle; an improvement model; and improvement measures. The improvement cycle involves four phases: evaluate and diagnose performance successes and challenges by school self-evaluations, school reviews and annual reporting; prioritise and set goals for improvement strategies; develop and plan improvement strategies through annual implementation planning; and implement improvement strategies selected from the improvement model and monitor their impact. The improvement model is structured around state-wide priorities based on six dimensions: building practice excellence; curriculum planning and assessment; building leadership teams; empowering students and building school pride; setting expectations and promoting inclusion; and building communities. Improvement measures, which are set out in a guide, provide a range of data sets that provide schools with a reliable instrument to evaluate and monitor the effect of their self-improvement efforts on student outcomes.

Professional learning communities provide the culture and structure that teachers need to effectively collaborate, reflect and evaluate the impact of their teaching on

student learning, and determine what they can do to improve their professional practice. In 2016 and 2017, over 200 public schools participated in piloting professional learning communities in the first intake. The purpose of the pilot was to build a consistent approach, in which school leaders, teachers and education support staff meet regularly to use a cycle of inquiry, student data and evidence-based instructional practices to improve teacher practices and student learning outcomes. Regional support teams work within and across schools to support implementation of professional learning communities across the education system and support identification and distribution of good practice across schools and networks. By 2021, approximately 800 schools are expected to be provided with professional learning to strengthen professional learning communities in their schools.

The Department of Education and Training collaborated with literacy and numeracy experts, principals, teachers, academics and stakeholders to design the Education State Literacy and Numeracy Strategy. The first version was released at regional principal forums held in June 2017 together with school leadership and instructional resources for improving literacy and numeracy. The *Literacy and Numeracy Strategy* sets out six principles and outlines current and proposed supports for teachers and school leaders. *Excellence in Teaching and Learning: a School Leaders' Guide to Improving Literacy and Numeracy Outcomes* outlines the building blocks of a whole-school approach to planning, monitoring and evaluating literacy and numeracy instruction. Aligned to the Framework for Improving Student Outcomes, the guide sets out building blocks to evaluate and diagnose, prioritise and set goals, develop and plan, and implement and monitor four key actions: evidence-based high impact teaching strategies; curriculum plans and assessment; building practice excellence; and evaluating impact on learning. *High Impact Teaching Strategies* sets out an overview, key elements and related effect sizes for ten high impact teaching strategies: setting goals; structuring lessons; explicit teaching; worked examples; collaborative learning; multiple exposures; metacognitive strategies; questioning; feedback; and differentiated teaching. The Department of Education and Training launched literacy and numeracy portals containing guides, activities and programs to support the Literacy and Numeracy Strategy. The Victorian Literacy Portal contains the Literacy Teaching Toolkit, Tools to Enhance Assessment Literacy, school case studies, the Premier's reading challenge, the Literacy and Numeracy Strategy, and parental engagement and activities. Released in stages from October 2017, the Literacy Teaching Toolkit consists of resources for reading and viewing, speaking and listening, writing, and a collection of videos featuring experts. Tools to Enhance Assessment Literacy contains professional learning resources, an assessment tools bank, units and a discussion forum for teachers of primary and secondary students, who are learning English as an additional language. The Victorian Numeracy Portal contains the mathematics curriculum companion, FUSE numeracy resources, mathematics professional learning, mathematics software and support, mathematics assessment, and the Victorian maths challenge. The mathematics curriculum companion contains online resources aligned to the Victorian Curriculum content descriptions.

To provide an assessment tool aligned to the Victorian Curriculum, the Department of Education and Training designed the Insight Assessment Platform for housing data on students' achievement and progress to improve student learning through

analysis and interpretation. Design of the platform involved bringing together various assessment tools and data from different places and combining them with a robust data analysis layer. As a result, the Insight Assessment Platform, which was piloted by schools completing and submitting over 1,000 assessments in 2016, provides a single platform for housing current and new assessments. Launched in January 2017, the Insight Assess website at www.insight.vic.edu.au houses the English Online Interview, Diagnostic Assessment Tools in English, Mathematics Online Interview, Fractions and Decimals Online Interview, Abilities Based Learning and Education Support, and Transition Learning Development Statement.

In 2014, the Department of Education and Training commissioned Deloitte Access Economics and the Centre for International Research in Education at Victoria University to undertake the Education State Government School Strategic Evaluation. The methodology for the four-year evaluation includes school performance data, school practice data, surveys and case studies to determine the effects of the Education State reforms on practice and student outcomes over time.

Administrative and supervisory structure

Victorian Department of Education and Training

In March 2012, the Department of Education and Early Childhood Development initiated a process to restructure its organisation to place it in the best possible position to deliver the action plan. A new central office was reorganised into two tiers. One tier was based on life stages and comprised three groups: Early Childhood Development; School Education; and Higher Education and Skills. The other tier was based on supplying services and support across the department and comprised four groups: Regional Support; Strategy and Review; Infrastructure and Financial Services; and People and Executive Services.

During 2015 and 2016, the Department of Education and Training introduced a new way of working, both centrally and in the regions, to support the vision of the Education State. In April 2016, the central office was reorganised into seven groups: People and Executive Services; Infrastructure and Finance Services; Policy Reform; Strategy and Performance; Early Childhood and School Education; Regional Services; and Higher Education and Skills. The role of the Regional Services group was strengthened to reflect its pivotal role in translating policies and programs into improved service delivery. Within the four regions, 17 areas were created in March 2016 with the appointment of an additional 150 staff as part of the new Learning Places regional model to support principals in leading improvement in their schools and networks. The North Western Victoria Region contains four areas: Mallee; Loddon Campaspe; Hume Moreland; and North Eastern Melbourne. The North Eastern Victoria Region contains four areas: Ovens Murray; Goulburn; Outer Eastern Melbourne; and Inner Eastern Melbourne. The South Eastern Victoria Region contains four areas: Outer Gippsland; Inner Gippsland; Southern Melbourne; and Bayside Peninsula. The South Western Victoria Region contains five areas: Wimmera South West; Barwon; Central Highlands; Western Melbourne; and Brimbank Melton.

Victorian Curriculum and Assessment Authority

Following enactment of the Victorian Curriculum and Assessment Authority Act in December 2000, the Victorian Curriculum and Assessment Authority (VCAA) came into operation in March 2001 comprising four divisions: Curriculum; Assessment; Educational Measurement and Research; and Operations. In 2010, VCAA was organised into three divisions: Curriculum; Assessment and Reporting; and Planning, Strategy and Corporate Support.

Organisation to implement the Australian Curriculum

The Department of Education and Early Childhood Development and VCAA defined an aspiration for how the Victorian Curriculum will change classroom practices and secured wide support for the aspiration internally and externally.

VCAA formed an internal leadership team to support implementation of the Victorian Curriculum. The team consists of a Victorian Curriculum F-10 unit located in the Curriculum division. The team oversees the development and delivery of the curriculum with a focus on providing resources and services to support implementation in Victorian schools and the broader community.

VCAA, the Department of Education and Early Childhood Development, the Catholic Education Commission Victoria and Independent Schools Victoria agreed on a common timeline to implement AusVELS consisting of three phases. In 2011, the first phase involved raising awareness, familiarisation and developing an understanding of the purpose and content of the Australian Curriculum, making it available to schools for trial, and providing initial professional learning. In 2012, the second phase involved professional development to build a deeper understanding of AusVELS, trialling phase one of the Australian Curriculum, and providing school-based curriculum planning. In 2013, the third phase involved schools implementing AusVELS. At the launch of the Victorian Curriculum in September 2015, VCAA released a timeline for commencing implementation at the beginning of the 2016 school year with full implementation by the end of 2017.

The Department of Education and Training presents financial statements in its annual reports, but these statements do not include a separate budget for implementing the Victorian Curriculum. VCAA presents financial statements in its annual reports, but these statements do not include a separate budget for implementing the Victorian Curriculum.

VCAA has not conducted a gap analysis comparing the content descriptions in the Victorian Curriculum to the content descriptions in the Australian Curriculum. VCAA provided a descriptive statement outlining the main differences between the structures of the Australian Curriculum and the Victorian Curriculum.

In Victoria, there is no guiding coalition of political, education and business leaders, who can provide forceful advocacy for reform, thereby building public understanding and will to sustain support for the Victorian Curriculum during implementation. The

Department of Education and Training formed the Education State Board, consisting of the secretary, deputy secretaries, chief executive officer of VCAA, assistant deputy secretaries and regional directors, to design the Education State Strategy, implement the reform agenda and coordinate the reforms. The Education State Board may perform the role of a guiding coalition to a limited extent.

The Department of Education and Training and VCAA engage in various activities to communicate information about implementation of the Victorian Curriculum. The Department of Education and Training maintains a Communications Division within the People and Executive Services Group responsible for communicating with stakeholders and advising central office staff on the management of media, events, print and online communications. A Media unit within the Communications division releases news articles about current and upcoming events, policies, programs and services. VCAA maintains a communications team in the Infrastructure and Business Services division, which publishes a monthly *VCAA Bulletin* for ten months each year covering news events relating to early years, the curriculum for foundation to year 10, the Victorian Certificate for Education, administrative advice, professional development opportunities and a bulletin board. In May 2003, VCAA published the first *VCAA Bulletin VCE, VCAL and VCE*, which consolidated the *VCE Bulletin* with information about the Victorian Certificate for Applied Learning. A *P-10 Supplement*, which was renamed the *VCAA Bulletin P-10* in April 2006, was also published to provide information about the foundation to year 10 curriculum. In August 2014, the two publications were amalgamated into a single *VCAA Bulletin*. VCAA also distributes an electronic newsletter, *P-10 Curriculum Update*, to subscribers.

Implementation action for aligning instructional practices

Curriculum guidelines

In December 2015, VCAA published revised guidelines for curriculum planning and reporting. In the guidelines, the Victorian Curriculum and Assessment Authority (2015) established the context for curriculum design in Victoria, outlined the basis for curriculum planning in Victorian schools, and discussed the context for reporting student achievement. The guidelines are introduced by statements presenting a rationale for student learning based on four elements: curriculum; pedagogy; assessment; and reporting. The foundation for the Victorian Curriculum is established in curriculum frameworks that preceded it, its implementation is based on principles that prevail in Victoria's education system, subject-based disciplines form the basis for its structure, the place of capabilities is stressed in this structure, developmental levels of learning form the basis for its sequence, and cross-curriculum priorities are embedded in the learning areas. The guidelines propose that curriculum plans and reporting student achievement against the learning achievement standards should have been in place in all schools at the start of the 2017 school year. Curriculum planning is based on three stages: Foundation (preparatory to year 2); Breadth (years 3 to 8); and Pathways (years 9 and 10). In the Foundation stage, curriculum plans should be based on the Victorian Early Years Learning and Development Framework's outcomes and provide a structured program in English and Mathematics, and draw on other learning areas in the Victorian Curriculum. In the Breadth stage, curriculum plans should be based on the

Victorian Curriculum. In the Pathways stage, curriculum plans should be based on the Victorian Curriculum, but recognise student needs for specialisation. The context of reporting student achievement in Victoria is established, and key issues involved in assessing and reporting student performance are discussed to support a contention that schools should have flexibility to choose the way in which they report student achievement. However, schools are required to report student achievement in English and Mathematics each year and in Science from year 3, and after the Foundation stage report in all learning areas and capabilities in each two-year band in accordance with each school's curriculum plan.

AusVELS

The process for developing AusVELS emerged in 2010 from a series of 30 forums convened by VCAA, in collaboration with the Department of Education and Early Childhood Development, the Catholic Education Commission Victoria and Independent Schools Victoria, in which over 2,000 educators reviewed drafts of the Australian Curriculum for English, Mathematics, Science and History. The outcome of this consultation led VCAA to integrate elements of the Australian Curriculum for English, Mathematics, Science and History into the Victorian Essential Learning Standards. The new curriculum framework, AusVELS, provided a single framework for Victoria's schools, accommodated links from the Victorian Early Years Learning and Development Framework, permitted the addition of learning areas in Phases Two and Three of the Australian Curriculum, and included links to curriculum resources to support its implementation. In November 2011, AusVELS was incorporated into a new F-10 Curriculum website launched by VCAA in October 2011.

Early in 2012, VCAA began managing a six-month trial of the Australian Curriculum involving 121 schools, which had nominated to participate in November 2011. Each participating school nominated a particular subject area or level for English, Mathematics, Science and History to trial over a semester. In March 2012, VCAA learning area consultants held online forums to support participants in the trial. An online platform was launched for participants to make connections with other teachers working on similar tasks, contribute to discussions, join forums dedicated to specific issues, and post documents for review. In August 2012, each school participating in the trial was required to submit a report to VCAA using a report template. Schools were also able to submit student work samples that had been assessed against the Australian Curriculum achievement standards. In September 2012, VCAA convened a conference, *Implementing the Australian Curriculum: Bringing Curriculum and Pedagogy Together*, at which 110 school leaders and higher education faculty explored the opportunities and challenges experienced in trialling the Australian Curriculum.

In 2012, all schools were expected to undertake curriculum planning to transition to AusVELS. The Department of Education and Early Childhood Development provided curriculum planning guidelines offering documents, tools and links to support whole school, student groups and individuals across five phases: understanding the context; planning and resourcing; implementation; continuous monitoring; and evaluation and review. The curriculum planning guidelines were

supported by two modules used for professional development. The module on whole-school curriculum planning consisted of six activities sequenced to support the process for whole-school curriculum planning. The module for planning programs for cohorts of students consisted of two activities. The Catholic Education Office and Independent Schools Victoria provided their own approaches to pedagogy and implementation to schools in their respective sectors.

VCAA released various resources to support whole-school planning. In March 2012, VCAA released scope and sequence documents to assist teachers plan units, and planning templates for each strand in English, History, Mathematics and Science to assist teachers align units to the content descriptions and achievement standards in AusVELS. Three background papers on different aspects of whole-school planning in relation to AusVELS were released to stimulate discussion among educators. Advice on time allocations and coverage of content in each learning area was released. In August 2013, a sample statement on the implementation of AusVELS, which public schools could adapt to inform parents, and an online chart to assist teachers to link directly to the content descriptions and achievement standards in AusVELS were released. In February 2014, VCAA published guidelines for curriculum planning and reporting, and launched a Curriculum Planning Resource website.

The Curriculum Planning Resource website provides school leaders with a range of resources to develop curriculum plans and report student learning achievement based on the guidelines. Whole-school planning involves four interrelated layers. First, the school documents the coverage of all the AusVELS domains reflecting the school's goals, vision and any particular areas of specialisation or innovation. Second, the school documents an instructional plan for each domain across year levels to support a progression of learning. Third, the school documents time allocations and sequencing of units, and schedules assessment activities for each year level. Fourth, the school documents units and lesson plans against content descriptions and achievement standards, and identifies instructional resources and activities. A self-assessment tool is provided to assist school leaders develop curriculum plans across the four layers, and identify areas that require improvement.

Victorian Curriculum

In September 2015, Premier Daniel Andrews and James Merlino, the Minister for Education, launched the Victorian Curriculum representing the final iteration of AusVELS. The Victorian Curriculum is based on three important conceptualisations that distinguish it from the Australian Curriculum. First, it includes four capabilities - critical and creative thinking, ethical, intercultural, and personal and social – that are organised by content descriptions and achievement standards. Second, the cross-curriculum priorities are embedded in the learning areas. Third, it is organised as a continuum of levels of learning achievement not as year levels.

In February 2016, VCAA updated its website with general and curriculum-specific advice to support schools implement the Victorian Curriculum. This advice included video tours, frequently asked questions, and curriculum mapping templates for each learning area. In July 2016, VCAA added sample templates for whole-school

planning into the Curriculum Planning Resource. The templates provide options for school personnel to consider when deciding how to best represent their instructional program, while ensuring coverage of all the learning areas and capabilities. Templates for each band were published in Excel format and can be modified to meet local needs.

In March 2016, VCAA announced that funds, provided to support implementation of the Victorian Curriculum, would be directed to offering briefings to principals and curriculum leaders in every school, time release for whole-school curriculum planning, and a specialist teacher program covering ten priority areas. VCAA appointed 60 specialist teachers to support implementation by providing advice and facilitate professional learning in STEM, digital coding, learning about world religions and world views, critical thinking, literacy in the early years, music, financial literacy, health education and personal and social capability, civic participation, and ethical understanding in a global world. Applications were sought from teachers with expertise in these areas over two rounds: 29 specialist teachers were appointed from applications lodged in November 2015; and 31 specialist teachers were appointed from applications lodged in November 2016. Initially, the specialist teachers participated in professional development to ensure they had a detailed understanding of the Victorian Curriculum, curriculum planning and assessment, and addressing the professional development needs of schools. Subsequently, the specialist teachers attended professional development sessions one day each month before commencing in this role for 18 months from their home schools at the beginning of the 2017 school year.

In April 2016, nine specific language curricula were added to the Victorian Curriculum in addition to four specific language curricula included in it, when it was launched in September 2015. The Victorian Curriculum also includes a curriculum for Victorian Aboriginal languages. A language team comprising traditional owners of the language and culture should design an instructional program in any one of 38 Aboriginal languages spoken in Victoria, and an Aboriginal person approved by the traditional owners should deliver the program to students. During 2016, VCAA collaborated with the Department of Education and Training to develop an English-as-an-Additional Language curriculum focusing on the language skills needed by students, for whom English-is-an-additional language, and taking account of the diverse needs of this group through multiple pathways. Following review of the draft curriculum by stakeholders and teachers in December 2016, the English-as-an-Additional Language curriculum was published in September 2017. In collaboration with the Australian Council for Educational Research, VCAA developed a battery of tests, known as the Languages Proficiency Assessments, for testing students' additional language reading and listening skills, providing teachers with diagnostic information in eight most commonly studied second languages. The Languages Proficiency Assessments were released in three stages over 2017, and supported by online professional learning sessions.

In 2018, VCAA began developing units and lessons aligned to the Victorian Curriculum and reviewing open educational resources. In February 2018, VCAA issued a call for teachers of Civics and Citizenship to apply to develop units and sequences of lessons. In March 2018, VCAA published reviews of open educational resources aligned to the Victorian Curriculum for Mathematics.

To support implementation of the Victorian Curriculum, the Department of Education and Training redesigned Find, Use, Share Education, a repository of digital materials launched in 2010 at fuse.education.vic.gov.au. Find, Use, Share Education, which allows teachers in Victoria's public schools to search, store and organise materials, and share them with other teachers, is organised into four areas: early childhood; primary students; secondary students; and teachers.

Implementation action for training educators

AusVELS

Beginning in June 2011, VCAA held 27 professional development sessions, varying in size from 30 to over 280 participants, across the state to assist principals and curriculum leaders plan transitioning to AusVELS. In August 2011, VCAA launched an online support program to supplement face-to-face professional development with seminars offered at regular intervals to introduce teachers to the structure and organisation of AusVELS. At the same time, the Department of Education and Early Childhood Development and the Catholic Education Office launched extensive face-to-face professional development sessions with ongoing support from regional support officers. The initial seminar provided an introduction to AusVELS. In May and June of 2012, VCAA repeated the online seminar. A total of 560 teachers attended the seven sessions providing an introduction to AusVELS. In August 2012, VCAA curriculum managers for English, history, mathematics and science presented online professional learning sessions on how AusVELS differs from the Victorian Essential Learning Standards and the Australian Curriculum. In June 2013, VCAA offered a number of online professional learning sessions that provided information on the relationship of AusVELS to the Australian Curriculum, AusVELS and assessment and reporting, online support resources, and the implementation timeline. In August and September of 2013, VCAA provided a series of online professional learning sessions to support teachers deliver AusVELS for each learning area. Feedback from the sessions, attended by over 500 teachers, was used to plan further online professional development opportunities. In November 2013, VCAA held two interactive online forums to answer teachers' queries about AusVELS.

Victorian Curriculum

Beginning in November 2015, VCAA held a series of online professional learning sessions to help teachers become familiar with the Victorian Curriculum. Over 600 teachers attended eight online professional learning sessions held late in 2015. Another three online professional learning sessions were held to familiarise teachers with the Victorian Curriculum in January 2016. Online professional learning sessions were also held on curriculum planning and reporting, capabilities and foundation level Victorian Curriculum for students with disabilities. Beginning in December 2015, VCAA began offering a series of online professional learning sessions in specific learning areas. Each hour-long session had capacity for 500 registrations. In June 2017, VCAA offered a whole-day workshop on critical and

creative thinking. In July 2017, the specialist teachers began facilitating professional learning opportunities in nine priority areas, including whole-day interactive workshops offered across regions and online sessions taking between 60 and 90 minutes. In April 2018, VCAA held a professional learning day on Civics and Citizenship for levels 3 to 10 focusing on implementation strategies, developing and adapting units, introducing and managing whole school events that activate student civic participation, and disseminating examples of best practices in the classroom.

Western Australia

Educational Reform Policy

Following appointment as Director General in June 2007, Sharyn O'Neill released the Director General's Classroom First strategy in December 2007. The Classroom First strategy provides a framework for future policy making, underpins the strategic plan, provides a rationale for corporate structures, and reflects beliefs and commitment to public education. The Classroom First strategy acknowledges that schools will benefit from different forms of support and require different levels of intervention, focuses on learning in classrooms, and targets improved instructional practice based on six elements: a focus on student achievement; a classroom orientation; context specific; practical support; meaningful accountability; and public confidence.

In May 2012, the Department of Education released the Strategic Plan for 2012 to 2015, *Excellence and Equity*, outlining transition of decision-making authority to provide schools with greater autonomy. Structured around the concept, *High Performance – High Care*, the strategic plan for 2016 to 2019 outlines progress made in empowering school communities and sets the next phase of building a culture of high performance and high care. Focus 2016, Focus 2017 and Focus 2018, which are aligned to the strategic plan, provide specific directions for each school year.

Administrative and supervisory structure

Western Australian Department of Education

In October 2009, the Department of Education separated from the Department of Education and Training, which allowed greater focus to be placed on the Western Australian Government's agenda for empowering schools with the commencement of the Independent Public Schools initiative in 2010. A School Innovation and Reform unit was established to manage a range of innovation projects. In January 2011, a more direct linkage between schools and the central office through a leaner management structure was provided by replacing 14 education districts with eight education regions: Goldfields; Kimberley; Midwest; North Metropolitan; Pilbara; South Metropolitan; Southwest; and Wheatbelt. Concurrently, 75 school networks were established to share local expertise, pool resources and provide opportunities to work flexibly to benefit students.

Following the state election in March 2017, the new Labor Government announced machinery of government changes to increase collaboration, deliver services more efficiently, focus on government objectives and deliver cost savings. From July 2017, the Department of Education and the Department of Education Services were amalgamated to form a new Department of Education, which gained responsibility for public schools, non-government school services, the School Curriculum and Standards Authority (SCSA), the Teacher Registration Board of Western Australia, the Training Accreditation Council, and the Rural and Remote Education Advisory Council. The Department of Education is organised into nine divisions: Schools; Finance and Administration; Statewide Planning and Delivery; Workforce; Statewide Services; Early Childhood Development and Learning; Innovation, Performance and Research; Executive and Communications Services; and Professional Standards and Conduct.

School Curriculum and Standards Authority

In May 2011, the Minister for Education, Elizabeth Constable introduced the Curriculum Council Amendment Bill into the Parliament of Western Australia to replace the Curriculum Council of Western Australia with an independent seven-member board consisting of experienced education experts. The resulting School Curriculum and Standards Authority Act 1997 established SCSA in March 2012 to set standards of student achievement, develop an outline for curriculum and assessment in schools, develop and accredit courses for schools, and maintain a database of information relating to students' participation and achievement, and prepare reports on the standards of student achievement.

As part of the amalgamation in July 2017, SCSA retains its own board, but services and support are provided by the Curriculum, Assessment and Strategic Policy directorate within the Department of Education.

Organisation to implement the Australian Curriculum

The Department of Education and SCSA defined an aspiration for how the Australian Curriculum will change classroom practices and secured wide support for the aspiration internally and externally.

The Department of Education formed an internal leadership team within the Statewide Services division to facilitate implementation of the Western Australian Curriculum in public schools. SCSA formed an internal leadership team consisting of learning area consultants for early childhood, pre-primary to year 6, and year 7 to 10 to support teachers implement the Western Australian Curriculum.

A timeline was released in February 2012 for implementing English, Mathematics, Science and History in Western Australia's schools over three years commencing in July 2012. In April 2016, SCSA released a timeline for implementing the Western Australian Curriculum. Humanities and Social Sciences, Health and Physical Education, Technologies and the Arts became available for familiarisation in April 2015 with full implementation of Humanities and Social Sciences, and Health and

Physical Education by April 2017 and Technologies and the Arts by April 2018. The revised curriculum for English, Mathematics and Science became available for familiarisation in February 2016 with full implementation by April 2017. In December 2015, SCSA released the P-10 Languages policy requiring Western Australian schools to implement languages education in a minimum of one language in year 3 from 2018. The policy requires all Western Australian schools to implement Languages programs progressively, so that all students from years 3 to 8 will be studying a language by 2023.

The Department of Education presents financial statements in its annual reports, but these statements do not include a separate budget for implementing the Western Australian Curriculum. SCSA presents financial statements in its annual reports, but these statements do not include a separate budget for implementing the Western Australian Curriculum.

In 2011, the Department of Education published comparison documents correlating the content descriptions in the Australian Curriculum to the content of the K-10 syllabuses, a set of advisory documents on the scope and sequence of content for the Arts, English, Health and Physical Education, Mathematics, Science, Society and Environment, and Technology and Enterprise published in 2007. SCSA provided a gap analysis comparing content descriptions in the Western Australian Curriculum for English, Mathematics and Science to content descriptions and achievement standards in the Australian Curriculum with implications for instruction.

In Western Australia, there is no guiding coalition of political, education and business leaders, who can provide forceful advocacy for reform, thereby building public understanding and will to sustain support for the Western Australian Curriculum during implementation.

The Department of Education and SCSA engage in various activities to communicate information about implementation of the Western Australian Curriculum. The Department of Education maintains a Media Unit in the Executive and Communication Services directorate. The Media Unit releases news articles relating to the Western Australian Curriculum. SCSA releases a regular circular for kindergarten to year 10 containing news articles relating to the Western Australian Curriculum.

Implementation action for aligning instructional practices

Curriculum, Assessment and Reporting Policy

With the publication of the Curriculum Framework and the Outcomes and Standards Framework in 1998, the Education Department of Western Australia published the *Curriculum, Assessment and Reporting: Policy and Guidelines* requiring schools to adopt the policy and use the guidelines for developing and implementing programs, and whole-school assessment and reporting procedures to parents. Between 1999 and 2004, public schools introduced elements of the policy and guidelines progressively. With the development of the Western Australian Curriculum and

Assessment Outline, new requirements that public schools need to meet in planning curriculum, assessment and reporting procedures were set out in the *Curriculum, Assessment and Reporting Policy and Procedures.* The policy requires public schools to implement the Western Australian Curriculum, and principals and teachers to develop school-based assessment and reporting plans.

In October 2016, SCSA released the *Pre-primary to Year 10: Teaching, Assessing and Reporting Policy.* The policy sets out the mandated minimum requirements for implementing curriculum, assessment and reporting on student achievement. All Western Australian schools are required to implement the Western Australian Curriculum and Assessment Outline, which includes the Kindergarten Curriculum Guidelines. Schools are required to provide the school community with an assessment and reporting policy that is based on the Principles of Learning, Teaching and Assessment. The policy must specify how principals and teachers provide students with feedback about learning, use student data to plan educational programs, make judgments about student achievement, administer mandatory assessments, communicate with students' parents about student achievement, and report to parents at the end of each semester. Reporting to parents must use plain language, be provided formally using a five-point scale, informally throughout the year for various reasons, and as requested by parents. Schools must also disseminate reports to parents about mandatory assessments, and submit student achievement data to SCSA. The policy is supported by the *Policy Standards for Pre-primary to Year 10: Teaching, Assessing and Reporting*, which refer to curriculum planning and reporting student achievement. Curriculum planning sets out standards for a modified curriculum, and curriculum requirements and available options. Reporting student achievement sets out standards for components of written reports, achievement in learning areas, modified reporting, and recognition of an alternative method of reporting student achievement.

Western Australian Curriculum and Assessment Outline

Familiarisation with the Australian Curriculum began in Western Australian schools, following allocation of grants from the state budget for 2010-2011. The grants were distributed by the Curriculum Council of Western Australia to public, Catholic and independent schools.

In 2012, the Australian Curriculum Working Group provided cross-sectoral discussions and agreement on issues, which included offering guidance to schools, developing funding applications and monitoring implementation of the Australian Curriculum. SCSA surveyed all schools across Western Australia to gauge progress in implementing the Australian Curriculum and to inform future planning and funding priorities. Collaboratively, the Department of Education, the Catholic Education Office and the Association of Independent Schools of Western Australia launched a website, Australian Curriculum Western Australia. Key areas of the Australian Curriculum, professional learning opportunities, and resources for professional learning projects were features included on the website. A cross-sectoral coordinator was appointed to deliver a common message to schools, enable the three sectors to work together, avoid duplication of effort, and coordinate

the implementation process across the three education sectors. Supported by the sectors, school leaders decided on implementation pathways best suited to fully implement the Australian Curriculum in English, Mathematics, Science and History within three years. Following release of the Western Australian Curriculum and Assessment Outline, materials held on the website, Australian Curriculum Western Australia, were transferred to the resources section of the Western Australian Curriculum and Assessment Outline.

During 2012 and 2013, SCSA commissioned Sandy Heldsinger, an assessment specialist, to consult teachers in developing a draft for the outline. Between October 2012 and March 2013, the draft kindergarten to year 10, curriculum and assessment outline was reviewed by stakeholder groups at forums. Following revision based on feedback from the forums, the draft was released for a seven-week review in May and June of 2013. During the review, almost 800 school leaders attended briefings at Perth, Albany, Broome, Bunbury, Busselton, Geraldton, Kalgoorlie, Karratha and Northam. In addition, SCSA hosted three teleconferences and conducted an online survey to collect feedback. In addition to feedback from the briefings, more than 330 submissions were used to revise the draft Western Australian Curriculum and Assessment Outline. Feedback from the review indicated that it was generally well-received, but further consideration of the reporting requirements for the pre-primary year was required. Following release of the Western Australian Curriculum and Assessment Outline in November 2013, SCSA held briefings for principals and deputy principals at Perth, Albany, Broome, Bunbury, Esperance, Geraldton, Kalgoorlie, Karratha, Narrogin and Northam in February and March of 2014.

Incorporating Phase One subjects of the Australian Curriculum, the Western Australian Curriculum and Assessment Outline was launched on SCSA's website in November 2013 and updated in March 2015. It provides the source for the Australian Curriculum for Western Australian schools. It sets out the knowledge, understanding, skills, values and attitudes that kindergarten to year 10 students are expected to acquire. It consists of eight components. Principles present an implementation timeline and guiding principles for Western Australian schools. Teaching presents the Early Years Learning Framework, Kindergarten Curriculum Guidelines, Western Australian Curriculum, general capabilities, cross-curriculum priorities, requirements for alternative curriculum recognition, and teaching support materials. Assessing sets out six assessment principles and reflective questions, assessment snapshots organised by year level, overview of research organised by year level, sample assessment activities organised by year level, judging standards organised by year level, testing, and assessment support materials. Policy presents the teaching, assessing and reporting policy, and policy standards. Resources present frequently asked questions, year 10 information handbook, outline PDFs, links, superseded teacher support materials, presentations, communication to schools, activities schedule, archived materials, Abilities Based Learning Education Western Australia, 'ways of teaching' videos, contact details, disability adjustment guidelines, and Brightpath. In addition, the Western Australian Curriculum and Assessment Outline provides links to Scootle and Connect to assist teachers identify instructional materials.

Western Australian Curriculum

In the 2013-2014 state budget, SCSA was provided with funding to adapt Phases Two and Three of the Australian Curriculum to meet the needs of Western Australian students. SCSA worked with teachers to review the subjects of History, Geography, Civics and Citizenship, and Economics and Business to ensure a complete Humanities and Social Sciences learning area. SCSA consulted stakeholders to refine the content of the Arts, Technologies, and Health and Physical Education. During 2014, SCSA developed 99 year-level syllabuses identifying the core to be taught to all students for the learning areas and subjects of Phases Two and Three of the Australian Curriculum. During 2015, assessment snapshots, assessment activities, judging standards and annotated work samples were developed. In July 2015, SCSA released the year-level syllabuses for Humanities and Social Sciences, Health and Physical Education, Technologies and the Arts.

In June 2014, SCSA commissioned a review into the provision of languages across pre-primary to year 12. The methodology involved analysing data collected from the education sectors, interviewing representatives of stakeholder groups and reviewing key documents pertaining to language education. Coghlan and Holcz (2014) reported on language provision in both schools and out-of-school settings. In 2013, a high proportion of students studied a language in years 3 to 7 across the three sectors: 93 per cent in independent schools; 83 per cent in Catholic schools; and 76 per cent in public schools. At the secondary level, there were significant reductions in the number of students studying languages in the transitions from year 8 to year 9 and year 9 to year 10. In years 11 and 12, approximately six per cent of year 12 students enrolled in a language course in 2013. Seventy-one per cent of all schools offered at least one second language program. However, provision varied with 80 per cent of metropolitan schools and 58 per cent of rural schools offering language courses in 2013. An analysis of 928 public and Catholic schools showed that schools in the most disadvantaged communities were less likely to offer a language course. The time allocated to teaching a language and the frequency of sessions increased from primary to secondary levels. In 2013, 19 Aboriginal languages were taught in 40 public schools ranging from remote to urban settings, 1,000 students learnt Auslan in 15 public schools, and the School of Isolated and Distance Education provided courses in French, Indonesian, Italian and Japanese. A community languages program provided by the Office of Multicultural Interests delivers an after-school-hours program and language insertion programs to community organisations to maintain languages spoken by ethnic groups.

In March 2015, SCSA convened a languages stakeholders' forum, which was attended by approximately 100 people representing schools, professional associations, universities and community organisations. Feedback from the forum assisted SCSA develop a policy on languages education, which requires schools, where possible, to provide one language in years 3, 4, 5 and 6 commencing in year 3 in 2018, in years 7 and 8 commencing in year 7 in 2022, although the study of languages is optional in years 9 and 10. In response, SCSA developed Languages syllabuses for Chinese, Japanese, Indonesian, French, German and Italian, which were released in July 2016. Furthermore, the study of an Aboriginal language is appropriate, students for whom English is a second language may study English-as-

a-second-language, the study of Auslan is appropriate, and schools may offer a language other than those provided by SCSA.

In June 2016, SCSA held a series of four seminars for curriculum leaders on implementing the Humanities and Social Sciences syllabuses. Beginning in August 2016, SCSA released a series of 'ways of teaching' videos for early childhood, Health and Physical Education, Humanities and Social Sciences, the Arts, Technologies and Languages to assist teachers implement the Western Australian Curriculum. Beginning in February 2017, SCSA released sample teaching and learning outlines for kindergarten, Health and Physical Education, Humanities and Social Sciences and Science to assist teachers determine timing and sequencing of the subject matter, the range of learning experiences, the selection of instructional materials, and the implementation of the principles articulated in the 'ways of teaching' videos.

Instructional materials

In 2011, the Department of Education trialled Connect, an instructional improvement system for teachers to network with other teachers, provide information to parents, and for students to access curriculum resources. The trial provided strong evidence of the success of Connect in meeting teachers', parents' and students' needs. As a result, Connect was delivered to more schools through a managed implementation plan. Work commenced on the Australian Curriculum Connect project to provide the technical framework to allow integration of the Australian Curriculum with the Department of Education's teaching, learning and reporting systems. Teachers use Connect to search and identify digital materials related to specific objectives for each year level in every subject of the Australian Curriculum. A final stage of replacing the Australian Curriculum with the Western Australian Curriculum became available to teachers in early 2018.

Teachers use Connect Resources to search and retrieve over 23,000 resources aligned to content descriptions in the Australian Curriculum for each year level for every subject. The digital resources include teacher guides, interactive resources, units of work, data sets, images, sound files, videos, student worksheets, graphic organisers and maps. Some resources are curated from Scootle, while other locally-developed resources are shared nationally through the same repository. The resources can be downloaded, linked and embedded into specific Connect Classes for students to access.

Science, technology, engineering and mathematics strategy

In 2013, Edith Cowan University was funded by the Western Australian Department of Commerce to identify the status of STEM education in Western Australian schools, challenges and needs of teachers and students, the range of organisations supporting STEM education, and present recommendations for optimising STEM education. The project involved reviewing literature and analysing data, interviewing 20 representatives from stakeholder organisations, and interviewing 19 representatives from industry. Hackling, Murcia, West and Anderson (2014)

identified a range of negative findings in relation to STEM education in Western Australian schools. There was declining participation, achievement and attitudes towards STEM subjects among students. There was a lack of teachers with STEM expertise, and challenges arising from out-of-field teaching and requirements of the Australian Curriculum. There was a diverse range of initiatives to support STEM education, but their delivery to schools was uneven. The key recommendation of the study was a proposal for the Western Australian Government to establish an Industry-STEM Education Consultative Group comprised of representatives from government, industry, companies, education service providers, education sectors, and school principals. A model for coordinating and optimising STEM education support to schools would involve education service providers and industry bodies launching a STEM website and fostering STEM education initiatives.

The findings of the study encouraged several initiatives for STEM education. In 2015, Governor Kerry Sanderson launched the annual Governor's School STEM Awards. In May 2017, Sue Ellery, the Minister for Education and Training, announced funding for the STEM Learning Project. In June 2017, David Kelly, the Minister for Science, and Minister Ellery announced that a STEM Advisory Panel, consisting of industry experts, researchers and educators, would be formed to develop a state STEM strategy. In August 2017, Premier Mark McGowan and Minister Ellery announced funding to convert facilities in 200 primary schools to establish science laboratories.

In 2016, the Department of Education formed a partnership with Scitech. Scitech created a consortium with the Educational Computing Association of Western Australia, the Mathematical Association of Western Australia, and the Science Teachers Association of Western Australia to develop STEM resources aligned with the Western Australian Curriculum. The STEM consortium formed a Project Control Group, chaired by Professor Mark Hackling, to conduct the STEM Learning Project. Launched at a showcase event hosted by Scitech in May 2017, the aim of the three-year project is to develop 40 resource modules for kindergarten to year 12, provide professional learning to support implementation of the modules across Western Australia, and offer online support accessible from the Connect portal. Conduct of the project involves holding workshops for primary and secondary teachers from public schools across the eight education regions until completion of the project in 2019. The workshops focus on examining the modules and discussing their use in classrooms. The first regional workshops were held at Geraldton in June 2017, Karratha and Christmas Island in August 2017, Armadale in September 2017 and Esperance in October 2017. In addition, a series of workshops are being held in the Department of Education's Statewide Services Centre at Padbury. At the end of the first year, Peter (2017), the project manager, discussed key issues learnt during the course of the project.

In 2017, the Department of Education placed a particular focus on STEM to ensure students develop the problem-solving, negotiation and critical thinking skills essential for future careers. Early in 2016, the Department of Education, in partnership with Innovation Unit Australia, commenced the Teacher Development Schools STEM Innovation Partnerships initiative. Community experts and staffs from 29 schools developed professional practices to increase student engagement. Resources and expertise were shared with other schools in 2017. A resource kit of

programmable interactive robots and electronic engineering resources to create real world projects, and touch tablet devices were delivered to 655 schools with primary-aged students. A STEM plan consisting of 32 projects was designed to support schools increase student engagement.

Aboriginal education

In 2014, the Cabinet Subcommittee of Aboriginal Affairs accepted a proposal to develop a framework for Aboriginal cultural standards for public schools. Following extensive consultation with Aboriginal leaders and educators, the Aboriginal Cultural Standards Framework was published in November 2015. The framework consists of five cultural standards: relationships; leadership; teaching; learning environment; and resources. Each standard sets out performance descriptors and indicators to guide educators when working with Aboriginal students, parents and communities. A continuum for each standard enables educators to reflect on individual and whole-school progress and develop strategies to become culturally responsive. In 2016, forums and workshops were convened to familiarise educators with the framework and prepare them to incorporate strategies for improvement in their school planning from 2017.

In November 2016, the Department of Education appointed two Aboriginal elders in residence to provide advice about education for Aboriginal students to policymakers and education officials. Early in 2017, the Department of Education formed an Aboriginal Education Teaching and Learning directorate led by a director and a principal adviser, and staffed by teachers, who have a record of successful practices in teaching Aboriginal students. The new directorate focused on establishing greater alignment of effort among existing teams in Statewide Services, reviewing current strategies and initiatives to ensure a more holistic and coherent approach, using a range of data to prioritise services and support for Aboriginal students, and applying a case management approach. The Department of Education also identified research opportunities with universities and expert groups to develop evidence-based, practical support for teachers and leaders in each standard of the framework. The first research grant, directed to the learning standard, focuses on providing better support and guidance for teaching practices.

Beginning in 2009, the Department of Education initiated the Aboriginal Perspectives across the Curriculum project by designing a website comprising of three components to provide teachers with materials to assist them implement Aboriginal studies. Lesson plans consist of approximately 300 sample lessons plans developed by consultants, who worked with staff in regional offices, universities and schools as well as community members. The lesson plans are aligned with the Australian Curriculum and organised by phases of development, learning areas and education regions. Mind maps present a collection of planning tools used to brain storm ideas and thoughts associated with a topic or learning area. Teaching resources consist of a collection of resources developed by national and state organisations that may be used to introduce Aboriginal perspectives into classroom instruction.

Implementation action for training educators

In 2011-2012, the Department of Education's Institute for Professional Learning delivered a Leading the Australian Curriculum course to assist 4,034 school leaders support teachers implement the Australian Curriculum, and a Leading Teaching and Learning course, focusing on leading pedagogy and the Australian Curriculum through a coaching approach, to 59 school leaders. In 2012, train-the-trainer modules were developed to support curriculum leaders implement the Australian Curriculum in their schools. Following completion of the modules in 2013, feedback on school-based activities was sought from identified curriculum leaders.

In March 2012, the Department of Education established 62 teacher development schools, which provided instructional support to implement the Australian Curriculum to 9,929 educators across the state in 2012 and 8,735 educators across the state in 2013. The teacher development schools worked with the Institute for Professional Learning to meet specific needs of schools based on the results of a survey of schools, workshop evaluations and requests from schools. Professional learning focused on continuing support for implementation of the Australian Curriculum by emphasising the integration of the cross-curriculum priorities and general capabilities. Department of Education professional development specialists worked in the teacher development schools to provide teachers with professional learning opportunities through face-to-face sessions, classroom modelling, and online discussion groups.

In 2012 and 2013, 219 teachers, nominated by the eight education regions across the state, completed a train-the-trainer course in one of the four learning areas of English, Mathematics, Science or History. Then, the trainers provided common messages and resources to support networks and schools to implement the Australian Curriculum. In August 2013, 82 regional facilitators from primary and secondary schools were trained to support teachers meet the increased demands of the Australian Curriculum across years 6 to 8, particularly since year 7 was moved to the secondary level from 2015 to provide students with specialist teaching and greater access to the Australian Curriculum. Training was delivered through a series of modules. The facilitators complemented the support provided by 463 primary and secondary Australian Curriculum Phase One learning area trainers working across the eight regions.

In 2014 and 2015, the Department of Education established 62 teacher development schools, which provided 1,187 professional learning events to 12,931 educators to implement the Western Australian Curriculum and Assessment Outline, improve instructional practices, prepare for smooth transition to secondary schooling, and prepare students for university or a vocation. In addition, the teacher development schools provided professional learning events attended by 7,777 educators in response to 840 requests for support. Each school focused on an area of expertise, such as a particular learning area, the Early Years Learning Framework, year 7 transition, special education needs, regional needs or senior secondary pathways. The teacher development schools provided teachers across the state with professional learning opportunities, curriculum expertise and exemplary instructional practice across schools, networks and professional learning

communities, and strategies and resources through professional learning and online communities.

In July 2015, the Department of Education commissioned PDT Consultancy to evaluate the preconditions, factors and practices that exist within school networks and teacher development schools that enable effective sharing of curriculum expertise and innovation, including support for implementing the Western Australian Curriculum. The Department of Education identified six school networks, two located in urban settings and four located in rural settings, and five teacher development schools located in both urban and rural settings to participate in the study. PDT Consultancy researchers interviewed 30 principals from the school networks and 26 administrators from the teacher development schools. Harris and Crosby (2016) found that both the school networks and teacher development schools exhibited a range of successful features. The school networks had developed strategic plans collaboratively led by committed and skilled network principals, had regular network meetings, sourced funds and resources, showed expertise across the network, convened whole-of-network conferences, built leadership capacity across the network and used information and communication technology. The teacher development schools delivered current curriculum practices with expertise, used expert practising teachers to deliver professional learning, used a team approach, showed capacity in delivering professional learning, shared leadership, provided a range of support opportunities, used information and communication technology, and depended on support provided by the team in Teaching and Learning Services in Statewide Services. There were many situations where the two models were collaborating by accessing and sharing expertise, and increasing awareness in identifying expertise.

In response to the findings of the evaluation, the Department of Education increased the number of teacher development schools to 69 in 2016 and 2017 with 13 focusing on supporting teachers of students with disabilities. In 2018 and 2019, 44 schools, selected as teacher development schools, are focusing on Phase 3 learning areas of the Western Australian Curriculum, in particular languages and digital technologies.

In March 2016, the Department of Education surveyed all public schools to collect information about preparedness and support needed to implement Phases Two and Three of the Western Australian Curriculum. Responses received from 390 schools identified specific areas of professional learning needed by network and school curriculum leaders. In August and September of 2016, the Department of Education held eight professional learning sessions for Humanities and Social Sciences, and Health and Physical Education. Between February and May of 2017, the Department of Education held a series of professional learning sessions for curriculum leaders in Humanities and Social Sciences and teachers in Health and Physical Education, Technologies and the Arts through face-to-face meetings and web-conferencing events made available in Connect communities.

In June 2017, the Department of Education and SCSA held curriculum forums for primary and secondary curriculum leaders and school administrators. The forums focused on instruction and assessment for Humanities and Social Sciences, and Health and Physical Education, and assessment practice using revised judging

standards for English, Mathematics and Science. SCSA developed a Teaching, Learning and Assessment Process Wheel, which illustrated the relationship between curriculum, assessment and reporting student achievement to form the objectives for the forums. The forums were attended by 286 primary teachers and 201 secondary teachers. Following the forums, teachers' support materials used in the forums were published on SCSA's website.

In January and April of 2017, SCSA held a series of briefings across Western Australia to update principals and deputy principals about the Western Australian Curriculum and Assessment Outline and the Western Australian Certificate of Education. In February and March of 2018, SCSA held a series of briefings across Western Australia to update primary school principals, deputy principals and teachers about the Western Australian Curriculum. Following the briefings, the participants attended a workshop to discuss policy requirements concerning planning, instruction, and the assessment and reporting process.

CHAPTER 4

CAPACITY FOR IMPLEMENTATION

This section interprets the results of the study in relation to the application of the rubric to rate states' and territories' capacity to 'organise to implement' and two implementation actions: align instructional practices to the Australian Curriculum; and train educators on the Australian Curriculum. Discussion of the findings of states' and territories' capacity focuses on analysing the results for each building block of 'Organise to implement' and each critical action of implementation actions I and II.

Organise to implement

Aspiration

The aspiration is an aim that signifies a shared understanding of what is envisaged by success. It is clear, measurable and understandable by stakeholders. The aspiration describes the impact that the Australian Curriculum and related assessments have on student learning. A state education agency sets the aspiration by defining and explaining the expectations for students in terms of performance targets. Once the state education agency has clearly articulated a vision for implementing the Australian Curriculum, the aspiration needs to be understood and agreed by key stakeholders.

Table 4 presents the rating for each state and territory against the descriptors set out in the segments of the scale for 'aspiration', outlined in Table 1. All eight jurisdictions have defined an aspiration for how the Australian Curriculum will change classroom practice and secured wide buy-in for the aspiration internally and externally.

TABLE 4

SUMMARY OF RATINGS FOR STATES' ASPIRATION

State	Rating
Australian Capital Territory	4
New South Wales	4
Northern Territory	4
Queensland	4
South Australia	4
Tasmania	4
Victoria	4
Western Australia	4
Key: 1 = No aspiration is defined for why the Australian Curriculum is important; 2 = The state education agency is developing an aspiration for how the Australian Curriculum will change classroom practice; 3 = The state education agency has defined an aspiration for how the Australian Curriculum will change classroom practice; 4 = In addition to '3', the state education agency has secured wide buy-in for the aspiration internally and externally.	

Explanations of aspiration are published on the websites, or in the curriculum documents, of state education agencies and curriculum, assessment and certification boards. The websites of the Australian Capital Territory Education Directorate, South Australian Department of Education and Child Development, and the Tasmanian Department of Education present concise statements of aspiration supplemented by links to the Australian Curriculum website. In New South Wales, the syllabuses for the Australian Curriculum contain concise statements of aspiration. In Queensland, QCAA and the Department of Education and Training include statements of aspiration within particular resources housed on their websites. In Victoria, the websites of VCAA and the Department of Education and Training present detailed statements of aspiration referring to the Victorian Curriculum. In Western Australia, the syllabuses for the Western Australian Curriculum contain statements of aspiration.

Internal leadership team

Ownership of the policy elements related to the implementation of the Australian Curriculum resides with personnel performing different roles inside and outside the state education agency. The internal leadership team should include representatives from various divisions within the state education agency, regions and schools, institutions of higher education, policymakers, and budget and communications specialists. By considering the mechanics in place for communication and oversight within the internal leadership team, two alternative models can be followed to provide a single point of accountability. A deputy or associate director could be assigned to drive the overall effort. Internal leadership teams that choose this option must give this leader sufficient authority and leverage to manage and coordinate the different divisions involved in the implementation effort. The advantage of this model is coherence by giving those involved in the effort somewhere to turn for leadership. Alternatively, a project management office consisting of a team of people with the appropriate skills to drive implementation could be formed to apply the appropriate set of tools for planning and problem-solving. A project management office plays a coordinating and monitoring role. Team members need to have strong interpersonal and relationship management skills to work with more senior counterparts in various divisions of the agency.

The internal leadership team needs to know the current curriculum well, have the capacity to consider and make recommendations about elements in the implementation plan, and oversee the plan. Initially, the internal leadership team develops a vision, timeline, phase-in strategy and work plan for implementation. As the implementation effort proceeds, different tasks will require the various divisions in the agency to combine their efforts, often together with the efforts of external partners. The internal leadership team is likely to need to create other working teams to examine specific issues and recommend how to proceed. Creation of a working group structure that brings relevant leaders together around particular areas of work will form the basis for interaction within the internal leadership team.

Table 5 presents the rating for each state and territory against the descriptors set out in the segments of the scale for 'leadership team', outlined in Table 1. All of the eight Australian jurisdictions have specified a clear point or multiple points of

accountability internally and with external stakeholders, and the internal leadership teams have the leverage to coordinate the effort.

TABLE 5

SUMMARY OF RATINGS FOR STATES' INTERNAL LEADERSHIP TEAM

State	Rating
Australian Capital Territory	4
New South Wales	4
Northern Territory	4
Queensland	4
South Australia	4
Tasmania	4
Victoria	4
Western Australia	4
Key: 1 = Ownership of implementation is haphazard or unclear; 2 = The state education agency has specified a clear point or multiple points of accountability internally; 3 = The state education agency has specified a clear point or multiple points of accountability internally and with external stakeholders; 4 = In addition to '3', the internal leadership team has the leverage to coordinate the effort.	

Although the model for internal leadership teams is usually based on assigning accountability to a senior leader rather than a team of people, internal leadership teams vary markedly with three states maintaining two points of accountability. In New South Wales, Queensland and Western Australia, autonomous internal leadership teams are maintained in the curriculum, assessment and certification boards and the state departments of education. In New South Wales and Western Australia, internal leadership teams housed in NESA and SCSA are involved in curriculum development as well as implementation activities. On the other hand, the internal leadership team housed in QCAA is involved mainly in implementation activities. In each of these three states, the state department of education maintains an internal leadership team focused on implementing the Australian Curriculum. In Victoria, the internal leadership team maintained in VCAA is involved in curriculum development as well as implementation activities. The adoption of new structures in the central office and regions to support implementation of the Education State initiatives in the Department of Education and Training is transforming this agency into an organisation that applies a delivery approach. In the Australian Capital Territory, South Australia and Tasmania, internal leadership teams housed in state education agency are involved only in implementation activities. The adoption of a new corporate structure in the central office and local partnerships is transforming the South Australian Department of Education and Child Development into an organisation that applies a delivery approach.

Timeline

The implementation timeline establishes how a state transitions to the Australian Curriculum. The implementation timeline can be organised by year, content area, cohort or pilot site. The leadership team within the state education agency will have

been involved in the endeavour of determining the implementation timeline by timing interdependencies across various streams of work, the flow of information and feedback to monitor progress, and capacity building that will be required to implement the Australian Curriculum. Articulation of an ambitious timeline is dependent on the state education agency having conducted a gap analysis between the old and new curriculum to identify new expectations and changes of content, identified personnel to lead particular components or stages of work, selected high-capacity schools to pilot efforts prior to state-wide implementation and determined when schools should assume responsibility, and established state, regional, school and classroom-level processes around implementation of instructional practices and professional development.

Table 6 presents the rating for each state and territory against the descriptors set out in the segments of the scale for 'timeline', outlined in Table 1. Of the eight Australian jurisdictions, one territory had an ambitious and realistic timeline that credibly prepares for implementation of aligned assessments. All of the remaining states and territories had vague or undefined timelines.

TABLE 6

SUMMARY OF RATINGS FOR STATES' TIMELINES

State	Rating
Australian Capital Territory	4
New South Wales	2
Northern Territory	2
Queensland	2
South Australia	2
Tasmania	2
Victoria	2
Western Australia	3
Key: 1 = A timeline has not been defined; 2 = The state education agency has articulated a timeline, but it is vague or undefined; 3 = The state education agency has articulated an ambitious, but realistic timeline that credibly prepares for implementation of aligned assessments; 4 = In addition to '3', the timeline defines key areas of work and milestones for each, which should enable tracking of implementation on a monthly or quarterly basis.	

The timeline released by the ACT Curriculum Advisory Group in 2016, which sequences implementation for each phase of the Australian Curriculum into four stages, is ambitious, since it prepares for implementation of aligned assessments and should enable tracking of implementation on a quarterly basis. The timeline released by NESA in 2017 for implementing the syllabuses for the Australian Curriculum is vague, since it only specifies the year in which implementation of each syllabus commences or continues. The timeline released by the Northern Territory Board of Studies in 2015 is vague, since it only specifies the year in which implementation of a subject commences. The timeline released by the Queensland Department of Education and Training for implementing the Core P-10 Australian Curriculum is undefined, since it allows each school to determine a timeline in consultation with its school community. The timeline released by the South Australian Department of Education and Child Development in 2013 is vague, since

it only specifies the year of implementation for each learning area. The timeline released by the Tasmanian Department of Education in 2016 is vague, since it only specifies the year of implementation for each learning area. The timeline released by VCAA for implementing the Victorian Curriculum is vague, since it only specifies that schools have one year to implement it. The timeline released by SCSA for implementing the Western Australian Curriculum is ambitious, since it prepares for implementation of aligned assessments.

Budget

Strategies to implement the Australian Curriculum are likely to be supported mainly by state and local funds, although supplemental funds from federal sources can provide support for states.

In April 2010, Julia Gillard, the Minister for Education, initiated a review to develop a funding system for schools, which is transparent, fair, financially sustainable and effective in promoting excellent outcomes for students. A six-member panel conducted a listening tour, produced an issues paper, invited public submissions, undertook school visits, and commissioned four research reports, which involved a separate submission process. In the report of the review, published by the Australian Government Department of Education, Employment and Workplace Relations (2011), the panel made 41 recommendations, but a needs-based approach to funding that provided a schooling resource standard with a base amount per student and loadings for disadvantage was the central concept.

In June 2013, the Australian Parliament enacted the Australian Education Act 2013 setting out the rights and responsibilities of approved authorities for schools, block grant authorities and non-government representative bodies to receive federal funding for schools. The Australian Education Act 2013 commenced in January 2014 and was amended in June 2017 to give effect to the Quality Schools package with changes to funding arrangements commencing in January 2018. Amended to take account of the Quality Schools package, the Australian Education Act 2013 will lead the Australian Government to increase funding for public schools to 20 per cent by 2027 and non-government schools to 80 per cent by 2027, all schools will move to consistent shares of the schooling resource standard within ten years, and state and territory governments will increase their share to public schools to at least 95 per cent of the schooling resource standard by 2023.

In July 2017, the Australian Government appointed an eight-member panel to conduct the Review to Achieve Educational Excellence in Australian Schools to examine evidence and make recommendations on how school funding should be used to improve school performance and student outcomes. In September 2017, the panel released an issues paper setting out five themes for the review: what students learn and how they learn; teachers and school leadership; parent and community engagement; determining and measuring success in education; and identifying, sharing and driving good practice and continuous improvement. A process for public submissions closed in November 2017, and the final report will be published in March 2018. In November 2017, the Australian Government appointed the National School Resourcing Board, consisting of eight education, finance and demography

experts, to review elements of the funding model under the Australian Education Act 2013. At its second meeting in November 2017, the board initiated a review of the socio-economic status score methodology to be completed by June 2018.

The first step in developing a budget is to determine what specific activities, services, supplies, materials and personnel costs need to be funded to implement the Australian Curriculum. The second step is to determine which funding streams might be available to support the identified costs. Once the most relevant funding sources are identified, the third step involves determining whether there are any fiscal restrictions that bar the proposed cost. The fourth step is to ensure that the proposed cost is consistent with any application, program plan or other planning tool that the state, region or school submitted to secure the funds.

Table 7 presents the rating for each state and territory against the descriptors set out in the segments of the scale for 'budget', outlined in Table 1. Policymakers in all eight state and territory jurisdictions may have made cost estimates for implementing the Australian Curriculum.

TABLE 7

SUMMARY OF RATINGS FOR STATES' BUDGET

State	Rating
Australian Capital Territory	1
New South Wales	1
Northern Territory	1
Queensland	1
South Australia	1
Tasmania	1
Victoria	1
Western Australia	1
Key: 1 = A cost estimate may have occurred, but little or no thinking has been done about how various state and federal funds will be used to provide sufficient funds; 2 = The state education agency has identified some relevant state and federal funds that can be used to fund implementation; 3 = The state education agency has identified most or all relevant state and federal funds that can be used to fund implementation; 4 = In addition to '3', the state education agency has built a comprehensive budget for implementation that allocates all costs to relevant funding sources and takes into account the restrictions on each.	

Content analysis of financial statements presented in annual reports of state education agencies and curriculum, assessment and certification boards failed to identify separate budgets for implementing the Australian Curriculum, indicating that little or no thinking has been done about how various state and federal funds will be used to provide sufficient funds.

Gap analysis

A gap analysis between a state's existing curriculum and the Australian Curriculum has clear implications for curriculum, instruction, assessment and professional

development of teachers. This activity is best coordinated at the state level and shared with all schools. State education agencies can conduct gap analyses independently using the following process. First, the curriculum needs to be read carefully to identify connections between the outcomes. While analysing the gap between the current and new outcomes, changing requirements in cognitive demand need to be identified. This task requires a deeper level of understanding, and could involve using Webb's Depth of Knowledge or Bloom's new verbs. The gap analysis should show which outcomes are new, which occur sooner and which occur later. The results of the gap analysis provide critical data to make decisions about resource allocation, instructional materials and professional development.

Table 8 presents the measurement for each state and territory against the descriptor set out in the rating scale for 'gap analysis', outlined in Table 1. Of the eight Australian jurisdictions, one state performed a detailed gap analysis that shows where new state outcomes were added and where existing state outcomes were augmented, moved or dropped, three states performed a gap analysis, and four states had made little effort to compare the state's outcomes to the Australian Curriculum.

TABLE 8

SUMMARY OF RATINGS FOR STATES' GAP ANALYSES

State	Rating
Australian Capital Territory	3
New South Wales	1
Northern Territory	2
Queensland	1
South Australia	1
Tasmania	2
Victoria	1
Western Australia	2
Key: 1 = Little effort has been made to compare the state's curriculum to the Australian Curriculum; 2 = The state education agency has performed a gap analysis; 3 = The state education agency has performed a detailed gap analysis that shows where new state outcomes were added and where existing state outcomes were augmented, moved or dropped; 4 = In addition to '3', the state education agency has used this analysis to identify high-priority subject areas or year spans according to the size of the gaps.	

Guiding coalition

Although the internal leadership team plays a key role in communicating the implementation plan to stakeholders, a guiding coalition of external stakeholders can help maintain public support for the reform effort. Sometimes this leadership can come from an individual, such as an education-minded politician or a highly respected official, but more often from a coalition of political, education and business leaders providing forceful advocacy for reform, thereby building sufficient public understanding and will to sustain support for the reform during implementation. The role of the guiding coalition is to remove bureaucratic barriers to change, exert

influence at key moments to support implementation and advise the internal leadership team.

Table 9 presents the measurement for each state and territory against the descriptor set out in the rating scale for 'guiding coalition', outlined in Table 1. Of the eight Australian jurisdictions, four states had an identified group of external stakeholders, but this group is limited in its scope or duration, and four states did not have deliberately identified groups of external stakeholders, which can drive change at each level.

TABLE 9

SUMMARY OF RATINGS FOR STATES' GUIDING COALITION

State	Rating
Australian Capital Territory	2
New South Wales	1
Northern Territory	2
Queensland	2
South Australia	1
Tasmania	1
Victoria	2
Western Australia	1
Key: 1 = There is no deliberately identified group of external stakeholders, which can drive change at each level; 2 = There is a deliberately identified group of external stakeholders, but this group is limited in its scope or duration; 3 = At least 7 to 10 change leaders from key backgrounds share a consistent understanding and are supportive of the aspiration and strategies for implementation; 4 = In addition to '3', the state education agency consistently consults and works with this group to guide implementation and communicate to the field.	

Analysis of groups of external stakeholders involved in state-level implementation of the Australian Curriculum shows that no states have maintained guiding coalitions of stakeholders. Representatives from education organisations have formed groups of stakeholders to guide implementation of the Australian Curriculum in the Australian Capital Territory, Northern Territory and Queensland. In the case of the Northern Territory and Queensland, these groups are no longer active. In Victoria, the Education State Board may perform activities consistent with a guiding coalition in driving change through the Education State initiatives.

Communications

Teachers, parents and community members need to understand the rationale for the Australian Curriculum, and the state's strategy for implementing the innovation and what it means for them. Development of an effective communications plan represents the best way to counter opposition to the innovation. The first step involves forming a communications team to promote and gain support for the innovation. Over time, a small team should be expanded to include policy and communications specialists, as well as school leaders. Initially, the communications team should communicate internally within the team by holding regular meetings,

scheduling conference calls, sending updates by a regular electronic newsletter and establishing an e-mail distribution list to ensure that team members are informed. Each member of the communications team should make use of existing networks and lines of communication to identify and communicate with stakeholder groups. The communications team should engage in a mapping exercise to identify critical stakeholders and a specific strategy for engagement, so that resources can be devoted to communicating with those groups with the most to contribute to the reform effort. The communications strategy should focus on developing three key messages: defining the issue; outlining the problem; and explaining the solution. These messages should be disseminated consistently at all times. In addition, to the key messages, critical information should be communicated to certain groups based on their roles in the implementation process. Engaging with educators, parents and policymakers should lead to the identification of ambassadors within key stakeholder groups. These individuals will serve as peer-to-peer messengers to support the reform by informing and training their constituents.

Table 10 presents the measurement for each state and territory against the descriptor set out in the rating scale for 'communications', outlined in Table 1. Of the eight Australian jurisdictions, four states have communications efforts that are frequent, coordinated and two-way, and four states have communications efforts that are sparse, uncoordinated and one-way.

TABLE 10

SUMMARY OF RATINGS FOR STATES' COMMUNICATIONS

State	Rating
Australian Capital Territory	1
New South Wales	2
Northern Territory	1
Queensland	2
South Australia	1
Tasmania	1
Victoria	2
Western Australia	2
Key: 1 = Communication efforts regarding the Australian Curriculum are sparse, uncoordinated and one-way; 2 = Communication efforts regarding the Australian Curriculum are frequent, coordinated and two-way; 3 = The state education agency has a clear communications plan for implementation that details the message and objective, audiences, modes of communication, frequency or timing of communication, and messengers; 4 = In addition to '3', the communications plan includes five-year strategies for on-going communications with all audiences to maintain support.	

Communications efforts undertaken by state education agencies and curriculum, assessment and certification boards regarding the Australian Curriculum have not extended to the creation of communication plans. New South Wales, Queensland, Victoria and Western Australia, the four most populous states, have maintained communications efforts that are frequent, coordinated and two-way, principally through the publication of regular electronic newsletters. In the cases of New South Wales, Victoria and Western Australia, each state's refinement of the Australian Curriculum to meet state needs is likely to have played a part in maintaining

communications efforts at a consistent level. On the other hand, there is evidence that less populous states and territories have curtailed communications efforts. State education agencies discontinued the publication of electronic newsletters in South Australia in 2015, and the Australian Capital Territory and Tasmania in 2014.

Align instructional practices

Strategies to achieve success

Placing curricula and instructional materials aligned to the Australian Curriculum in the hands of teachers represent an initial challenge in transitioning to the new curriculum. This action, which forms a key element within the full range of activities undertaken to implement the Australian Curriculum by aligning instructional practices, should precede intensive professional development.

The leadership team should establish a working group charged with developing strategies to align instructional materials to the Australian Curriculum. Initially, the working group needs to consider how instructional materials are developed, selected and used in the state at present. The analysis needs to take into account that the materials' marketplace involves a complex set of interactions between publishers' production and marketing strategies, committees' selection procedures, and consumers' patterns of use. The findings of this analysis will help identify where necessary changes will need to be made to inaugurate a balanced and coordinated set of activities that will credibly align instructional materials.

Placing aligned instructional materials in the hands of teachers may mean developing different strategies for high-, medium- and low-capacity schools. High-capacity schools, which are ahead of other schools in implementing new curricula, will seek clarity from the state education agency when policies in this area change, but are not likely to require further assistance. Medium-capacity schools selectively engage with the state education agency, when assistance is needed. Low-capacity schools, which have the greatest difficulty implementing new curricula, will require additional training and support from the state education agency.

Table 11 presents the measurement for each state and territory against the descriptor set out in the rating scale for 'strategies to achieve success', outlined in Table 2. Of the eight Australian jurisdictions, two states had identified and laid out a balanced and coordinated set of activities that are benchmarked against best practices both within and outside the state, five states had identified and laid out a balanced and coordinated set of activities, and one state had specific activities, but these activities are uncoordinated and siloed.

In the Australian Capital Territory, the activity of teachers developing and aligning units of work to the Australian Curriculum, and sharing the units of work with teachers in other schools, shows that the Directorate of Education has identified and laid out a balanced and coordinated set of activities. In New South Wales, the activity of state advisers developing and aligning materials across the key learning areas to the Australian Curriculum, and publishing the materials on the Department

TABLE 11

**SUMMARY OF RATINGS FOR STATES' STRATEGIES TO ACHIEVE
SUCCESS IN ALIGNING INSTRUCTIONAL MATERIALS**

State	Rating
Australian Capital Territory	3
New South Wales	3
Northern Territory	3
Queensland	4
South Australia	2
Tasmania	3
Victoria	3
Western Australia	4
Key: 1 = No specific activities have been identified; 2 = Specific activities have been identified, but activities are uncoordinated and siloed; 3 = The state education agency and external stakeholders have identified and laid out a balanced and coordinated set of activities; 4 = In addition to '3', activities are benchmarked against best practices both within and outside the state.	

of Education's website for local use and adaptation by teachers, shows that the Department of Education has identified and laid out a balanced and coordinated set of activities. In the Northern Territory, the activity of curriculum consultants and teachers developing and aligning materials to the Australian Curriculum, and publishing the materials on the Learning Links website for local use by teachers, shows that the Department of Education has identified and laid out a balanced and coordinated set of activities. In Queensland, the activity of curriculum consultants and teachers developing and aligning unit plans to the Australian Curriculum, and publishing the unit plans on OneSchool for local use and adaptation by teachers and on Scootle for use by teachers across Australia, shows that the Department of Education and Training has identified and laid out a balanced and coordinated set of activities, which are benchmarked against best practices both within and outside the state. In South Australia, the activities of curriculum consultants developing materials for literacy and numeracy were identified, but these activities were uncoordinated and siloed. In Tasmania, the activity of teachers developing and aligning materials for My Education to the Australian Curriculum, publishing the materials on the My Education website for local use by teachers and students, shows that the Department of Education has identified and laid out a balanced and coordinated set of activities. In Victoria, the activity of curriculum consultants and teachers aligning digital materials developed by various organisations to the Victorian Curriculum and publishing the materials on Find, Use, Share Education for local use by teachers, shows that the Department of Education and Training has identified and laid out a balanced and coordinated set of activities. In Western Australia, the activity of curriculum consultants and teachers aligning materials to the Western Australian Curriculum and publishing the materials on Connect for local use by teachers and on Scootle for use by teachers across Australia, shows that the Department of Education has identified and laid out a balanced and coordinated set of activities, which are benchmarked against best practices both within and outside the state.

Understanding how the strategies will be implemented through the field to the classroom

The working group needs to identify a delivery chain to disseminate new instructional materials to teachers and students. The delivery chain consists of a set of actors and interactions among them that allows for instructional materials to be disseminated to teachers and students.

Delivery chains can be formed in a number of ways. Determining the correct dissemination mechanisms for instructional materials may be affected by the extent of the state's legal authority to mandate the use of instructional materials, how the state interacts with high- or low-capacity schools, and the gap between the old and new curriculum. Where decision-making is centralised to the state level, the state education agency can affect schools' selection decisions and influence publishers to make necessary adjustments to their materials. Where decision-making is decentralised to the local level, school personnel need to focus on ensuring alignment in selection decisions.

Once the delivery chain has been determined, it is important to identify areas of potential weaknesses. Strengths and weaknesses in the personal relationships among key actors need to be determined. The ease or difficulty in coordinating the actors needs to be assessed. The sources and flow of funds and resources required to maintain the delivery chain need to be regulated. Mechanisms for monitoring the performance of the actors and identifying encumbrances need to be put in place, which ensure that desired changes occur in the delivery chain. Weaknesses identified in the delivery chain need to be addressed by strengthening relationships or redesigning the delivery chain by removing unnecessary actors or easing the pressure on overburdened actors.

Table 12 presents the measurement for each state and territory against the descriptor set out in the rating scale for 'understanding how the strategies will be implemented through the field to the classroom', outlined in Table 2. Of the eight Australian jurisdictions, one state had laid out a delivery chain that runs from the state through regions and local education agencies to schools and classrooms that consists of strong relationships that create a credible path to reach the field, one state had laid out a delivery chain that runs from the state through regions and local education agencies to schools and classrooms, five states had articulated a partial and incomplete delivery chain, and one state had not yet articulated how the reform strategy will reach the field.

In the Australian Capital Territory, strategies for sharing units of work is dependent upon initiatives taken by individual curriculum coordinators and teachers, indicating that the Directorate of Education has articulated a partial and incomplete delivery chain. In New South Wales, strategies for delivering materials for local use and adaptation is dependent upon initiatives taken by individual teachers to access the materials on the Department of Education's website, indicating that the Department of Education has articulated a partial and incomplete delivery chain. In the Northern Territory, strategies for delivering materials for local use is dependent upon initiatives taken by individual teachers to access the materials on the Learning Links website,

TABLE 12

SUMMARY OF RATINGS FOR STATES' UNDERSTANDING HOW THE STRATEGIES IN ALIGNING INSTRUCTIONAL MATERIALS WILL BE IMPLEMENTED THROUGH TO THE CLASSROOM

State	Rating
Australian Capital Territory	2
New South Wales	2
Northern Territory	2
Queensland	4
South Australia	1
Tasmania	2
Victoria	2
Western Australia	3
Key: 1 = The state education agency has not yet articulated how the reform strategy will reach the field; 2 = The state education agency has articulated a partial and incomplete delivery chain; 3 = For all relevant activities, the state education agency has explicitly laid out a delivery chain that runs from the state through regions and local education agencies to schools and classrooms; 4 = In addition to '3', the delivery chain consists of strong relationships that create a credible path to reach the field, or the state education agency has identified weaknesses in the chain and has a plan for addressing them.	

indicating that the Department of Education has articulated a partial and incomplete delivery chain. In Queensland, strategies for delivering unit plans for local use involves using advisers to provide professional development across the regions as well as teachers accessing the unit plans on OneSchool, indicating that the Department of Education and Training has explicitly laid out a delivery chain that runs from the state through the regions to schools and classrooms consisting of strong relationships that create a credible path to reach the field. In Tasmania, strategies for delivering materials for local use is dependent upon initiatives taken by individual teachers to access the materials on the Curriculum Support Centre, indicating that the Department of Education has articulated a partial and incomplete delivery chain. In Victoria, strategies for delivering digital materials for local use is dependent upon initiatives taken by individual teachers to access the materials on Find, Use, Share Education, indicating that the Department of Education and Training has articulated a partial and incomplete delivery chain. In Western Australia, strategies for delivering materials for local use is dependent upon initiatives taken by individual teachers to access the materials on Connect and sharing the materials through Connect Communities, indicating that the Department of Education has explicitly laid out a delivery chain that runs from the state through education regions to schools and classrooms.

Connecting strategies to expected outcomes

Once instructional materials are placed in the hands of teachers, the working group needs to ensure that teacher instruction actually changes. First, the working group needs to identify a clear timeline when planned activities occur. Tracking when

milestones or end products for an activity are met forms an important project management discipline.

Next, the working group needs to develop success measures to track alignment, user satisfaction and impact on student outcomes. Potential metrics for measuring teachers' use of instructional materials include self-reporting of usage by teachers or principals' observations of teachers' behaviours. A potential metric for measuring user satisfaction is a survey of teachers and principals. Potential metrics for impact on student outcomes include formative and summative assessments.

Developing success measures involves integrating several tasks. Determining how activities will result in real impact involves difficult conversations on this topic. New mechanisms for data collection may need to be designed. An example would be designing an online questionnaire to survey teachers' use of aligned instructional materials. Finally, targets need to be set by considering the overall impact on student outcomes of instructional materials and estimating the impact over time. The estimate of impact over time is a guideline to compare it to what actually happens and use the differential to drive any mid-course corrections. Revisiting prior decisions is essential, since activities, success metrics and impact over time are interdependent variables. As one is considered, it is sensible to revise and refine the other two until there is a balance that represents an ambitious but realistic plan.

Table 13 presents the measurement for each state and territory against the descriptor set out in the rating scale for 'connecting strategies to expected outcomes', outlined in Table 2. None of the eight Australian jurisdictions had identified metrics and targets for success, or the metrics and targets are not meaningfully connected to the overall aspiration.

TABLE 13

SUMMARY OF RATINGS FOR STATES' CONNECTING STRATEGIES TO EXPECTED OUTCOMES IN ALIGNING INSTRUCTIONAL MATERIALS

State	Rating
Australian Capital Territory	Not available
New South Wales	2
Northern Territory	Not available
Queensland	2
South Australia	1
Tasmania	Not available
Victoria	1
Western Australia	Not available
Key: 1 = Metrics and targets for success have not been identified or are not meaningfully connected to the overall aspiration; 2 = Initial work on setting metrics has been undertaken, or metrics do not define success; 3 = The state education agency has identified a range of metrics that define success and set annual targets for each metric; 4 = In addition to '3', the targets and metrics provide feedback on whether the aspiration is being achieved on time and whether the right steps are being taken to achieve it, and activities are sequenced to show how achieving implementation milestones will help the state education agency hit the outcome targets.	

It is impossible to determine whether metrics have been set by the Australian Capital Territory Directorate of Education, because sample units of work were not accessible for examination. Evidence that the New South Wales Department of Education has undertaken initial work on setting metrics is demonstrated by assessment tasks included in sample units for English, assessment strategies included in units for Science and suggested assessment activities included in units for Chinese. It is impossible to determine whether metrics have been set by the Northern Territory Department of Education, because materials housed on the Learning Links website were not accessible for examination. Evidence that the Queensland Department of Education and Training has undertaken initial work on setting metrics is demonstrated by assessment tasks included in each of the Curriculum into the Classroom unit plans across all the learning areas. It is impossible to determine whether metrics have been set by the Tasmanian Department of Education, because materials on the My Education website were not accessible for examination. The Victorian Department of Education and Training has derived materials on Find, Use, Share Education from various external organisations indicating that metrics and targets for success have not been identified or are not meaningfully connected to the overall aspiration. It is impossible to determine whether metrics have been set by the Western Australian Department of Education, because materials on Connect were not accessible for examination.

Train educators

Strategies to achieve success

The education system, in which professional development occurs, needs to be analysed to provide teachers with training to implement the Australian Curriculum. A well-designed professional development system allocates resources to the most important priorities in ways most likely to raise student achievement.

It begins with a concrete understanding of the available resources and the form of professional development most likely to improve student performance. It involves the working group identifying the state's student learning priorities and determining the exact level and content area to target support. The working group can employ two tools to identify these needs. First, the gap analysis can identify which year spans, content areas or curriculum strands need immediate attention. Second, carefully considering school capacity can help the state leverage the work of high-capacity schools as well as target additional resources to low-capacity schools.

The design of a professional development system requires differentiation between high- and low-capacity schools. High-capacity schools are most likely to already have successful professional development systems in place. In these cases, regional support structures and state-wide networks can share these professional development resources with other schools. Elsewhere, the state education agency may need to target professional development resources to low-capacity schools by contracting professional development providers.

The working group's task is to prioritise those activities most likely to help the state achieve its vision for training teachers. Initially, the working group needs to consider

how professional development is delivered at present. The analysis needs to take into account an indefinite number of professional development providers, estimate their current market share, and determine the extent to which they currently provide professional development that is congruent with the state's areas of focus and meets the state's expectation for professional development. The findings of this analysis will help identify where necessary changes will need to be made in defining options for providers, including the state itself, regional structures, schools and external providers. Ideally, a balanced portfolio of providers should be selected on the basis of past performance, potential for future performance, and ability to reach the field. A model for a professional development system that allows the state to regulate entry into, activity in, and exit from the marketplace of professional development provision should be depicted depending on the chosen players. For example, state-provided professional development can be regulated through direct management within the state education agency, while use of the contract and grant structure may be required to manage other players.

Table 14 presents the measurement for each state and territory against the descriptor set out in the rating scale for 'strategies to achieve success', outlined in Table 3. Of the eight Australian jurisdictions, two state and territory education agencies and external stakeholders had identified and laid out a balanced and coordinated set of activities that are benchmarked against best practices both within and outside the state or territory, and six states and territories and external stakeholders had identified and laid out a balanced and coordinated set of activities.

TABLE 14

SUMMARY OF RATINGS FOR STATES' STRATEGIES TO ACHIEVE SUCCESS IN TRAINING EDUCATORS

State	Rating
Australian Capital Territory	3
New South Wales	3
Northern Territory	4
Queensland	3
South Australia	3
Tasmania	3
Victoria	3
Western Australia	4
Key: 1 = No specific activities have been identified; 2 = Specific activities have been identified, but activities are uncoordinated and siloed; 3 = The state education agency and external stakeholders have identified and laid out a balanced and coordinated set of activities; 4 = In addition to '3', activities are benchmarked against best practices both within and outside the state.	

In the Australian Capital Territory, train-the-trainer coaching provided to curriculum coordinators and regular workshops provided to educators, shows that the Directorate of Education has identified and laid out a balanced and coordinated set of activities. In New South Wales, series of Syllabus Plus webinars, online professional learning courses and collections of professional learning resources, provided to educators, shows that the Department of Education has identified and laid out a balanced and coordinated set of activities. In the Northern Territory,

Visible Learning Plus professional development provided to school leaders and impact coaches, shows that the Department of Education has identified and laid out a balanced and coordinated set of activities, which are benchmarked against best practices within the territory. In Queensland, series of face-to-face sessions and online modules as well as several conferences, provided to educators, shows that the Department of Education and Training has identified and laid out a balanced and coordinated set of activities. In South Australia, professional development activities delivered by Australian Curriculum implementation teams as well as an online implementation resource, provided to educators, shows that the Department of Education and Child Development has identified and laid out a balanced and coordinated set of activities. In Tasmania, series of courses provided by the Professional Learning Institute to educators shows that the Department of Education has identified and laid out a balanced and coordinated set of activities. In Victoria, series of face-to-face sessions and online modules provided to educators, shows that the Department of Education and Training has identified and laid out a balanced and coordinated set of activities. In Western Australia, the use of teacher development schools and a train-the-trainer model to provide professional development courses to educators shows that the Department of Education has identified and laid out a balanced and coordinated set of activities, which are benchmarked against best practices within the state.

Understanding how the strategies will be implemented through the field to the classroom

The working group needs to identify a delivery chain to train teachers. The delivery chain consists of a set of actors and interactions among them that allows teachers to be trained to implement the Australian Curriculum.

Delivery chains may already exist and can be expanded by considering the avenues through which teachers participate in professional development. These avenues may be categorised into direct and indirect activities. The state education agency, regional organisations, schools and vendors may provide professional development directly to teachers. Electronic and virtual means, professional organisations, intermediary organisations and train-the-trainer models may provide professional development indirectly to teachers. The choice of a delivery chain may be influenced by the model for professional development. A state-led model has different implications for implementation from one in which best practices are identified and expanded through the marketplace.

Once the delivery chain has been determined, it is important to identify areas of potential weaknesses.   Strengths and weaknesses in the personal relationships among key actors need to be determined. The ease or difficulty in coordinating the actors needs to be assessed. The sources and flow of funds and resources required to maintain the delivery chain need to be regulated. Mechanisms for monitoring the performance of the actors and identifying encumbrances need to be put in place, which ensure that desired changes occur in the delivery chain. Weaknesses identified in the delivery chain need to be addressed by strengthening relationships or redesigning the delivery chain by removing unnecessary actors or easing the pressure on overburdened actors.

Table 15 presents the measurement for each state and territory against the descriptor set out in the rating scale for 'understanding how the strategies will be implemented through the field to the classroom', outlined in Table 3. All states and territories had laid out a delivery chain that runs from the state through regions and local education agencies to schools and classrooms.

TABLE 15

SUMMARY OF RATINGS FOR STATES' UNDERSTANDING HOW THE STRATEGIES IN TRAINING EDUCATORS WILL BE IMPLEMENTED THROUGH TO THE CLASSROOM

State	Rating
Australian Capital Territory	3
New South Wales	3
Northern Territory	3
Queensland	3
South Australia	3
Tasmania	3
Victoria	3
Western Australia	3
Key: 1 = The state education agency has not yet articulated how the reform strategy will reach the field; 2 = The state education agency has articulated a partial and incomplete delivery chain; 3 = For all relevant activities, the state education agency has explicitly laid out a delivery chain that runs from the state through regions and local education agencies to schools and classrooms; 4 = In addition to '3', the delivery chain consists of strong relationships that create a credible path to reach the field, or the state education agency has identified weaknesses in the chain and has a plan for addressing them.	

In the Australian Capital Territory, strategies for training educators use a train-the-trainer model and regular workshops, indicating that the Directorate of Education has explicitly laid out a delivery chain that runs from the territory to schools and classrooms. In New South Wales, strategies for training educators use electronic and virtual means, indicating that the Department of Education has explicitly laid out a delivery chain that runs from the state through operational directorates and principal networks to schools and classrooms. In the Northern Territory, strategies for training educators use a train-the-trainer model, indicating that the Department of Education has explicitly laid out a delivery chain that runs from the territory through regions to schools and classrooms. In Queensland, strategies for training educators use electronic and face-to-face means as well as an intermediary organisation, indicating that QCAA and the Department of Education have explicitly laid out a delivery chain that runs from the state through regions to schools and classrooms. In South Australia, strategies for training educators use a train-the-trainer model as well as electronic and virtual means, indicating that the Department of Education and Child Development has explicitly laid out a delivery chain that runs from the state through local partnerships to schools and classrooms. In Tasmania, strategies for training educators use an intermediary organisation, indicating that the Department of Education has explicitly laid out a delivery chain that runs from the state through learning service areas to schools and classrooms. In Victoria, strategies for training

educators use electronic and face-to-face means as well as an intermediary organisation, indicating that VCAA and the Department of Education and Training have explicitly laid out a delivery chain that runs from the state through regions and areas to schools and classrooms. In Western Australia, strategies for training educators use a train-the-trainer model, electronic and virtual means as well as an intermediary organisation, indicating that the Department of Education has explicitly laid out a delivery chain that runs from the state through education regions to schools and classrooms.

Connecting strategies to expected outcomes

Implementation planning ends once planned professional development activities have begun, but the working group needs to ensure that teacher instruction actually changes. First, the working group needs to identify a clear timeline when planned activities occur. Tracking when milestones or end products for an activity are met forms an important project management discipline.

Next, the working group needs to develop success measures to track alignment, user satisfaction, classroom practice and impact on student outcomes. Potential metrics for measuring alignment include the number of providers that offer aligned professional development or the number of participants in professional development activities offered by an aligned provider. A potential metric for measuring user satisfaction is a survey of teachers and principals. A potential metric for measuring classroom practice includes self-reporting of changed practice by teachers, who participate in aligned professional development. Potential metrics for impact on student outcomes include formative and summative assessments.

Developing success measures involves integrating several tasks. Determining how activities will result in real impact involves difficult conversations on this topic. New mechanisms for data collection may need to be designed. Some examples include requiring professional development providers to submit data on participation to the state education agency, conducting audits of professional development providers to check fidelity, or developing an online survey to register participant satisfaction. Finally, targets need to be set by considering the overall impact on student outcomes of professional development and estimating the impact over time. The estimate of impact over time is a guideline to compare it to what actually happens and use the differential to drive any mid-course corrections. Revisiting prior decisions is essential, since activities, success metrics and impact over time are interdependent variables. As one is considered, it is sensible to revise and refine the other two until there is a balance that represents an ambitious but realistic plan.

Table 16 presents the measurement for each state and territory against the descriptor set out in the rating scale for 'connecting strategies to expected outcomes', outlined in Table 3. Of the eight Australian jurisdictions, two states have identified a range of metrics that define success and set annual targets for each metric, one state has undertaken initial work on setting metrics, and three states and territories have not identified metrics and targets for success or metrics and targets are not meaningfully connected to the overall aspiration.

TABLE 16

SUMMARY OF RATINGS FOR STATES' CONNECTING STRATEGIES TO EXPECTED OUTCOMES IN TRAINING EDUCATORS

State	Rating
Australian Capital Territory	1
New South Wales	3
Northern Territory	Not available
Queensland	3
South Australia	2
Tasmania	1
Victoria	Not available
Western Australia	1
Key: 1 = Metrics and targets for success have not been identified or are not meaningfully connected to the overall aspiration; 2 = Initial work on setting metrics has been undertaken, or metrics do not define success; 3 = The state education agency has identified a range of metrics that define success and set annual targets for each metric; 4 = In addition to '3', the targets and metrics provide feedback on whether the aspiration is being achieved on time and whether the right steps are being taken to achieve it, and activities are sequenced to show how achieving implementation milestones will help the state education agency hit the outcome targets.	

In the Australian Capital Territory, no system of measures has been designed for tracking professional development outcomes. In New South Wales, a performance and development process involves each teacher developing professional goals, implementing strategies to achieve the goals, conducting a mid-year self-assessment, and participating in an end-of-year formal review and feedback, which indicates that the Department of Education has identified a range of metrics that define success and set annual targets for each metric. In the Northern Territory, it is impossible to determine whether metrics have been set, because information about professional learning is accessible only to personnel on the Department of Education's intranet. In Queensland, an annual performance review, introduced in 2015, involves each teacher developing a plan, setting goals and indicators of success, undertaking professional learning that integrates evidence of effectiveness, and receiving feedback and participating in a formal review, which indicates that the Department of Education and Training has identified a range of metrics that define success and set annual targets for each metric. In South Australia, Teaching for Impact, being introduced in a phased approach from 2016, incorporates five priority areas including professional learning, which indicates that initial work on setting metrics is being undertaken. In Tasmania, no system of measures has been designed for tracking professional development outcomes. In Victoria, it is impossible to determine whether metrics have been set, because guidelines, templates and tools to assist educators through performance assessment are accessible only to personnel on the Department of Education and Training's website. In Western Australia, no system of measures has been designed for tracking professional development outcomes.

Conclusion

Organise to implement

The preliminary phase, 'Organise to implement', sets out a process for a state or territory to organise implementation based on seven building blocks: aspiration; internal leadership team; timeline; budget; gap analysis; guiding coalition; and communications.

Analysis of the profiles identified key attributes of each building block that led to the following conclusions. Statements of aspiration, describing the impact of the Australian Curriculum on student learning, were usually only implied in information found on the websites of state education agencies and curriculum, assessment and certification boards. Typically, internal leadership teams were found within the curriculum units of state education agencies and curriculum, assessment and certification boards, but also included representatives from other divisions and involved external stakeholders to varying degrees. Those states and territories with the most detailed timelines were more able to revise, edit and expand their timelines to incorporate an increasing number of activities that they engaged in to implement the Australian Curriculum. The failure of state education agencies to provide cost estimates for implementing the Australian Curriculum indicates that little consideration and planning had been undertaken into calculating budgets. The failure of national organisations, involved in national curriculum collaboration, to provide a comparison tool affected the quality of gap analyses produced by states and territories. The failure of states and territories to establish guiding coalitions arises from a lack of advocacy by policymakers. The failure of states and territories to develop communication plans can probably be attributed to the lack of organised public opposition to the Australian Curriculum.

Align instructional practices

Implementation Action I, 'Align instructional practices to the Australian Curriculum', sets out a process for a state or territory to disseminate aligned instructional materials to teachers by undertaking three critical actions: identify strategies to achieve success; understand how the strategies will be implemented through the field to the classroom; and connect strategies to expected outcomes.

Analysis of the profiles identified key attributes referring to the critical actions in relation to aligning instructional materials that led to the following conclusions. Authority and responsibility for procuring, selecting and using instructional materials in all states and territories, which rest with individual schools, affect mechanisms for disseminating instructional materials. The materials' marketplace is dominated by a small number of foreign companies, but small publishing companies play an important role as niche publishers. The adequate supply of materials is dependent on whether individual schools use book-list, book-hire or class-set systems as a basis for procuring new materials. Selection procedures are decentralised, highly differentiated, unsystematic and dependent on demographic characteristics affecting individual schools. Teachers depend in their instructional practice on using teacher-developed resources derived from photocopying print-based materials. Typically, state and territory education agencies provide relatively few resources to assist teachers align instructional materials to the Australian Curriculum. The specification of guidelines or rubrics to select materials, the publication of lists of materials, and

the provision of searchable databases of materials are the most frequently available resources provided to assist teachers select aligned materials.

Train educators

Implementation Action II, 'Train educators on the Australian Curriculum and related assessments', sets out a process for a state or territory to support high-quality or promising providers train teachers and monitor teachers' participation in professional development by undertaking three critical actions: identify strategies to achieve success; understand how the strategies will be implemented through the field to the classroom; and connect strategies to expected outcomes.

Analysis of the profiles identified key attributes referring to the critical actions in relation to training educators that led to the following conclusions. The findings show that the delivery plans that states and territories use to train teachers are complex. Professional development is provided directly to teachers by state and territory education agencies or curriculum, assessment and certification boards, regional structures and vendors, or indirectly by electronic means, professional associations, intermediary organisations or train-the-trainer models. States' and territories' delivery plans usually employ a combination of these means, although one means often predominates. State or territory education agencies were the principal providers of training in the Australian Capital Territory, New South Wales, the Northern Territory, South Australia, Tasmania and Western Australia. State curriculum, assessment and certification boards were the principal providers of training in Queensland and Victoria.

CHAPTER 5

CONCLUSION

The purpose of this chapter is to discuss the implications of the findings of the study in relation to each of the objectives. The first objective was to trace and analyse the requirements of decision-making involved in the development of the Australian Curriculum, the review of the Australian Curriculum, and monitoring and evaluation of the Australian Curriculum on its implementation by states and territories. The second objective was to trace and analyse the process undertaken by each state and territory to implement the Australian Curriculum within the context of its educational reform policy, and its administrative and supervisory structure. The third objective was to rate the capacity of each state and territory to implement the Australian Curriculum in terms of its delivery approach. The fourth objective was to identify evidence that a delivery approach is practised within the education system of each state and territory.

Requirements of decision-making

The results of the study showed that planning, structuring and implementing decisions made during the change process were effective in producing a national curriculum that satisfied the expectations of most stakeholders, since recycling decisions during the review of the Australian Curriculum produced only minor adjustments. Awareness about increasing diversity of state and territory curricula led policymakers to determine that a common curriculum offered a solution to this problem. The setting for decision-making in attaining this solution involved attempting a large change supported by a low understanding of how to accomplish the change. This setting required MCEETYA to design an action plan for programming the segments of research, development, diffusion and adoption of the Australian Curriculum. Several organisations collaborated on implementing decisions to utilise, control and refine procedures for carrying out the action plan to create the Australian Curriculum. The Australian Government Department of Education, Employment and Workplace Relations gained an important role in overseeing development and review of the Australian Curriculum, and funding resources to support implementation of the Australian Curriculum. ACARA was responsible for developing the Australian Curriculum, monitoring its implementation, aligning the National Assessment Program to the Australian Curriculum, and maintaining a data collection and reporting program. Education Services Australia played a key role in managing resources to support implementation of the Australian Curriculum.

However, the policy setting in which the innovation was implemented depended on legislative regulations rather than incentives based on competitive grants to support adoption and implementation. The Australian Parliament passed the Australian Curriculum, Assessment and Reporting Act 2008 providing the basis for ACARA's mission to develop and monitor the Australian Curriculum, administer national assessments, analyse student achievement data, facilitate information sharing of school data, publish information relating to school education, provide school

curriculum resource and educational research services, and provide advice to teachers. Later, the Australian Parliament passed the Australian Education Act 2013 to provide equitable funding of schools as a basis for raising student achievement. The Australian Education Act 2013 requires approved authorities receiving federal funding to certify that their schools implement the Australian Curriculum or a curriculum that is recognised by ACARA. Approved authorities are required to implement the Australian Curriculum for particular learning areas according to implementation deadlines agreed by the Education Council.

Research into issues and problems associated with implementation of the Australian Curriculum is an important factor for improving practice and advancing theory. The monitoring studies, conducted by ACARA into the implementation of the Australian Curriculum, have focused on issues relating to ACARA's products and services, rather than various aspects of the implementation of the Australian Curriculum by the states and territories. The monitoring studies only touch on key issues concerned with implementation, such timelines, cost estimates, gap analyses and communications. The findings of the monitoring studies fail to show that implementation of the Australian Curriculum is a multi-faceted enterprise affected by many challenges.

The failure of policymakers to sponsor education organisations or university-based institutes to conduct research into the implementation of the Australian Curriculum means that little is known and understood about decision-making involved in this enterprise. To some extent, independent researchers are addressing this shortcoming by showing an increasing interest in investigating various issues relating to the implementation of the Australian Curriculum that affect transactions occurring between educators in schools, and teachers and students in classrooms.

Implementation process

The results of the study showed that each state and territory engaged with stakeholders on various innovations to align instructional practices and train educators in relation to the implementation of the Australian Curriculum. Innovative activities, which involved inventing, testing and diffusing new solutions to significant problems, were more commonly encountered in the most populous states. In New South Wales, Victoria and Western Australia, state policymakers and education officials engaged in further review and consultation with stakeholders to refine the Australian Curriculum to meet state needs. The process of revision in these states led to the design of novel activities to align instructional practices and train educators.

Activities, undertaken by states and territories to align instructional practices to the Australian Curriculum, showed considerable variation. English Textual Concepts, the Numeracy Skills Framework and the Literacy and Numeracy Strategy were influential for implementing the syllabuses for the Australian Curriculum in New South Wales. STEM education involving the construction of tech schools, and the Literacy and Numeracy Strategy characterised key developments influencing implementation of the Victorian Curriculum. A STEM strategy was designed in Western Australia to support implementation of the Western Australian Curriculum.

Curriculum into the Classroom units form the principal strategy for implementing the Australian Curriculum in Queensland. In South Australia, existing educational programs were redesigned to form the Primary Australian Curriculum Strategy, but the Numeracy and Literacy Strategy, STEM Strategy and Languages Strategy have been initiated recently. In Tasmania, the Literacy and Numeracy Strategy was influential in the implementation of the Australian Curriculum, but My Education has been initiated recently. In the Australian Capital Territory, the prevailing practice of school-based curriculum development has underpinned implementation of the Australian Curriculum. In the Northern Territory, Literacy and Numeracy Essentials and policies supporting the teaching of Asian and Aboriginal languages have become influential for implementing the Australian Curriculum.

Activities, undertaken by states and territories to train educators to implement the Australian Curriculum, showed considerable variation. In New South Wales, professional development in the form of Syllabus Plus webinars, professional learning courses and professional learning resources were delivered indirectly by electronic means. In Victoria, professional development, focusing on the structure of AusVELS and the Victorian Curriculum, were delivered initially by face-to-face sessions, but later by online professional learning sessions and on demand sessions. In Western Australia, teacher development schools were established to provide professional development to teachers across the state. In Queensland, professional development, focusing on implementation in particular learning areas, is delivered by face-to-face and online sessions. Three conferences, held at intervals, were important events providing professional development to large numbers of Queensland educators. In South Australia, the Australian Curriculum implementation teams formed the initial means for delivering professional development to teachers, but later online resources and professional learning communities became more important means for providing teachers with professional development. In Tasmania, the Professional Learning Institute delivers professional development to teachers in the form of face-to-face sessions. In the Australian Capital Territory, professional development is delivered through a combination of face-to-face sessions and a train-the-trainer model. In the Northern Territory, training materials were used initially to provide professional development to teachers, but the adoption of Visible Learning Plus means that school leaders and impact coaches provide professional development to teachers in their schools.

Educational reform policies, initiated by state-level policymakers, appear to be influential in shaping implementation of the Australian Curriculum in several states. Victoria's Education State agenda represents the most far-reaching effort at systemic reform, since it aims to restructure the education system by establishing Learning Places, form networks through Communities of Practice, and improve professional practice through professional learning communities. A more fragmented approach to educational reform has been taken in New South Wales through a range of initiatives aimed at improving teacher quality, local decision-making, outcomes for rural and remote communities, outcomes for Aboriginal students, school improvement, and school climate. Queensland's Advancing Education agenda represents an ambitious effort to reform early childhood education, STEM education, increase participation in languages education, improve transition from school to further education, improve literacy, invest in resourcing schools, increase partnerships between different levels of education, and improve

teacher quality. Small-scale educational reforms focusing on specific initiatives are being undertaken in other states and territories. In Tasmania, reform is focusing of extending high schools to cater for years 11 and 12, and developing a year 9 to 12 curriculum. In the Northern Territory, reform is focusing on initiatives to improve Indigenous education.

Capacity for delivery

The plans for delivering instructional practices aligned to the Australian Curriculum showed some variation across the eight states and territories. The stronger delivery plans established in Queensland and Western Australia, when rated against the first two critical questions, can be attributed to specific strategies initiated in these two states. In Queensland, the Department of Education and Training uses OneSchool, an instructional improvement system developed in partnership with companies providing specialist information and communications technology services to deliver Curriculum into the Classroom units to regions, schools and classrooms across the state. In Western Australia, the Department of Education uses Connect, an instructional improvement system to deliver materials to education regions, schools and classrooms across the state. Other states and territories have identified and laid out balanced and coordinated sets of activities to deliver instructional practices to regions, schools and classrooms, but the delivery chains are partial or incomplete. It was more difficult to identify the extent to which metrics and targets for success have been set by state and territory education agencies to connect strategies to expected outcomes.

The plans for delivering training to educators on the Australian Curriculum showed little variation across the eight states and territories. All of the states and territories had established strong delivery plans, when rated against the first two critical questions with strategies to achieve success, established in the Northern Territory and Western Australia, benchmarked against best practices within and outside the state or territory. In the Northern Territory, the Department of Education adopted Visible Learning Plus, an international professional development program delivered to more than 20 countries by a team of international partners. In Western Australia, the Department of Education pioneered the concept of teacher development schools, which share high-level curriculum expertise and innovation across schools, networks and professional learning communities. The findings of the study show that the delivery plans that states use to train teachers are complex. Professional development is provided directly to teachers by a range of organisations using face-to-face sessions and train-the-trainer models, or indirectly by electronic means. The introduction of teacher accreditation in New South Wales, requiring teachers to participate in a performance and development process, and in Queensland, requiring teachers to participate in an annual performance review, has led to the specification of metrics and targets connecting strategies to expected outcomes.

Delivery approach

In August 2017, the researcher lodged an inquiry with Delivery Associates based in London in order to identify whether the principles of systematic delivery have

influenced policymakers in Australia. Founded by Michael Barber in 2014, Delivery Associates assists governments to implement large-scale reforms using the science of delivery in the areas of education, health, economic development, infrastructure and other areas of government. The outcome of the inquiry identified that Delivery Associates had worked in New South Wales and Michael Barber had presented a lecture on the use of data in education at the State Library of Victoria in Melbourne in May 2015. No evidence, however, was identified that Delivery Associates had promoted systematic delivery approaches to policymakers in Australia.

In spite of this finding, it is apparent that some state education agencies have decentralised decision-making by creating new structures at the local level. These structures include 64 principal networks established in New South Wales in 2015, 60 local partnerships established in South Australia in 2014 supported by 20 local education teams formed in 2016, 17 areas established in Victoria in 2016, and 75 school networks established in Western Australia in 2011. The formation of local education agencies, in addition to existing regional structures, is conducive to the formation of delivery chains consisting of actors, whose role focuses on implementing a strategy through the most direct line of influence. Although an emphasis on service delivery underpins this movement to decentralise decision-making to the local level, it is difficult to find evidence of its practice. The study that PDT Consultancy conducted for the Western Australian Department of Education to evaluate practices that school networks and teacher development schools engage in to share expertise forms the only study that provides evidence about the effectiveness of such practices.

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