

**From National Curriculum Collaboration to National
Consistency in Curriculum Outcomes: Does this Shift
Reflect a Transition in Curriculum Reform in Australia?**

Michael G. Watt

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Biographical note

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From National Curriculum Collaboration to National Consistency in Curriculum Outcomes: Does this Shift Reflect a Transition in Curriculum Reform in Australia?

Abstract

The purpose of this study was to review national and state level initiatives in curriculum reform to identify whether the move towards greater national consistency in curriculum outcomes confirms the dominance of outcomes-based education or reflects a shift from outcomes-based to standards-based education. Policy documents were examined, and the content of curriculum documents developed at both the national and state levels in Australia was analysed to identify whether the philosophical and theoretical bases of curriculum reforms derived from outcomes-based or standards-based education. The results indicated that the principles underpinning the national statements and profiles, which were published in 1994, derived initially from the national curriculum being developed at that time for England and Wales, although outcomes-based education increased in its influence. However, outcomes-based education became the predominant educational philosophy underpinning the curriculum frameworks and syllabuses developed by the states and territories from the national statements and profiles. The development of statements of learning, commenced in 2003, represented an attempt to circumscribe the increasing diversity among state and territory curriculums, but also gave greater acknowledgment and recognition to the principles of standards-based education. The results showed that whilst curriculum developers are giving greater attention to setting clear and measurable outcomes in curriculum documents, the lack of a strong tradition of independent evaluation of these documents makes it difficult to judge their quality. As well as recommending the need for independent evaluations of curriculum documents, policymakers and curriculum developers need to consider alternative approaches to curriculum planning to ameliorate divisive debates. The document includes two tables, a bibliography and a glossary.

From National Curriculum Collaboration to National Consistency in Curriculum Outcomes: Does this Shift Reflect a Transition in Curriculum Reform in Australia?

A common antecedent influenced standards-based education in the USA and national curriculum collaboration in Australia. The principles of outcomes-based education provided a foundation for both the standards movement in the USA and national curriculum collaboration in Australia, although subsequent events led to the role of outcomes-based education becoming significantly different in the two countries. The ascendancy of standards-based education in the USA posed a critical challenge for state-level policymakers in translating the national standards into state standards, developing curriculums around clearly defined sets of expectations, and assessment systems that measure whether students are meeting these expectations. Similarly, the incorporation of the outcomes-based principles embodied in the national statements and profiles represented a critical challenge for state-level policymakers in developing curriculums for the states and territories in Australia.

The key principle of outcomes-based education of identifying outcomes, and then constructing a curriculum to achieve them, formed the process in initial standards-setting exercises in some states in the USA in the early 1990s. Attacks by conservative Christian groups over the emphasis of outcomes-based education on the teaching of values, the presentation of radical social, political and economic values, the promotion of a whole language approach in reading, and multicultural education stifled these reforms. However, a multiplicity of trends in American education had concurred by this time leading conservatives and liberals to forge a consensus about focusing on what students should learn. From this consensus, the definition of national standards based on academic disciplines issued from the six National Education Goals expounded following the Charlottesville Education Summit convened by President George H. W. Bush in September 1989 (Vinovskis, 1999). Policymakers set nationally recognised groups in key disciplines the task of developing national standards consisting of content, performance and opportunity-to-learn standards (National Education Goals Panel, 1993). This shift in standards-setting, delineated by Ravitch (1995) as constituting the setting of clear and measurable content standards, focusing content standards on cognitive learning, and basing content standards on traditional academic disciplines set the standards movement apart from outcomes-based education. In contrast, outcomes set in outcomes-based education are often so vague as to be inherently unmeasurable, frequently cover affective or psychomotor behaviours, and are usually organised around interdisciplinary or non-disciplinary topics. As a consequence, the ascendancy of standards-based education in the USA relegated outcomes-based education to a marginal position in curriculum reform (Spady, 1998).

The Goals 2000: Educate America Act, passed by the Clinton Administration in March 1994, required state education agencies to use the national standards as blueprints to develop and align state standards to state assessment systems. From July 1994, state education agencies applied to the United States Department of Education for Goals 2000 grants under Title III to develop and implement comprehensive education improvement plans, which included

establishing challenging state standards. Each state education agency was required to appoint a broadly representative panel to develop state improvement plans in consultation with the state governor and the chief state school officer. The Improving America's School Act, passed by the Clinton Administration in October 1994, required each state to develop state content and performance standards for mathematics and reading by the 1997-1998 school year and assessments by the 2000-2001 school year appropriate for all students. Enactment in December 2001 of the No Child Left Behind Act by President George W. Bush led to new regulations being issued in November 2002. These regulations required each state to measure students' progress in reading and mathematics in each of years 3 to 8, and at least once during years 10 to 12 by the 2005-2006 school year. By the 2007-2008 school year, states must also administer assessments in science at least once each in years 3 to 5, 6 to 9, and 10 to 12. At the beginning of 2003, each state was required to establish a definition of adequate yearly progress, based on a set of 10 criteria, to use each year to determine the achievement of each school district and school. In defining adequate yearly progress, each state sets the minimum levels of improvement that school districts and schools must achieve within time frames specified in the No Child Left Behind Act. Each state begins by setting a starting point that is based on the performance of its lowest achieving demographic group or the lowest achieving schools. The state then sets the level of student achievement that a school must attain in order to make adequate yearly progress. Subsequent thresholds must increase at least once every three years until at the end of 12 years, all students in the state are achieving at the proficient level in state assessments for reading language arts and mathematics.

The adoption of corporate management approaches by education systems in Australia led to the incorporation of outcomes-based education as a significant assumption underlying national curriculum collaboration in the 1980s. Policymakers viewed outcomes-based education to be compatible with the drive for economic reform, because it promised the delivery of measurable outcomes. Outcomes-based education gained a pre-eminent position in Australia because it represented the most recent form of behaviourist theory. The principles of programmed learning and mastery learning introduced into Australian education in the 1960s and 1970s provided a foundation for the acceptance by education officials of outcomes-based education in the 1990s. Its widespread acceptance was fostered by a consortium of national and state organisations sponsoring a visit to Australia by a leading advocate of outcomes-based education, William Spady, who conducted a series of workshops in Canberra, Sydney, Melbourne and Brisbane in September 1992 (Spady, 1993).

The ascendancy gained by outcomes-based education within the education community found serious detractors only among mathematics educators. In a critique of the process of national curriculum collaboration, Ellerton and Clements (1994) contended that the incorporation of an outcomes-based approach in the Mathematics profile led to an instrument that was deficient in measuring student progress. This conclusion led a group of mathematicians at the University of Melbourne to lobby the Victorian Minister for Education to form a committee in May 1993 to review the Mathematics profile. However, the Australian Education Council thwarted this move in July 1993 by referring the

national statements and profiles to the states and territories for adoption. Following their referral, each state and territory engaged in consultations within its own education community to reach a decision about whether to align its curriculum to the national statements and profiles or to implement the national statements and profiles. Initially most of the smaller states and territories implemented the national statements and profiles, but by 2003 all of the states and territories had developed curriculums derived from the national statements and profiles.

The Forum on National Statements and Profiles in Australian Schools, held in Sydney during October 1996, stimulated the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) to review the Common and Agreed National Goals for Schooling in Australia. Accomplished over a two-year period commencing in March 1997, the review led MCEETYA to adopt the National Goals for Schooling in the Twenty-First Century in April 1999. Their release in the Adelaide Declaration on Schooling focused MCEETYA's attention onto conceiving measures to ensure that education systems and schools met the National Goals. The appointment of Dr Brendan Nelson as the Australian Government Minister for Education, Science and Training in November 2001 shifted the national education agenda more firmly towards establishing greater national consistency between education systems. This shift was reflected in the presentation of the Schools Assistance (Learning Together – Achievement through Choice and Opportunity) Bill to the Australian Parliament in June 2004, and the Plan for Higher Standards and Values in Schools, the Liberal and National parties' policy for the federal election held in October 2004. Commencement of the Schools Assistance (Learning Together – Achievement through Choice and Opportunity) Act in 2005 changed the structure of Commonwealth funding for schools, and introduced a set of 11 requirements related to the Australian Government's national priorities for education that education agencies must meet to obtain funds for schools.

The purpose of this paper is to examine the influence of both outcomes-based and standards-based education on curriculum reforms in Australia. This topic is considered within the grounding of Australian curriculum reforms in the philosophical and theoretical bases of outcomes-based education. The intent is to compare developments in Australia with those in the USA to assess whether the move towards greater national consistency in curriculum outcomes confirms the dominance of outcomes-based education or reflects a shift from outcomes-based to standards-based education. The importance of this paper lies in providing current information on a topic that is gaining increasing interest and importance for curriculum reform in Australia. By gaining a deeper understanding of the elements and influence of both outcomes-based and standards-based education on curriculum reforms in Australia, policymakers and curriculum developers are more likely to be able to assess the ramifications of applying these models within the Australian context.

Methodology

Information from two types of documents, used to prepare this paper, was collected and analysed over a fifteen-year period from 1990 to 2005. Reports and policy documents obtained from federal, state and territory education

agencies and state and territory accreditation boards provided a valuable source for information on the historical backgrounds and policy directions of curriculum reforms. Curriculum frameworks and syllabuses obtained from state and territory education agencies and accreditation boards outlined the structure and organisation of curriculums and standards. These documents, and current information on curriculum reforms, were also accessed on the web sites of these agencies and boards, as well as other education organisations listed on the portal, Education Network Australia.

The contents of these documents were analysed. The reports and policy documents on curriculum reforms were examined to determine the historical contexts of national and state education reforms. The curriculum frameworks and syllabuses were analysed from two perspectives. First, the components were examined to identify the purpose of each document, the scope and sequencing of the content, activities and resources involved in using the document, and the sources of references in bibliographies. Second, the types of outcomes listed in each document were classified according to particular categories defined in the glossary. Analysis involved reading all relevant documents and preparing draft summaries, which were then organised chronologically, and incorporated into a commentary on curriculum reforms.

The accuracy of information obtained from these documents and secondary sources was verified through personal correspondence with officials of education agencies and accreditation boards. Once draft summaries had been prepared, they were referred to particular officials for review and comment. The draft summaries were then revised on the basis of responses before being incorporated into the commentary on curriculum reforms.

From National Curriculum Collaboration to National Consistency

National Statements and Profiles

The development of the national statements and profiles between 1986 and 1993 was based on the assumptions and goals driving the broader agenda for education reform in Australia during the 1980s. Interpretations of policy-making involved in national curriculum collaboration during this period have contrasted the doctrine of corporate federalism with the states' rights position adopted by the states and territories (Bartlett, 1992; Bartlett et al., 1994; Lingard et al., 1995). In concluding that the federal Labor Government initiated economic reform in the 1980s through corporate federalism, these commentators argued that management of curriculum development by the Australian Education Council took the form of corporate managerialism. This was evident in four underlying concepts. Curriculum was viewed in a product-like format. Instrumentalism was apparent in the autocratic relationships between participating groups and in consultations. Integration was seen in the drive towards uniformity and consistency in the eight learning areas and procedures for curriculum development. Purposive action was seen in the private sector style relationships within the Curriculum Corporation.

Key features of the national statements and profiles are outlined in Table 1. The column reporting on 'type of standards' presents the findings of the content

analysis of outcomes in these documents. A similar format consisting of three parts was applied in the national statements across the eight learning areas. The first part presents a rationale statement for the learning area. The second part describes the knowledge, skills and processes for the strands of the learning area. The third part presents a sequence of learning activities for developing knowledge and skills across four bands. The analysis showed that the learning activities are generally expressed as curriculum standards, although those for Mathematics and Studies of Society and Environment contain a mixture of curriculum and content standards. A similar format was applied to the national profiles across the eight learning areas. Each national profile organises outcomes and pointers for each strand into eight levels. The analysis showed that content standards are expressed as benchmarks with performance indicators, which are not grade-related.

Statements of Learning

Issues raised by representatives of subject associations and other education organisations prompted Minister Nelson to write to state and territory ministers expressing concern about the variations in the structures, curriculums and certification practices between education systems. In June 2003, Minister Nelson released a statement calling for state and territory governments to establish greater national consistency between education systems by 2010.

At its meeting in July 2002, MCEETYA commissioned the Curriculum Corporation to survey the Australian states and territories on the provision of curriculum. MCEETYA considered the report of this study, which was produced by the Curriculum Corporation (2003), at its meeting in July 2003. The report focused on the relationship between states' and territories' curriculums and the national statements and profiles, the specification of content, cross-curricular and essential organising principles, the content of Studies of Society and Environment and Technology, performance indicators, the allocation of time between learning areas, and assessing student achievement. The structure, bands and organisation of the formats of most curriculum documents developed by the states and territories were closely related to the national statements and profiles. These curriculum documents varied considerably in the extent to which they specified the content students should learn. A range of cross-curricular and essential organising principles have been incorporated into these curriculum documents, but there were differences in the ways these elements were conceptualised and the status they were given. There was greater commonality between the different states and territories in the organisation of content specified in Studies of Society and Environment than in Technology. All the states and territories specified performance indicators in their curriculum documents, but there were differences in the ways they were applied. With the exception of New South Wales's syllabuses, the allocation of time was rarely mandated in curriculum documents. Whilst national benchmarking assessments for literacy and numeracy are administered across Australia in years 3, 5 and 7, student achievement was not widely assessed in other learning areas by the states and territories. A comparative analysis of the organisation of these curriculum documents indicated that a common format applied in many learning areas. In some learning areas, it was possible to identify broadly equivalent outcomes in most curriculum documents, although there were clear disparities in

Table 1
National Statements and Profiles

Learn- ing Area	Format of National State- ment	Type of Stand- ards	Release Date	Format of National Profile	Type of Stand- ards	Release Date
Arts	know- ledge, skills and pro- cesses organis- ed by strands for years 1 to 4, 4 to 7, 7 to 10 and 11 and 12	curric- ulum stand- ards	1994	out- comes and pointers organis- ed by strands for eight levels across years 1 to 10	content stand- ards, bench- marks and per- form- ance in- dicators	1994
English	know- ledge, skills and pro- cesses organis- ed by strands for years 1 to 4, 4 to 7, 7 to 10, 11 and 12	curric- ulum stand- ards	1994	out- comes and pointers organis- ed by strands for eight levels across years 1 to 10	content stand- ards, bench- marks and per- form- ance in- dicators	1994
Health and Physical Educ- ation	know- ledge, skills and pro- cesses organis- ed by strands for years 1 to 4, 4 to 7, 7 to 10, 11 and 12	curric- ulum stand- ards	1994	out- comes and pointers organis- ed by strands for eight levels across years 1 to 10	content stand- ards, bench- marks and per- form- ance in- dicators	1994

**Table 1
(cont.)**

National Statements and Profiles

Learn- ing Area	Format of National State- ment	Type of Stand- ards	Release Date	Format of National Profile	Type of Stand- ards	Release Date
Lang- uages other than Eng- lish	know- ledge, skills and pro- cesses organis- ed by strands for years 1 to 4, 4 to 7, 7 to 10, 11 and 12	curric- ulum stand- ards	1994	out- comes and pointers organis- ed by strands for eight levels across years 1 to 10	content stand- ards, bench- marks and per- form- ance in- dicators	1994
Math- emat- ics	know- ledge, skills and pro- cesses organis- ed by strands for years 1 to 4, 4 to 7, 7 to 10, 11 and 12	curric- ulum or content stand- ards	Dec- ember 1990	out- comes and pointers organis- ed by strands for eight levels across years 1 to 10	content stand- ards, bench- marks and per- form- ance in- dicators	1994
Scien- ce	know- ledge, skills and pro- cesses organis- ed by strands for years 1 to 4, 4 to 7, 7 to 10, 11 and 12	curric- ulum stand- ards	1994	out- comes and pointers organis- ed by strands for eight levels across years 1 to 10	content stand- ards, bench- marks and per- form- ance in- dicators	1994

**Table 1
(cont.)**

National Statements and Profiles

Learn- ing Area	Format of National State- ment	Type of Stand- ards	Release Date	Format of National Profile	Type of Stand- ards	Release Date
Stud- ies of Soc- iety and En- viron- ment	know- ledge, skills and pro- cesses organis- ed by strands for years 1 to 4, 4 to 7, 7 to 10, 11 and 12	curric- ulum or content stand- ards	1994	out- comes and pointers organis- ed by strands for eight levels across years 1 to 10	content stand- ards, bench- marks and per- form- ance in- dicators	1994
Tech- nol- ogy	know- ledge, skills and pro- cesses organis- ed by strands for years 1 to 4, 4 to 7, 7 to 10, 11 and 12	curric- ulum stand- ards	1994	out- comes and pointers organis- ed by strands for eight levels across years 1 to 10	content stand- ards, bench- marks and per- form- ance in- dicators	1994

what students should attain. Some notable divergences from typical practice included outcomes containing elements of content and skill defined in New South Wales's syllabuses, and cases where the number of outcomes had been reduced at a particular level leading to a contraction in the range of student learning. Furthermore, curriculum documents included outcomes defined in terms of content students should achieve as well as teaching and learning activities that should take place in the classroom. Many education agencies have developed a range of curriculum documents that are not based on discrete learning areas. These documents tend to focus on cross-curricular, essential learning and equity issues, pedagogy, and student assessment. In addition, each education agency had produced documents to support implementation of

curriculum frameworks or syllabuses by providing guidance to teachers for developing programs and assessing students.

In order to establish greater national consistency in curriculum outcomes, MCEETYA agreed in July 2003 to develop statements of learning setting out essential knowledge, understanding, skills and capacities for English, Mathematics, Science, and Civics and Citizenship. At its meeting in May 2005, MCEETYA agreed to develop statements of learning for Information and Communications Technology, which had been added to the legislative requirements by the Australian Government. In 2004, MCEETYA directed the Australian Education Systems Officials Committee (AESOC) to develop the Statements of Learning for English as a pilot project (Holt et al., 2004). Endorsed by MCEETYA in February 2005, the Statements of Learning for English were revised and approved by AESOC in August 2005. Then referred to MCEETYA, the Statements of Learning for English were endorsed by the ministers out-of-session. Published by the Curriculum Corporation (2005), the Statements of Learning for English set out statements of learning and professional elaborations. Each statement of learning organises knowledge, understanding, skills and capacities by strands. Each professional elaboration, which builds on the statement of learning by providing more details, organises knowledge, understanding, skills and capacities by strands. The analysis of the knowledge, understanding, skills and capacities in the statements of learning and the professional elaborations indicates that they are content standards.

Initiated to provide federal funding for schools from 2005 to 2008, the Schools Assistance (Learning Together – Achievement through Choice and Opportunity) Bill was presented to the Australian Parliament in June 2004. Passed in December 2004, the Schools Assistance (Learning Together – Achievement through Choice and Opportunity) Act came into effect through regulations signed in August 2005. The Act changed the structure of Commonwealth funding for schools, and introduced a set of new requirements that education agencies must meet to obtain funds for schools. Monitored through participation in the Annual National Report on Schooling in Australia, the requirements reflect the Australian Government's national priorities for education in 11 areas. One set of priorities for achieving greater national consistency in schooling, creating safer schools, increasing transparency of school performance, providing greater autonomy for school principals, making values a core element of education, and improving professional development for teachers are intended to improve educational programs. Another set of priorities for increasing pupils' participation in physical activity, providing better approaches for boys' education, accelerating Aboriginal Australians' education outcomes are intended to improve student performance. A third set of priorities for improving reporting to parents, and assisting families make decisions about their children's careers are intended to increase family involvement in education. The requirements to achieve greater national consistency involve implementing a common school starting age across Australia by 2010, and introducing national tests in years 6 and 10 in the subject areas of English, mathematics, science, and civics and citizenship. State and territory education agencies and independent systems are required to implement the statements of learning in their next cycle of curriculum review, at latest by January 2008.

Capabilities-Based Curriculum

An alternative approach for national curriculum collaboration in Australia has been postulated by Alan Reid, professor of education at the University of South Australia, as part of a research fellowship instigated by the Australian Government Department of Education, Science and Training. Undertaken between October 2002 and September 2003, the project explored whether the notion of national curriculum collaboration is still relevant, and if so, how it might be advanced in a more educationally productive way. In the report of the study, Reid (2005a) proposed a capabilities-based curriculum for Australia. A national approach to develop a capabilities-based curriculum should be based on and consistent with six procedural principles. First, a rationale, purpose and philosophical reference points should be articulated. Second, a view of the curriculum should be theorised and articulated. Third, a strong research and conceptual base should be incorporated. Fourth, the professional community should be engaged in the conceptual phase. Fifth, the process should seek to build a constituency of support. Sixth, the political realities of the federal system of government should be recognised.

Reid argued that the official curriculum should be organised from a reference point against which various models will be assessed on the extent to which they enable teaching for capabilities using the procedural principles. This approach constructs the official curriculum as a guiding resource, providing support for inquiry-based practice rather than presenting content. Development of a capabilities-based approach could be an extension of the National Goals for Schooling in the Twenty-First Century, although capabilities play a different role. There would be two key phases of an on-going discussion and debate in the education community. The first would focus on the nature of capabilities. The second would be a professional discussion about how to work through the content described in state and territory curriculums. Initially, the Australian Government would promote the first phase, whilst the second phase would occur in schools before the discussion is widened in each jurisdiction and across states and territories. Reid proposed that a set of capabilities could be common across Australia, and would become a focus of teaching and learning in each state and territory. At the same time, the states and territories would retain existing content-based curriculums organised in a manner agreed within each jurisdiction. Teachers would teach through the content in order to develop the capabilities.

National Approaches to Curriculum Forum

In December 2005, the Executive Committee of the Australian Curriculum Studies Association initiated an invitational conference to debate a range of issues relating to national approaches for curriculum reform. Convened at the Melbourne Business School in February 2006, the National Approaches to Curriculum Forum provided representatives of Australasian curriculum, assessment and certification agencies, state and territory education agencies, professional associations, and other education organisations with an opportunity to examine and discuss initiatives undertaken in curriculum reform. In the report on the proceedings, Zbar (2006) stated that the work of the forum focused on identifying the nature of national approaches to curriculum reform,

examining current reports and initiatives at the national level, and proposing a direction forward. Alan Reid, a chair of the forum, contended that past and present national approaches to curriculum reform had failed to develop a rationale for national curriculum collaboration, articulate a coherent view of the curriculum, incorporate policies and strategies based on research, and develop a view of curriculum change. After the participants had discussed the first two propositions, they examined three recently published reports on benchmarking Australian primary school curriculums (Donnelly, 2005), comparison of year 12 pre-tertiary mathematics subjects (Barrington and Brown, 2005), and teaching reading (National Inquiry into the Teaching of Literacy, 2005). Identifying shortcomings in the methodologies applied in each of these studies, the participants concluded commissioned reports needed to be analysed critically before they contribute to policymaking. Then, the participants were briefed on four current initiatives – the Australian Certificate of Education, the statements of learning, employability skills for the future, and the comparative study of selected subjects for the year 12 certificate – being undertaken at the national level. Three groups, based on the types of organisations represented at the forum, considered strategies for national dialogue and collaboration. The groups agreed that the Australian Curriculum Studies Association could facilitate the formation of a unified voice on national curriculum collaboration. In concluding the forum, Tony Mackay, the other chair of the forum, indicated that the Australian Curriculum Studies Association would plan a two-day working conference focusing on the rationale and strategies that would contribute to taking the dialogue forward.

Curriculums of the States and Territories

Overview

Following the referral of the national statements and profiles to the states and territories in July 1993, each system engaged in consultations within its own education community to align them to its curriculum or to implement them. Systemic reform in New South Wales, leading to the passage of the Education Reform Act in 1990, had as an important element the definition of a core curriculum. This core curriculum became the paramount structure for organising the curriculum after the Review of Outcomes and Profiles in 1995 rejected aligning the syllabuses with the national statements and profiles. In Victoria and the Australian Capital Territory, existing curriculum frameworks were readily aligned to the national statements and profiles. South Australia and Tasmania, however, chose to implement the national statements and profiles in their existing forms, whilst the Northern Territory developed a curriculum derived from the recommendations of a review concluded in 1992. This position changed during the course of the 1990s. Curriculum reviews concluded in Queensland in 1994, Western Australia in 1995 and the Northern Territory in 1999 led to the development of syllabuses or curriculum frameworks based on the national statements and profiles. Systemic reforms concluded in South Australia in 1999 and Tasmania in 2000 also led to the development of curriculum frameworks based on the national statements and profiles. Key features of the curriculum frameworks and syllabuses used in the states and territories are outlined in Table 2. The column reporting on ‘type of standards’ presents the findings of the content analysis of outcomes in these documents.

Comparative Studies

Studies on the Progress of Implementation

Meeting in December 1993, the Australian Education Council and the Ministers for Vocational Education, Employment and Training commissioned the Curriculum Corporation to identify approaches being taken by the states and territories to implement the national statements and profiles. The Curriculum Corporation conducted surveys in 1994, 1995 and 1996 to collect data from state and territory education agencies. McLean and Wilson (1995) summarised the findings of the first two surveys. In the report of the first survey, the Curriculum Corporation found that all states and territories were using the national statements and profiles as a basis for curriculum development. Different patterns of adoption for the national statements and profiles among the states and territories were reflected in different forms of advice to schools. In the report of the second survey, the Curriculum Corporation found that the states and territories regarded the general use of the national statements and profiles endorsed a trial of outcomes-based education. Most teachers had reacted positively to the national statements and profiles indicating that they provided comprehensive provision of the curriculum, the benefit of a common approach for planning programs, and reporting student achievement. Concerns were expressed about the complexity and size of the documents, the lack of alignment between some statements and the corresponding profiles, inconsistencies between profiles in different learning areas, and variations in the quality of the documents. The states and territories indicated that implementation needed to proceed over two- or three-year periods, with most systems projecting completion of substantial implementation of state and local versions of the national statements and profiles by the end of 1997.

Representing the only in-depth investigation into the implementation of the national profiles, a study undertaken in 1996 by the Australian Council for Educational Research (ACER), was reported by Lokan (1997). In mid-1995, the Commonwealth Department of Employment, Education, Training and Youth Affairs commissioned ACER to investigate the use of the national profiles or their state variants, and their role in classroom assessment and reporting student learning outcomes. A Management Committee, consisting of representatives from the public, Catholic and independent sectors, teacher unions, and the National Schools Network, was appointed early in 1996 to oversee the project, which consisted of three stages. First, each state and territory education agency was invited to commission a knowledgeable person to prepare a report on current initiatives in curriculum, assessment and reporting in its system. Second, two nationwide samples were surveyed by questionnaire in March and April of 1996 to identify teachers' practices and attitudes about using the national profiles or their state variants, and exemplary practices used in their classrooms for assessment and reporting. A stratified random sample of 390 public, Catholic and independent schools and a systematic sample of 52 schools, nominated because of their involvement in trialing and implementing the national profiles, provided the two samples. Third, two researchers conducted site visits to 26 schools in New South Wales, Victoria, South Australia, Western Australia, Tasmania and the Northern Territory between June and September of 1996. They used a schedule to

Table 2

State and Territory Frameworks and Syllabuses

State or Territory	Title	Structure	Bands	Format	Type of Standards	Release Date and Revision Process
Australian Capital Territory	ACT Curriculum Requirements	school boards determine the structure of the curriculum	early childhood (P-2); later childhood (3-5); early adolescence (6-8); later adolescence (9-10)	essential learning achievements	content standards	ACT Curriculum Frameworks, 1993; ACT Curriculum Requirements, under development; no scheduled revision process
New South Wales	Syllabuses	six learning areas* (stages 1 to 3); eight learning areas* (stages 4 to 6)	early stage 1 (K); stage 1 (1-2), stage 2 (3-4), stage 3 (5-6), stage 4 (7-8), stage 5 (9-10), stage 6 (11-12)	outcomes and indicators organised by strands (stages 1 to 3); outcomes and content organised by strands (stages 4 to 6)	content standards, benchmarks and performance indicators	revised periodically*

**Table 2
(cont.)**

State and Territory Frameworks and Syllabuses

State or Territory	Title	Structure	Bands	Format	Type of Standards	Release Date and Revision Process
Northern Territory	NT Curriculum Framework	four domains of Essential Learnings*; four domains of Learning Technology*; English as a Second Language; eight nationally agreed learning areas; Indigenous Languages and Culture	key growth points 1, 2, 3 (entry points), band 1 (end of 2), band 2 (end of 4), band 3 (end of 6), band 4 (end of 8), band 5 (end of 10), beyond band 5 (extension level)	outcomes and indicators organised by strands	content or curriculum standards, benchmarks and performance indicators	2002; no scheduled revision process

**Table 2
(cont.)**

State and Territory Frameworks and Syllabuses

State or Territory	Title	Structure	Bands	Format	Type of Standards	Release Date and Revision Process
Queensland	Syllabuses	eight nationally agreed learning areas; five subject syllabuses*	foundation, levels 1, 2, 3, 4, 5, 6, beyond level 6	key learning area, core learning and discretionary learning outcomes organised by strands	content standards and benchmarks	revised periodically*
South Australia	South Australian Curriculum, Standards and Accountability Framework	three learning areas* (birth - 3 years of age); seven learning areas* (3 years of age – reception); eight nationally agreed learning areas (reception - 12)	early years (birth-2), primary years (3-5), middle years (6-9), senior years (10-12)	key ideas and standards organised by strands	curriculum standards, content standards, and performance indicators	2001; no scheduled revision process

**Table 2
(cont.)**

State and Territory Frameworks and Syllabuses

State or Territory	Title	Structure	Bands	Format	Type of Standards	Release Date and Revision Process
Tasmania	Essential Learnings Framework 1; Essential Learnings Framework 2	five essential learnings*	foundations, standard 1 (end of K), standard 2 (end of 2), standard 3 (end of 5), standard 4 (end of 8), standard 5 (end of 10)	key element outcomes organised by essential learnings	content standards, benchmarks and performance indicators	Essential Learnings Framework 1, 2002; Essential Learnings Framework 2, 2003; curriculum framework for years 11-12, under development; no scheduled revision process

**Table 2
(cont.)**

State and Territory Frameworks and Syllabuses

State or Territory	Title	Structure	Bands	Format	Type of Standards	Release Date and Revision Process
Victoria	Victorian Essential Learning Standards	four domains of the Physical, Personal and Social Learning strand*; five domains of the Discipline-based Learning strand*; four domains of the Interdisciplinary Learning strand*	laying the foundations (P-4), building breadth and depth (5-8), developing pathways (9-10)	learning focus statements and standards organised by dimensions	curriculum standards, content standards, and performance indicators	Curriculum and Standards Framework, 1995; Curriculum and Standards Framework II, 2000; Victorian Essential Learning Standards, 2005; no scheduled revision process

**Table 2
(cont.)**

State and Territory Frameworks and Syllabuses

State or Territory	Title	Structure	Bands	Format	Type of Standards	Release Date and Revision Process
Western Australia	Curriculum Framework for K to 12 Education in Western Australia; Outcomes and Standards Framework	Curriculum Framework: overarching statement; eight nationally agreed learning areas; Outcomes and Standards Framework: eight nationally agreed learning areas	Curriculum Framework: early childhood (K-3), middle childhood (3-7), early adolescence (7-10), late adolescence/early adulthood (10-12)	Curriculum Framework: overarching learning outcomes, learning area learning outcomes organised by strands; Outcomes and Standards Framework: outcomes organised by strands	Curriculum Framework: curriculum standards (overarching learning outcomes), content standards (learning area learning outcomes); Outcomes and Standards Framework: content standards, benchmarks, and performance indicators	Curriculum Framework and Outcomes and Standards Framework, 1998; Outcomes and Standards Framework, revised, 2005; no scheduled revision process

Key

(The key specifies details indicated by an asterisk in the table):

Structure

1. New South Wales: Stages 1 to 3 - Creative and Practical Arts; English; Mathematics; Human Society and its Environment; Personal Development, Health and Physical Education; Science and Technology. Stages 4 to 6 - Creative Arts; English; Mathematics; Human Society and its Environment; Languages other than English; Personal Development, Health and Physical Education; Science; Technological and Applied Studies.
2. Northern Territory: Essential Learnings - Inner Learner; Creative Learner; Collaborative Learner; Constructive Learner. Learning Technology – Problem-Solving and Decision-Making through Research; Communicating through Presentation, Publication or Performance; Operating Computer Components; Information Communication Technology in Society.
3. Queensland: Subject Syllabuses - Agriculture Education; Business Education; Home Economics Education; Industrial Technology and Design Education; Information and Communication Education.
4. South Australia: Birth to 3 years of age - Physical Self; Psychological Self; and Thinking and Communicating Self. 3 years of age to reception - Arts and Creativity; Communication and Language; Design and Technology; Diversity; Health and Physical Development; Self and Social Development; Understanding our World.
5. Tasmania: Essential Learnings - Thinking; Communicating; Personal Futures; Social Responsibility; World Futures.
6. Victoria: Physical, Personal and Social Learning - Health and Physical Education; Interpersonal Development; Personal Learning; Civics and Citizenship. Discipline-based Learning - Arts; English and Languages other than English; Humanities (Economics, Geography, and History); Mathematics; Science. Interdisciplinary Learning - Communication; Design, Creativity and Technology; Information and Communications Technology; Thinking.

Release Dates

7. New South Wales: Stages 1 to 3 - English, and Human Society and its Environment, 1998; Personal Development, Health and Physical Education, 1999; Creative Arts 2000, and Mathematics 2002. Stages 4 and 5 - all syllabuses, 2002-2004. Stage 6 - all syllabuses, 1999.
8. Queensland: Science, and Health and Physical Education, 1998; Studies of Society and Environment, and Languages other than English, 2000; Technology, and the Arts, 2002; and Mathematics, 2004.

interview principals, and those teachers responding to the questionnaire, on their use of the national profiles or their state variants for teaching, assessment and reporting. The findings showed schools were at varying stages of implementing the national profiles, and it was unlikely that their adoption could be accomplished in less than five years. Many respondents, however, held that time limits needed to be imposed on completing successful implementation of the national profiles in schools, a situation that was not helped by the unrealistic views of some officials about the progress of implementation, and the lack of involvement by some teachers. Therefore, a relatively slow, staged implementation process dependent on progressive training was seen as essential. However, implementation was unlikely to be successful if it was provided with insufficient resources, partial and tenuous, directed to only one aspect of the reform, focused on later stages of the reform to the detriment of earlier stages, and no benefits were perceived to flow from the process. Effective adoption of the national profiles was seen to depend on focusing on student learning, employing the best strategies for implementation, recognising needs, and applying effort.

Studies on the Quality of Outcomes

Funded by the Australian Government Department of Education, Science and Training, Education Strategies, a consulting group based in Melbourne conducted the first study in Australia to assess the quality of outcomes at the primary level in curriculum documents used in the six states and the Northern Territory.

The methodology employed two techniques. Initially, a search was undertaken to identify resources that address questions such as the significance of international studies and the desire of education systems to strengthen performance. An increasing interest of governments in comparing how well their education systems perform in international studies against better performing education systems was identified in addressing curriculum reform. A synthesis of research findings from international studies identified four characteristics associated with high performing education systems. First, they adopt a discipline-based approach to school subjects focusing on essential learning, especially in mathematics and science. Second, they provide clear, rigorous and measurable intended curriculum documents linked to textbooks, teacher training, and classroom practice. Third, they provide greater time on task in the classroom, less disruption, and greater emphasis on formal, whole-class teaching. Fourth, they have regular testing and examinations used to stream students and to decide whether they should be promoted from year to year. The three approaches of a syllabus format, outcomes-based education, and standards-based education were identified as being associated with practices of curriculum development in the countries participating in international studies.

Then, four subject experts applied the criteria of academic rigour, detail, clarity and ease of measurement to analyse a range of curriculum documents, and noted significant discrepancies between Australian and international documents. For mathematics, outcomes in Australian curriculum documents for 'multiplication and division', and 'fractions and decimals' were compared with those in documents used in Singapore, Japan and California. For science,

outcomes in Australian curriculum documents for 'chemical matter' and 'physical world' were compared with those in documents used in Singapore, England and California. For English, outcomes in Australian curriculum documents for 'literature' and 'beginning reading' were compared with those in documents used in England, New Zealand and California.

In the report of the study, Donnelly (2005) contended that Australian curriculum documents were based on the principles of outcomes-based education. This approach required translation into a syllabus format at the local level, failed to deal with essential learning based on academic disciplines, favoured a developmental approach to learning focusing on formative assessment, and gave precedence to a constructivist approach to learning. Whilst the national statements and profiles presented a traditional model of outcomes-based education, it was argued that the curriculums of all the states and territories, except New South Wales, Queensland and Victoria, were moving towards a transformational model of outcomes-based education.

The analysis of the quality of outcomes in curriculum documents used in the six states and the Northern Territory showed considerable variability. For mathematics, outcomes for 'multiplication and division' ranged from showing very strong evidence to limited evidence in meeting the four criteria of academic rigour, detail, clarity and ease of measurement. The standards in the *SACSA Companion Document: R-10 Mathematics Teaching Resource* showed very strong evidence of academic rigour and detail, and strong evidence of clarity and ease of measurement. The standards in the *Victorian Essential Learning Standards* showed strong evidence of academic rigour, and some evidence of detail, clarity and ease of measurement. The outcomes in the New South Wales's *Mathematics K-6 Syllabus*, Queensland's *Mathematics Years 1-10 Syllabus*, and Western Australia's *Outcomes and Standards Framework* showed some evidence of academic rigour, detail, clarity and ease of measurement. The outcomes in the Northern Territory's *NT Curriculum Framework* showed some evidence of ease of measurement, and limited evidence of academic rigour, detail and clarity. The outcomes in Tasmania's *Essential Learnings Framework* showed limited evidence of academic rigour, detail, clarity and ease of measurement. Outcomes for 'fractions and decimals' ranged from showing strong evidence to limited evidence in meeting the four criteria of academic rigour, detail, clarity and ease of measurement. The outcomes in the New South Wales's *Mathematics K-6 Syllabus* showed strong evidence of academic rigour, detail, clarity and ease of measurement. The standards in the *SACSA Companion Document: R-10 Mathematics Teaching Resource* showed strong evidence of academic rigour, detail and ease of measurement, and some evidence of clarity. The outcomes or standards in Queensland's *Mathematics Years 1-10 Syllabus*, the *Victorian Essential Learning Standards* and Western Australia's *Outcomes and Standards Framework* showed some evidence of academic rigour, detail, clarity and ease of measurement. The outcomes in the Northern Territory's *NT Curriculum Framework* showed some evidence of ease of measurement, and limited evidence of academic rigour, detail and clarity. The outcomes in Tasmania's *Essential Learnings Framework* showed limited evidence of academic rigour, detail, clarity and ease of measurement.

For science, outcomes for 'chemical matter' ranged from showing very strong evidence to limited evidence in meeting the four criteria of academic rigour, detail, clarity and ease of measurement. The outcomes in Queensland's *Science Years 1-10 Syllabus* showed very strong evidence of academic rigour and ease of measurement, and strong evidence of detail and clarity. The outcomes or standards in the Northern Territory's *NT Curriculum Framework*, the *SACSA Companion Document: R-10 Science Teaching Resource* and Western Australia's *Outcomes and Standards Framework* showed strong evidence of academic rigour, detail, clarity and ease of measurement. The standards in the *Victorian Essential Learning Standards* showed some evidence of academic rigour, detail, clarity and ease of measurement. The outcomes in New South Wales's *Science and Technology K-6 Syllabus* showed some evidence of clarity and ease of measurement, and limited evidence of academic rigour and detail. The outcomes in Tasmania's *Essential Learnings Framework* showed some evidence of ease of measurement, but limited evidence of academic rigour, detail and clarity. Outcomes for 'physical world' ranged from showing very strong evidence to some evidence in meeting the four criteria of academic rigour, detail, clarity and ease of measurement. The outcomes in Western Australia's *Outcomes and Standards Framework* showed very strong evidence of academic rigour and ease of measurement, and strong evidence of clarity and detail. The outcomes in Queensland's *Science Years 1-10 Syllabus* showed very strong evidence of academic rigour, and strong evidence of clarity, detail and ease of measurement. The standards in the *SACSA Companion Document: R-10 Science Teaching Resource* showed very strong evidence of ease of measurement, and strong evidence of academic rigour, detail and clarity. The outcomes in the Northern Territory's *NT Curriculum Framework* showed strong evidence of academic rigour, detail, clarity and ease of measurement. The outcomes in New South Wales's *Science and Technology K-6 Syllabus* showed strong evidence of detail and ease of measurement, and some evidence of clarity and academic rigour. The outcomes or standards in the *Victorian Essential Learning Standards* and Tasmania's *Essential Learnings Framework* showed some evidence of academic rigour, detail, clarity, and ease of measurement.

For English, outcomes for 'literature' ranged from showing strong evidence to limited evidence in meeting the four criteria of academic rigour, detail, clarity and ease of measurement. The standards in the *SACSA Companion Document: R-10 English Teaching Resource* showed strong evidence of detail and clarity, and some evidence of academic rigour and ease of measurement. The outcomes in Queensland's *English Years 1-10 Syllabus* showed strong evidence of detail, and some evidence of academic rigour, clarity and ease of measurement. The outcomes in New South Wales's *English K-6 Syllabus*, the Northern Territory's *NT Curriculum Framework* and the *Victorian Essential Learning Standards* showed some evidence of academic rigour, detail, clarity, and ease of measurement. The outcomes in Tasmania's *Essential Learnings Framework* showed some evidence of detail and clarity, but limited evidence of academic rigour and ease of measurement. The outcomes in the *Curriculum Framework for Kindergarten to Year 12 Education in Western Australia* and the *Curriculum Framework Curriculum Guide: English* showed some evidence of detail, but limited evidence of academic

rigour, clarity and ease of measurement. Outcomes for 'beginning reading' ranged from showing strong evidence to limited evidence in meeting the four criteria of academic rigour, detail, clarity and ease of measurement. The outcomes in New South Wales's *English K-6 Syllabus* showed strong evidence of academic rigour, detail, clarity, and ease of measurement. The outcomes in Queensland's trial *English Years 1-10 Syllabus* showed some evidence of academic rigour, detail, clarity, and ease of measurement. The outcomes in the Northern Territory's *NT Curriculum Framework*, the *Victorian Essential Learning Standards* and the *Curriculum Framework for Kindergarten to Year 12 Education in Western Australia* and the *Curriculum Framework Curriculum Guide: English* showed some evidence of detail, clarity and ease of measurement, but limited evidence of academic rigour. The standards in the *SACSA Companion Document: R-10 English Teaching Resource* showed some evidence of detail and clarity, and limited evidence of academic rigour and ease of measurement. The outcomes in Tasmania's *Essential Learnings Framework* showed limited evidence of academic rigour, detail, clarity, and ease of measurement.

Australian Capital Territory

Beginning in 1984, the Australian Capital Territory Schools Authority developed curriculum frameworks after initiation of a five-year plan for curriculum review and renewal. Following a decision made to align the curriculum frameworks with the national statements in 1990, working parties of teachers merged the frameworks. After a system-wide consultative process, the Australian Capital Territory Department of Education and Training (1993) published the curriculum frameworks. The Australian Capital Territory Department of Education and Training consulted teachers across the Australian Capital Territory to identify perspectives they addressed in classrooms that were not included in the *ACT Curriculum Frameworks*. Following identification of nine cross-curricular perspectives, groups of curriculum specialists and teachers developed support papers on Aboriginal education and Torres Strait Islander education, Australian education, environment education, gender equity, information access, language for understanding, multicultural education, special needs education, and work education, which were published in 1997.

Appointed in September 2003 to oversee a review of the curriculum for Australian Capital Territory schools, the Curriculum Renewal Taskforce formulated a set of criteria to evaluate the curriculum and proposed a set of principles to guide curriculum development. A Curriculum Renewal Team evaluated the existing curriculum by examining curriculums from other states, reviewing educational research referring to the Australian Capital Territory, and visiting schools to discuss curriculum issues. In the report on the evaluation released by the Australian Capital Territory Department of Education, Youth Affairs and Family Services (2004a), the Curriculum Renewal Taskforce recommended replacing the existing curriculum documents with ACT Curriculum Requirements. Released by the Australian Capital Territory Department of Education, Youth Affairs and Family Services (2004b) in April, a discussion paper presented a set of possible principles, and 10 propositions about the ACT Curriculum Requirements. The consultation involved the Curriculum Renewal Team convening 123 meetings with teachers, parents and students.

Responses to the meetings, and from more than 170 submissions, indicated strong support for the principles, but less support for the propositions.

From this information, the scope and detail of the curriculum review was outlined in a report released by the Australian Capital Territory Department of Education and Training (2005a) in February. It stated that the curriculum review should be based on the requirements of the Education Act 2004, should meet changes in society, and should define the elements for a new curriculum. The future directions for the curriculum review should focus on designating the scope and purpose of the curriculum, defining the principles, identifying essential content, specifying essential learning achievements, incorporating four bands, and determining priorities that may not necessarily be congruent with the learning areas. The principles, the curriculum framework and support materials would be developed between 2005 and 2007, and a process would be determined for schools to review the curriculum as part of the school review procedure. The Australian Capital Territory Department of Education and Training (2005b) released a curriculum statement to mark the completion of the first phase. In it the curriculum is defined as all learning planned, guided and implemented by the school. The purpose of the curriculum is to develop each student as a learner, person, community member and contributor to society. The curriculum is based on a set of 10 principles. The curriculum framework includes 36 essential learning achievements, each containing statements and descriptions, levels of development, and elements of content, pedagogy and assessment.

For the second phase, essential learning achievement reference groups of teachers and academics, appointed in March 2005 to develop each essential learning achievement, drafted markers of progress. An Exceptional Learning Needs Working Party examined ways to make the essential learning achievements inclusive for students with exceptional learning needs. In February 2006, the Curriculum Renewal Taskforce reduced the number of essential learning achievements from 36 to 28 to remove duplication identified by the reference groups, and agreed on a structure for essential learning achievements. A curriculum renewal action plan, released in March 2006, presented seven key actions. First, development of the essential learning achievements using this structure would be completed in April 2006. Second, a one-year validation study of the essential learning achievements would commence in May 2006. Third, professional learning would commence with a Curriculum Renewal Conference to be held in May 2006. Fourth, a one-year trial of the essential learning achievements in schools would commence in July 2006. Fifth, development of support materials would commence in September 2007. Sixth, the essential learning achievements would be completed and published in July 2007. Seventh, an ongoing communications strategy would be launched in March 2006.

New South Wales

Reports on system-wide management (New South Wales Education Portfolio, 1989), curriculum reform (Committee of Review of New South Wales Schools, 1989), and a ministerial policy statement on the core curriculum (Metherell, 1989) led to the enactment of the Education Reform Act in 1990. Established in June 1990, the New South Wales Board of Studies appointed syllabus advisory

committees in 1991 to develop new syllabuses incorporating outcomes defined in terms of objectives and stages. In October 1993, the Minister for Education, Training and Youth Affairs required the Board of Studies to incorporate the national profiles into the syllabuses. In 1994, the Board of Studies consulted teachers about the suitability of draft outcomes, finding that there was general support for including outcomes in syllabuses. In May 1995, the newly elected Labor Government initiated the Review of Outcomes and Profiles. In the report of the Review of Outcomes and Profiles, the New South Wales Department of Education and Training Coordination (1995) recommended that profiles and levels should be replaced with outcomes based on stages. In 1996, the Board of Studies released two papers. *Syllabus Model Using Staged Outcomes* presented a model for developing syllabuses and support documents, and establishing an understanding of the place of outcomes in syllabuses. *Assessing and Reporting Using Staged Outcomes* outlined the use of outcomes in stages for assessing and reporting student achievement.

Revised syllabuses for stages 1 to 3 were approved for English in March 1998, Human Society and its Environment in October 1998, Personal Development, Health and Physical Education in August 1999, Creative Arts in December 2000, and Mathematics in November 2002. Syllabuses for stages 1 to 3 consist of an introduction, a rationale, the aim and objectives, an overview of the subject, stage statements, outcomes and indicators organised by strands, content overviews for each stage, scope and sequence of the content, and general principles for planning, programming, assessing, reporting and evaluating. The analysis of the outcomes outlined in the syllabuses for stages 1 to 3, which is presented in Table 2, indicated that they are content standards. The content standards are expressed as benchmarks with performance indicators at the end of kindergarten, and years 2, 4 and 6.

In 2002, the New South Wales Teachers' Federation lobbied the Minister for Education and Training to undertake a study into the demands that the introduction of outcomes' assessment and reporting were placing on primary teachers. In November 2002, the New South Wales Department of Education and Training commissioned an evaluation, which was undertaken by a team of consultants from the University of Sydney between February and August of 2003. Published by the New South Wales Department of Education and Training (2003), the report of the evaluation found that teachers were positive about using outcomes, but unclear whether all outcomes were mandatory. The report recommended that mandatory outcomes should be defined for literacy and numeracy, program frameworks presenting the mandatory outcomes should be developed, and assessment and reporting frameworks should be designed taking account of ways that outcomes can be best reported to parents. In November 2003, the New South Wales Government accepted the report's recommendations. In response, the New South Wales Board of Studies (2004) published a consultation paper containing a draft set of mandatory outcomes chosen by more than 30 experienced primary teachers, and a questionnaire. From more than 1,500 teachers, who reviewed the draft set of mandatory outcomes at 28 meetings held as part of the consultation between October 2004 and February 2005, 600 responses to the questionnaire and 65 submissions were received. The analysis of the responses indicated strong support for the statement that teachers do not need to formally assess and record achievement

of individual syllabus outcomes, but that a reduction in the number of outcomes is insufficient to lessen the workload. Rather than identify particular outcomes as mandatory, the Board of Studies decided to develop a set of foundation statements for each stage using the existing syllabus stage statements. Setting out the knowledge, skills and understanding students should achieve at each stage, the foundation statements replace the stage statements in each of the six primary syllabuses. Teachers were also provided with suggested time allocations for each key learning area.

In 2000, the Board of Studies began developing a framework to provide a basis for reviewing the primary and secondary syllabuses. Following consultation on the first draft, a revised draft was produced in March 2001 and then submitted for review by focus groups and organisations. Their responses indicated broad support for the direction established in the draft, particularly the move towards a standards-based approach to syllabus design. In October 2001, the Board of Studies approved a set of criteria to be used to ensure that standards of high quality are met by the syllabuses, and that the intentions of the framework are achieved. Published by the New South Wales Board of Studies (2002), the framework presented six principal elements. Syllabuses should present a clear understanding of the purpose of learning. Syllabuses should specify the broad learning outcomes essential for all students. The development of curriculum requirements and syllabuses should be guided by principles of student engagement, a core curriculum, explicit standards, inclusiveness, and maximising student learning. The curriculum should provide a K to 10 standards framework. Syllabuses should be developed according to a defined process and approved according to specified criteria. The Board of Studies is empowered by the Education Reform Act of 1990 to establish guidelines for courses of study. The key learning principles expressed in the framework were influenced by a body of research indicating that curriculum and pedagogy should be considered together, so that learning outcomes are achieved effectively. They take account of conclusions based on research studies in the USA, reported by Bransford et al. (1999), emphasising the importance of teaching students so that they develop the concepts and understandings that signal expertise in the courses they are studying.

This framework guided the review and revision of the syllabuses for stages 4 and 5 commenced in September 2001. The elements referring to purpose, broad learning outcomes and principles were used to evaluate the existing syllabuses. Teams of teachers examined Board statistics on candidates, surveyed samples of schools, held focus group meetings with teachers and other groups, and reviewed literature to write evaluation reports for each syllabus. The Board Curriculum Committee used these reports to recommend directions for the revision of each syllabus. Writing briefs were prepared and distributed within the education community for consultation. The revised writing briefs were then used to revise the existing syllabuses so they would reflect a contemporary understanding of teaching and learning emphasising outcomes, content, and assessment for learning against standards. After consultations within the education community, the draft syllabuses for stages 4 and 5 were revised, approved by the Minister for Education and Training, published and distributed to schools. The English and Mathematics syllabuses were implemented in years 7 and 8 in 2004 and in years 9 and 10 in 2006. All other

syllabuses, except Languages, were implemented in years 7 and 9 in 2005 and in years 8 and 10 in 2006. The Languages syllabuses were implemented in years 7 and 9 in 2005 and in years 8 and 10 in 2006. Syllabuses for stages 4 and 5 consist of an introduction, a rationale, the place of the subject in the curriculum, the aim, objectives, the syllabus structure, outcomes, the continuum of learning, the content organising outcomes and content statements by strands, and information on assessment. The analysis of the outcomes outlined in the syllabuses for stages 4 and 5, which is presented in Table 2, indicated that they are content standards. The content standards are expressed as benchmarks at the end of years 8 and 10.

The development of syllabuses for stage 6 was affected by the Review of the Higher School Certificate initiated in 1995 with the publication of a discussion paper (McGaw, 1996). In a report on 38 public hearings and the analysis of more than 1,000 submissions following a public review of the discussion paper, McGaw (1997) presented a report outlining 26 recommendations. Recommendation 3 proposed that syllabuses should present learning outcomes students are expected to achieve, and evidence that each learning outcome is set at an appropriate standard. Recommendation 21 proposed adopting a standards-referenced approach for assessment by developing achievement scales. Aquilina (1997) presented the New South Wales Government's reforms to the Higher School Certificate, which accepted the major directions of the report, including recommendations 3 and 21.

In order to redesign the new structure of courses for stage 6, the Board of Studies appointed a project team to evaluate the extent to which each Board-developed syllabus needed to be revised. The draft reports were then presented for consultation across the education community before the final reports were produced and presented to the Board of Studies in June 1998. The recommendations of the evaluation reports were used to develop writing briefs, a process begun in August 1998. Following consultation across the education community, each writing brief was revised and approved as the basis for syllabus development. The syllabuses were then developed and presented to the education community for review between February and April of 1999, prior to final revision on the basis of responses. Following approval by the Minister for Education and Training in April and May of 1999, the new syllabuses were published and distributed to schools in July 1999.

The Board of Studies disseminates a principal's package and a book for parents and community members to introduce each new syllabus for stages 1 to 3, as well as support documents to assist teachers implement each syllabus. Commencing in June 1999, the Department of Education and Training trained professional learning teams to facilitate implementation of the syllabuses for stage 6 at local interest group events focusing on school structures and organisation, syllabus implementation and assessments. A web site, workshops in key learning areas, and state conferences supported implementation of the syllabuses for stage 6. In 2003 and 2004, the Board of Studies conducted presentation sessions across New South Wales to familiarise teachers with the revised syllabuses for stages 4 and 5 implemented between 2004 and 2006.

Northern Territory

In 1992, the Northern Territory Board of Studies published the Common Curriculum Statement and the Common Assessment Framework, providing a basis for schools to plan, develop and implement school-based policies in relation to student achievement. In 1998, the Common Assessment and Reporting Statement was published to reflect the development in 1997 of the Northern Territory outcomes' profiles. At the same time, the Common Curriculum Statement was revised to reflect the nationally agreed learning areas, and to provide a framework for schools to implement the common curriculum in terms of balance among the learning areas and cross-curricular perspectives. Early in 1999, the Board of Studies published a Learning Area Statement for each of the eight learning areas, which described the content and essential outcomes of the common curriculum. Initiated in September 1998, a review of education in the Northern Territory led the Northern Territory Department of Education (1999) to release a discussion paper proposing that the Common Curriculum Statement, the Common Assessment and Reporting Statement, and the learning area statements should be replaced by a curriculum framework.

Appointed in December 1999, the Action Curriculum Team disseminated an information and analysis pack in January 2000 for each school to nominate its preferred degree of involvement in and response to the curriculum review. The first phase involved distributing an options pack to schools in March 2000 outlining key elements for the proposed framework and offering teachers an opportunity to shape it. The options pack was revised on the basis of responses by the Action Curriculum Team, and distributed to all schools for refinement by teachers in April 2000. The second phase involved appointing focus groups, each consisting of a writing team and a trialing team, to the eight learning areas, and indigenous languages and culture. Following receipt of responses to the second distribution, the contributing teams revised the options pack in August 2000 to form a trial framework. The trial framework was disseminated to teachers and revised on the basis of the responses to form a pilot version. Piloted in more than 90 schools during February and March of 2001, the pilot version was revised, and presented for public review by parents, business and industry groups in July 2001. Following an evaluation by the Curriculum Corporation in November 2001, the Northern Territory Board of Studies approved the final draft in March 2002.

In September 1999, William Spady worked with Northern Territory teachers over a six-day period to apply his model of outcomes-based education to shape the essential learnings' component for the curriculum framework. Other aspects of Spady's work to influence the curriculum framework included life role performances, authentic assessment and the concept of learner-centred, outcome-focused learning. With links to South Australia for curriculum and assessment in years 11 and 12, connections with the Senior Secondary Assessment Board of South Australia were explored to ensure consistency through to the post-compulsory curriculum.

Published by the Northern Territory Department of Employment, Education and Training (2002), the *NT Curriculum Framework* consists of components on

essential learnings, learning technology, English as a second language, the eight learning areas, and indigenous languages and culture. Each learning area statement organises outcomes and indicators by strands. The analysis of the outcomes outlined in the *NT Curriculum Framework*, which is presented in Table 2, indicated that they consist of a mixture of curriculum and content standards expressed as benchmarks with performance indicators at the end of years 2, 4, 6, 8, 10 and an extension level.

The Action Curriculum Team supported implementation of the *NT Curriculum Framework* through a professional development program and the development of support materials, including programming, assessing and reporting guidelines. A resource document, developed in 2004 and 2005 for teachers in the pre-compulsory years, was trialed late in 2005. An electronic curriculum management tool, Curriculum eTool, designed to facilitate outcomes-focused planning, assessing and reporting student achievement, was implemented in 25 schools in 2003. The phased implementation of the Curriculum eTool commenced in 2004 with full implementation in all schools based on the minimum requirements signed off by the Executive Board by the end of 2007.

In September 2002, the Northern Territory Government commissioned Charles Darwin University to review the quality of secondary education. Based on visits to 134 sites and analysis of 111 submissions, Charles Darwin University and the Northern Territory Department of Employment, Education and Training (2003) presented sets of recommendations covering 11 issues. With reference to the curriculum, the review found general satisfaction with the *NT Curriculum Framework* among teachers, but concerns were raised that many outcomes gave insufficient direction, and indicators lacked parity. It was found that secondary teachers have been slower to adopt the *NT Curriculum Framework* than primary teachers, because they require more professional development to integrate the principles in the *NT Curriculum Framework* into their teaching practice. The report recommended that the outcomes and indicators should be refined, and the enterprise strand in Studies of Society and Environment should be modified to reflect a cross-curricular perspective. Professional development in effective pedagogy should be provided to secondary teachers to support implementation of the *NT Curriculum Framework*.

The Northern Territory Government presented the report's recommendations for public review through a three-phase consultation process conducted by Socom, a public relations consultancy based in Melbourne. The first phase involved a series of workshops held in May 2004 to discuss the report's recommendations with stakeholders. In the second phase, participants in the first phase led discussions around the report's recommendations with their local communities, which led to 160 submissions being lodged in July 2004. In the third phase, representatives from school communities led public forums in August 2004 to consider the propositions of most interest that had emerged. The report of the public review, published by Socom and the Northern Territory Department of Employment, Education and Training (2004), detailed strong confirmation for the *NT Curriculum Framework* elicited from primary teachers, supported by views that it should not be changed. The Department of Employment, Education and Training had anticipated that the *NT Curriculum Framework* would be adopted

more widely, whereas some secondary schools reported lack of support to implement it.

In February 2005, the Northern Territory Government launched the Building Better Schools program intended to improve secondary education over the next four years by investing in students and learning, supporting teachers, improving indigenous education, providing high quality distance education, and building stronger school communities. The Building Better Schools program includes five initiatives that are related to the implementation of the *NT Curriculum Framework*. First, professional learning communities, where teachers can develop, trial and share best practice, were established. Second, a teaching and learning framework, which is aligned to the *NT Curriculum Framework* and to the Senior Secondary Assessment Board of South Australia's curriculum statements, was developed to outline and establish the essential features of good pedagogy. Third, learning profiles, which record learning needs, progress and achievement, were developed for all students. Fourth, support and financial grants were provided to schools to expand vocational education and training, and vocational and enterprise learning. Fifth, the Pathways Mentorship program was established to support students in their transition from school to work, further training or higher education.

In addition, the Northern Territory Government consulted the education community in 2005 on how to better engage 11- to 14-year-old students in education. The consultation led to the development of the Middle Years of Schooling Policy Framework, which was endorsed by the Northern Territory Government. Establishing years 7 to 9 as the middle years of schooling, the framework outlines key principles for teaching and learning, curriculum and assessment, relationships between teachers and students, the role of school leadership, literacy and numeracy, and system support. In 2006, the education community was consulted on the best way for the framework to be implemented in schools.

Queensland

In November 1992, the Labor Government appointed a four-member panel to review the curriculum. In its report, 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 Queensland 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 to form the Queensland School Curriculum Council in December 1996. Following a decision taken by the Queensland 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. The new agency, the Queensland Studies Authority, commenced operations in July 2002.

The shift to outcomes occurred in Queensland, when student performance standards were developed to support the Mathematics syllabus published in 1987, and the English Language Arts syllabus published in 1994. Subsequently, the Queensland School Curriculum Council developed new syllabuses and sourcebooks for the remaining six key learning areas. The syllabuses for Science, and Health and Physical Education were published in 1998. The syllabus for Studies of Society and Environment and subject syllabuses for Civics, Geography and History, and Languages other than English for Chinese, French, German, Indonesian, Italian, Japanese and Korean were published in January 2000. Draft curriculum guidelines for Languages other than English for years 1 to 3 were published in December 2000. Syllabuses were published for Technology in March 2002 and the Arts in June 2002. In 1999, the Queensland School Curriculum Council initiated reviews of the English and Mathematics syllabuses. Following trials and revisions, the Queensland Studies Authority published the revised Mathematics syllabus in October 2004. Trialed in 2005, the English syllabus will be implemented in 2006.

The syllabuses consist of three sections. The rationale explicates the nature of the key learning area, the contribution of the key learning area to lifelong learning, cross-curricular priorities, and understandings about learners and learning. Outcomes define the concepts within the framework, organise key learning area, core learning and discretionary learning outcomes by strands, and present guidelines for using outcomes for planning and assessment. Assessment presents the principles for assessment, application of assessment principles, and making judgments and reporting. The sourcebooks, which provide the basis for planning units of work, consist of guidelines for teachers and modules presenting lesson plans. The analysis of the outcomes outlined in the syllabuses, which is presented in Table 2, indicated that the key learning area, core learning and discretionary learning outcomes are content standards. The core learning and discretionary learning outcomes are expressed as benchmarks at the end of years 1, 3, 5, 7, 9, 10 and an extension level.

Although the principles of outcomes-based education have informed the development of learning outcomes in the syllabuses, a three-tiered hierarchy of learning outcomes evolved through consultation within the education community about the needs of Queensland schools. Overall learning outcomes contain elements common to all learning areas, and describe the valued attributes of a lifelong learner. Key learning area outcomes describe intended results of extended engagement with the learning described by core learning and discretionary learning outcomes. Core learning outcomes describe essential learnings, what students should know and do with what they know, whilst discretionary learning outcomes describe what students should know and do with what they know beyond what is essential.

The Queensland Studies Authority publishes initial in-service materials, consisting of a set of modules accompanying each syllabus and sourcebook, to familiarise teachers with the syllabuses and sourcebooks individually, in small groups or in facilitated workshops.

In April 1999, the Queensland School Curriculum Council approved the development of subject syllabuses for Agriculture Education, Business

Education, Home Economics Education, Industrial Technology and Design Education, and Information and Communication Education at levels 5 and 6. Commencing in January 2000, subject area syllabus committees developed initial drafts for the five subject syllabuses, which were released in November 2000. Following consultation within the education community during 2001, second drafts were trailed in schools during 2002. After revision, the Queensland Studies Authority approved the five subject syllabuses in July 2003.

In March 2002, the Queensland Government released a consultation paper proposing a package of education and training reforms. Following public review of the proposals from March to July 2002, the Queensland Government (2002) published a paper presenting 99 recommendations referring to five aims. First, children would be better prepared before they enter school so they can achieve more in the early years. Second, a new approach to the middle years of schooling would focus on students' learning needs and to provide a solid foundation for the senior years. Third, flexible opportunities would be provided for 15- to 17-year-old students to achieve a senior certificate or vocational education qualifications. Fourth, standards of attainment would be strengthened. Fifth, a community commitment to young people would be fostered.

In March 2002, the Minister for Education requested the Queensland School Curriculum Council to develop an early years curriculum to support the first aim by building on children's learning with their families and their preschool experience. On becoming responsible for the project in July 2002, the Queensland Studies Authority appointed a project team and a reference group to provide advice. The project team screened early learning and development frameworks used in other Australian states and countries. Incorporating an early learning and development framework, the draft early years curriculum was released in January 2003. Following trials in 39 schools in 2003, the early years curriculum was revised and trialed in a further 27 schools in 2004. In 2005, the final versions of the Early Years Curriculum Guidelines and the Early Learning and Development Framework, together with professional materials, were produced.

In June 2001, Education Queensland released the *Curriculum Framework for Education Queensland Schools Years 1-10*, requiring each school to develop its own curriculum plan providing core learnings based on the Queensland syllabuses, teaching strategies, a range of assessment devices, and reports on student progress and achievement. Schools developed curriculum plans in collaboration with school communities, submitted the plans to district directors by February 2003, and revise them annually. In April 2005, the Queensland Government appointed a six-member Policy Steering Committee consisting of the chief executives of the public, Catholic and independent sector agencies, and an Expert Advisory Group to develop a new *Queensland Curriculum, Assessment and Reporting Framework*. The new framework will define what is essential, set standards for student achievement, establish a bank of assessment tools, determine comparable assessment standards at three benchmarks, specify a common framework for reporting student achievement against the standards, and provide for on-going review of Queensland's syllabuses. In 2006 and 2007, the Queensland Studies Authority will develop the

essential learnings and standards, assessment practices, and the reporting framework in collaboration with Queensland schools. Selected because they have demonstrated particular expertise, partner schools will work with the Project Team to develop the tools and resources before trial schools will use them to provide feedback on their effectiveness. All schools will be invited at various stages to comment on the development of the tools and resources. In February 2006 the Queensland Studies Authority released a draft Essential Learnings and Standards Map for schools to develop and trial essential learnings and standards, and trial assessment tasks for years 4, 6 and 9. Later in 2006, the Queensland Studies Authority will release an Assessment Bank, providing teachers with tools and resources to be developed and refined over two years. A reporting framework to guide student assessments for parents, student achievements of essential learnings in English, mathematics and science and one other area at years 4, 6 and 9, and comparability and quality of schools' assessments of student achievement will be developed, trialed and refined. The *Queensland Curriculum, Assessment and Reporting Framework* will be published in 2008.

South Australia

Following a process of public review, the South Australia Department of Education and Children's Services (1997) published a declaration affirming the agency's fundamental purpose. The declaration established five strategic directions: developing the individual and society; achieving unity through diversity; strengthening community; creating a spirit of enterprise; and becoming global citizens. In order to reflect the philosophical and educational parameters articulated in the declaration, the South Australia Department of Education, Training and Employment released a curriculum statement in March 1998. In 1999, the Department of Education, Training and Employment aligned the rationale presented in the curriculum statement with a new policy on school management as a basis for integrating the existing curriculum documents. A Steering Committee, supported by four curriculum band reference groups and 20 experts' working groups, was appointed to oversee their integration. In May 1999, more than 1,000 teachers, participating in workshops and teleconferences at 28 sites across South Australia, were consulted about the existing curriculum documents used in South Australia to provide an information base for developing a new curriculum framework. A consortium of 37 educators from the University of South Australia and the Council for Educational Associations of South Australia, appointed in August 1999 to form a Writing Team, produced a preliminary draft in November 1999. An evaluation of the preliminary draft, contracted to the Erebus Consulting Group, involved the collection of responses from educators by a questionnaire, as well as interviews and focus group sessions with the curriculum band reference groups and experts' working groups. The evaluation report presented recommendations to direct the Writing Team in preparing a trialing draft, which was trialed in more than 100 schools and also reviewed in all other schools between March and May of 2000. The responses from the trial were used to develop the curriculum framework, which was approved by the chief executives of the public, Catholic and independent sector agencies in November 2000 before being published by the South Australia Department of Education, Training and Employment (2001).

The *South Australian Curriculum, Standards and Accountability Framework* consists of sections covering scope, standards and accountability. The scope consists of three component frameworks covering four bands. Three learning areas from birth to three years of age cover the first stage of the early years' band. Seven learning areas from three years of age to reception cover the second stage of the early years' band. Eight learning areas from reception to year 12 cover the third stage of the early years' band, together with the primary, middle and senior years' bands. Each component framework organises key ideas and standards by strands. The standards are specified at six levels. The accountability section outlines assessment and reporting policies. The analysis of the key ideas outlined in the *South Australian Curriculum, Standards and Accountability Framework*, which is presented in Table 2, indicated that they are curriculum standards. They are followed by content standards with performance indicators at the end of years 2, 4, 6, 8, 10 and 12.

Stehn (1999) identified that a range of eclectic influences affected the development of the *South Australian Curriculum, Standards and Accountability Framework*. Foremost among these influences was a constructivist approach, the view that the learner is active in the process of building knowledge and understanding, which had been promoted by the influential educator, Garth Boomer. The constructivist approach is evident in the prominent place given to essential learnings, understandings, capabilities and dispositions developed throughout a person's life. Approaches to student assessment were influenced by outcomes-based education, implicit in the national profiles. From birth to reception, there are broad, developmental learning outcomes describing a child's learning over time. From reception to year 10, there are standards defined at points, which provide a common reference point for monitoring, judging and reporting student achievement. Year 12 standards relate to standards provided by the external assessment board used in conjunction with the essential learnings.

During 2000 and 2001, the Department of Education, Training and Employment provided professional development for site leaders to facilitate implementation of the *South Australian Curriculum, Standards and Accountability Framework*. From 2002, implementation by district and cluster implementation groups was coordinated by the SACSA Implementation Steering Committee. In 2005, the Department of Education and Children's Services launched the Moving Forward with SACSA Initiative, consisting of two components intended to promote student achievement by relating the intent and philosophy underpinning the *South Australian Curriculum, Standards and Accountability Framework* to teaching, learning and assessment. The engagement option is designed to support teachers explore pedagogy, essential learnings, assessment, and data for learning through facilitated professional learning, a CD-ROM containing resources, tools and processes, and additional resources developed by innovation sites. In 2006, all schools are required to engage in professional learning that focuses on student achievement using the CD-ROM and support from district teams. Schools involved in current and emerging initiatives will be supported in identifying and collecting outcomes and standards data in relevant learning areas. The innovation option is designed to support research and development of tools, resources and processes at selected sites. Innovation sites developed assessment exemplars, investigated how data inform planning,

devised moderation processes, developed a reporting format, designed a multimedia resource for reflecting on pedagogical practice, and developed a tool for monitoring learners' growth of essential learnings. Following trials and improvement by other innovation sites, the tools, resources and processes are shared with other schools across South Australia. In July 2006, a small number of innovation sites will be selected to continue working in the areas of assessment, pedagogy, essential learnings, data for learning, and the South Australian Certificate for Education. In addition, three projects in the early years will be extended. From 2006 to 2009, the Moving Forward with SACSA Initiative is expected to ensure that schools provide data on student achievement to a central bank, and apply aggregated data to improve learning for targeted groups of students.

The *South Australian Curriculum, Standards and Accountability Framework* is supported by a range of initiatives listed on the SACSA web site in Ideas for Practice.

Commencing in May 1999, the Learning to Learn initiative provided opportunities for teachers to reflect on their teaching practice through research and locally based inquiry. The initiative's main component, the Core Learning Program, exposes participants to research about learning, constructivist pedagogies and methodology. The Core Learning Program is facilitated by a network of project colleagues, who work with a range of education providers through six modes. Mandated two-day sessions are provided for funded Learning to Learn sites. Optional workshops and conferences covering a wide range of activities based on constructivism are open to all schools in South Australia. At learning circles, project colleagues work with staff of individual sites to ground the learning of the Core Learning Program to the site's context. Particular sites present three-day practicums to share their experiences with teachers across South Australia. Five forums on senior secondary issues, standards and assessment, stewards and leaders in transition, literacy, numeracy and information and communication technology, and creativity and the arts have been run in conjunction with other projects. An Expo, held in August 2001, focused on connections between research, theory and practice established during the first three years of the initiative. Five residential retreats have been held to explore particular topics through dialogue, reflection, movement and the construction of shared meaning. The Learning to Learn initiative's web site, the Learning Workroom, presents resources for exploring themes, participants' most significant changes collected from learning circles and sites, sharing challenges through learning journeys, and a collection of materials for professional development.

Working with Outcomes presents case studies on nine schools nominated by the Learning Outcomes and Curriculum Group as working successfully to implement the key ideas and standards in the *South Australian Curriculum, Standards and Accountability Framework*. Each school was visited by a Project Team, which observed, documented and reported on a successful practice in terms of its vision, journey and program. The vision articulates reasons why a school made changes to its practice and how the *South Australian Curriculum, Standards and Accountability Framework* supported these changes. The journey outlines activities and practices a school undertook

to implement a proposed program. The program outlines how a school is engaging with the key ideas and standards in the *South Australian Curriculum, Standards and Accountability Framework*. Emerging voices summarise similarities in methodologies between the nine schools, and the benefits for each school community.

In 2001, professional development provided at the district level led to participating teachers forming local educator networks, and collaborating in 2002 to produce materials. In 2001, selected preschools and schools worked with curriculum consultants on essential learnings' field projects to develop materials to support the essential learnings. In 2002, a project on interdisciplinary curriculum in the primary and middle years produced units on teaching, learning and assessment. In 2001, the Department of Education and Children's Services and the South Australian Multicultural and Ethnic Affairs Commission funded grants for teachers to implement programs to promote multicultural education and counter racism. Educators' Ideas present a searchable database of the materials relating to these four projects.

A partnership formed between the South Australian Primary Principals' Association and the Curriculum Policy Directorate led to teachers from a broad range of schools developing activities based on suggested topics at a workshop held in 2001. These activities form Insites, which provide starting points for teachers to plan educational programs in each learning area. The activities, which embed the essential learnings, equity cross-curriculum perspectives, and enterprise and vocational education, are organised into associated year levels within a band of learning.

Beginning in 1996, the Department of Education and Children's Services initiated the Consistency in Teacher Judgment Project to investigate moderation practices and methods. A CD-ROM was produced in partnership with Victoria and Queensland. Teachers from 14 schools developed teaching, learning and assessing programs, and guides for interpreting evidence. As a member of a moderation team, each participating teacher presented sets of evidence on one or more students for exploration, analysis and interpretation by the moderation team using a moderation process and protocols. Records made by the teacher and the moderation team on the proceedings of the moderation process are used to write a commentary, which is attached to each set of evidence presented on the SACSA web site. The commentary explains the extent to which the student has demonstrated achievement of the outcome. Moderated evidence provides a description of a teaching, learning and assessing program, descriptions of assessment events, associated guides for interpreting student evidence, and sets of student evidence with teacher commentaries.

Beginning in July 2000, South Australian teachers developed teaching and assessing guides aligned to the *South Australian Curriculum, Standards and Accountability Framework*. Presenting units of work, learning and assessing materials, and materials to support specific needs, the teaching and assessing guides are stored in a searchable database organised according to which model is applied. Developed by About Learning located in Wauconda, Illinois, the 4MAT model is based on an assumption that learning involves the four elements of meaning, concepts, applications and creations. Teachers apply this

model to develop teaching and assessing guides based on focusing and generating skills, patterning, organising and analysing skills, inquiring, exploring and problem-solving skills, and integrating and evaluating skills. The model advocated by Julia Atkin, an education consultant located in Hardin-Murrumburrah, New South Wales, requires teaching and assessing guides to be based on applying all modes of processing from the whole brain to develop a learning task. The model advocated by Julie Boyd, an education consultant located in Launceston, Tasmania, requires teaching and assessing guides to be based on six elements. Appropriate competencies and capabilities are developed, content is defined for an appropriate context leading towards learning outcomes, summative assessments are administered, an event is tuned, and strategies are applied to develop these elements.

A partnership formed in 2003 between the South Australian Primary Principals' Association and the Curriculum Policy Directorate led to the development of the SACSA companion documents. The draft documents, which were written by teams of teachers, were trialed in schools over four rounds. SACSA companion documents for R-7 Mathematics and English were produced in 2003, Science, Arts and 8-10 Mathematics early in 2004, Design and Technology, Health and Physical Education, and Society and Environment late in 2004, and Languages in 2005. The SACSA companion document for Languages consists of three volumes covering seven alphabetic languages, two non-alphabetic languages, and nine Australian Aboriginal languages. A professional learning module, Planning for Teaching and Learning, developed to support the SACSA companion documents, was released on the SACSA web site.

Tasmania

Curriculum reform was initiated in Tasmania as an outcome of a policy statement on education, itself a component of *Tasmania Together*, a strategy intended to develop a twenty-year social, environmental and economic plan for the state. Following a series of meetings within the education community in 1999, draft proposals for education, training and information provision were released for public review in February 2000. Analysis of more than 160 responses led to the formulation of five goals, which were incorporated into a policy statement (Tasmania Department of Education, 2000). Titled *Learning Together*, the policy statement presented a long-term plan for transforming the education system, including the development of a curriculum framework.

Following the release of the draft proposals, a nine-member Consultation Team was appointed to conduct a three-year project to develop a curriculum, consisting of three phases: clarifying values and purposes; specifying content; and developing teaching and assessment practices. Beginning in June 2000, district reference groups led more than 6,900 teachers, child-care professionals, business people, community members and students at meetings focusing on clarifying the values and purposes of public education. The report on the consultation, released in October 2000, led to the publication of a statement in December 2000 identifying seven values and six purposes as important.

The statement of values and purposes formed the basis for developing an initial draft of 'emerging' essential learnings, organised into four categories of working

organisers. Responses collected from a review were used to revise the initial draft to produce 'working' essential learnings consisting of five categories, each containing a description and several key elements. Selected in November 2000, 20 partnership schools worked with the Consultation Team to refine the 'working' essential learnings, determine outcomes and standards to describe knowledge, skills and competencies, and identify teaching and assessment practices consistent with the values and purposes. In March, the Tasmania Department of Education (2002) released *Essential Learnings Framework 1*, presenting the statement of values and purposes, descriptions and key elements of the essential learnings, culminating outcomes for the essential learnings, and a set of learning, teaching and assessment principles.

Teachers from more than 40 schools worked with the Consultation Team during 2002 to specify sets of expectations for students at different levels to provide the basis for the statement of outcomes and standards. In March, the Tasmania Department of Education (2003a) released *Essential Learnings Framework 2*, consisting of three components. The Introduction to Outcomes and Standards outlines the structure of the framework and describes support available to assist teachers. Outcomes and Standards organise the key element outcomes and standards by the key elements of the essential learnings. The Learners and Learning Provision Statement discusses some key advances in the understanding of how learning occurs, and what is known about the distinctive features of learners at different stages in their development. Developed by the Consultation Team and 53 partnership schools, the *Learning, Teaching and Assessment Guide*, released on the Internet in April 2003, presents guidelines for effective teaching, assessing, planning, professional learning, transforming schools, parents and community, and a specific focus for different levels of schooling and the essential learnings. The *Learning, Teaching and Assessment Guide* is designed to be dynamic, and undergo refinement and expansion on the Internet.

In 2004, the Department of Education released several resources to support implementation of the *Essential Learnings Framework*. *Essential Connections: A Guide to Young Children's Learning* provides a detailed explanation of learning for young children from birth to age five, produced to assist child-carers and early childhood teachers design programs related to the *Essential Learnings Framework*. *Guiding Learning Communities* presents sets of modules organised around eight topics to support school leaders in providing professional training for implementing the *Essential Learnings Framework*. A booklet and CD-ROM, *Planning Learning Sequences*, supports individual and collaborative planning by teachers in using the *Essential Learnings Framework*. A video CD-ROM, *A Curriculum for the 21st Century*, informs parents about the *Essential Learnings Framework*. Other resources released to support implementation of the *Essential Learnings Framework* include *Unlocking Literacy*, *Mental Computation*, *Numeracy is Everywhere*, and *Research into Action*.

Learning Together also proposed convening an international conference in 2002 to showcase aspects of education in Tasmania. A survey of schools across Tasmania in September 2001 led to 50 schools responding with

suggested topics or issues for the conference, whilst three regional committees considered the best ways to organise the conference to ensure representation of presentations across Tasmania. Convened in Hobart, Launceston and Burnie over 10 days in July 2002, the Leading Learning conference hosted keynote speakers from Australia, the UK and the USA, including a representative from Harvard University's Project Zero, who discussed the features of the project. In addition, over 80 schools opened their doors to hold more than 100 workshops to share innovative and successful programs with more than 5,000 participants. These presentations focused on a range of issues concerning the curriculum consultation and the vision for schools of the future.

In February 2003, a paper outlining the scope and purpose of a strategy for post-compulsory education was released for public comment. The Department of Education then disseminated a set of nine issues' papers to facilitate discussion about learners' needs at a series of regional and stakeholder forums. A project steering committee, supported by several reference groups, drew on submissions made by community members at the forums to design the strategy, which was released in December by the Tasmania Department of Education (2003b). The statement on the strategy, known as *Tasmania: A State of Learning*, presented a vision, purposes and values to guide post-compulsory education, and set out outcomes to be achieved through a range of initiatives organised under four tracks: guaranteeing futures; ensuring essential literacies; enhancing adult learning; and building learning communities.

One initiative under guaranteeing futures involves reviewing the curriculum for years 11 and 12 to develop a curriculum framework aligned to the *Essential Learnings Framework*, identifying a model for syllabus development, and addressing issues relating to delivery, organisation and resources for post-compulsory institutions. Facilitated by a Project Team supported by school-based project officers, the curriculum review was initiated in February 2004 through discussions with the post-compulsory education community about values, purposes and outcomes, and conversations with Catholic and independent schools. These discussions focused on articulating a set of values and purposes of education and training for years 11 and 12, defining outcomes that students should achieve by the end of year 12, and developing statements on learning and assessment for years 11 and 12. The outcomes of this work, presented in a progress report in February 2005, were followed by the release of a paper in April 2005 intended to promote discussion around the structures and organisation of learning. Following consultation on the substance of the paper, development of the curriculum framework was completed in the second half of 2005. In 2006, the Project Team supported by the school-based project officers will work with colleges and schools in the public, Catholic and independent sectors to implement the curriculum framework.

A second international conference was convened in 2005 to examine policy initiatives contained in the *Essential Learnings Framework*, *Essential Learnings for All*, and *Tasmania: A State of Learning*. Convened in Hobart, Launceston and Burnie over 10 days in July 2005, the Leading Lifelong Learning conference hosted keynote speakers from Australia, Canada, the UK and the USA. The conference program included a one-day component in each

region focusing on building better learning communities, innovation and change in Tasmania, and early childhood. In addition, schools, colleges and lifelong learning centres opened their doors for one day in each region for delegates to examine the implementation of *Essential Learnings Framework*, *Essential Learnings for All*, and *Tasmania: A State of Learning*.

Victoria

In September 1984, the Minister for Education issued a paper titled *Curriculum Development and Planning in Victoria*, later published in a collection of six ministerial papers (Victoria, Minister for Education, 1985). It stated that curriculum development should be decentralised to local school communities by proposing that the school curriculum be based in a framework with student outcomes being defined by school councils. A three-phase Curriculum Frameworks Project, initiated in 1984 to support this policy, involved forming 10 writing teams to develop an overview statement, and statements in each of nine learning areas, and then in 1985 disseminating a discussion paper for consultation. The second phase involved reviewing the results of the consultation, and publishing 10 statements during 1986. The third phase involved implementing the frameworks, which were published by the Victoria Ministry of Education (1988), and then adapting them to school contexts in 1987 and 1988. Several commentators reporting on this development found that a balance was reached between school-based management by school councils and a state-wide curriculum and assessment program (Caldwell, 1994; Fuhrman and Johnson, 1994; Watkins, 1991).

In July 1993, the Minister for Education requested the Victorian Board of Studies to examine whether the national statements and profiles provided an adequate basis for developing a new curriculum framework. Finding they provided an adequate foundation, the Board of Studies appointed eight key learning area committees in November 1993 to develop a draft, which was distributed for a state-wide review resulting in more than 5,000 responses. Following revision, the Minister approved the curriculum framework in November 1994. Published by the Victorian Board of Studies (1995), the *Curriculum and Standards Framework* formed a key component of the systemic reform initiative, *Schools of the Future* (Caldwell and Hayward, 1998).

The *Curriculum and Standards Framework* was supported by a variety of resources. The Board of Studies published a series of four documents under the title *Using the CSF* in 1995 and 1996, a series of seven general and key learning area advice booklets, and a guide for primary teachers to plan science programs. In collaboration with the Catholic and independent sectors, the Victoria Department of Education developed Course Advice documents for each key learning area and English as a Second Language containing suggested learning activities, curriculum resources, and assessment techniques. Two interactive multimedia CD-ROMs, called *Understanding Australia*, which presented information about Australia's history, geography, economy, politics, laws and culture, were also developed.

In May 1998, the Minister for Education initiated a review of the *Curriculum and Standards Framework*. Appointed to oversee the 18-month review, the CSF

2000 Advisory Committee consulted representatives from groups within the education community to develop a directions paper, which formed the basis for 21 forums held with 1,200 principals across Victoria during August and September of 1998. On the basis of the responses, CSF key learning area committees revised each of the eight key learning areas over a six-month period commencing in October 1998. In April 1999, the revised draft, together with a questionnaire administered in computer disk format, was distributed to schools for a field review. Following revision based on over 700 responses, which were overwhelmingly positive about the draft, the Victorian Board of Studies (2000) published the *Curriculum and Standards Framework II*.

Following the release of the draft *Curriculum and Standards Framework II*, curriculum specialists compared the learning outcomes with the outcomes in the original *Curriculum and Standards Framework* to identify which units in the Course Advice documents needed to be revised or replaced. Approximately 50 writers, contracted in June 1999, completed revisions to the Course Advice documents in November 1999. Containing suggested learning activities, curriculum resources, and assessment techniques linked to *Curriculum and Standards Framework II* by outcome codes, the Course Advice documents were revised for each key learning area and English as a Second Language, and released on a CD-ROM in October 2000. Teachers, who were designated trainers in the use and application of the CD-ROM, provided workshops for teachers across Victoria on its use for curriculum planning.

As part of the review, the Board of Studies commissioned the Melbourne-based consulting group Education Strategies to benchmark the learning outcomes for English, Mathematics and Science in the *Curriculum and Standards Framework* against other curriculum documents with regard to their detail, degree of ambiguity, measurability and conceptual content. For English, the *Curriculum and Standards Framework* was compared to the New Standards Project, the *New Zealand Curriculum Framework*, New South Wales's syllabuses, the National Curriculum for England and Wales, and the California Content Standards. For Mathematics, the *Curriculum and Standards Framework* was compared to the Singapore syllabuses, the Curriculum Guidelines for Japan, the *Curriculum Framework for Kindergarten to Year 12 Education in Western Australia*, the National Curriculum for England and Wales, and the California Content Standards. For Science, the *Curriculum and Standards Framework* was compared to the Singapore syllabuses, the Ontario Curriculum, the *Curriculum Framework for Kindergarten to Year 12 Education in Western Australia*, the National Curriculum for England and Wales, and the California Content Standards. The Victorian Board of Studies (1998) reported that the *Curriculum and Standards Framework* compared favourably with these documents by introducing topics in a similar way, increasing complexity of topics across levels, and being detailed, unambiguous, measurable and presenting conceptual content.

In June 1999, the Board of Studies hosted a symposium, *Setting Standards for Our Students: Ensuring High Level Achievement*, at the Melbourne Business School. The symposium provided a forum for policymakers and education leaders to learn more about the role of standards-based reform in the USA in

improving student achievement, and advancing practice in this area with application to schools. Curriculum leaders from schools, regional offices and other states heard four keynote speakers discuss the importance of setting standards to ensure high quality student achievement. Robert Schwartz, then president of Achieve outlined aspects of the standards movement in the USA identifying six key issues. The variable quality of content standards needs to be supported by performance standards. Little experience is available in developing standards-based curriculum. Models for professional development need to be designed to support standards-based reforms. Teacher preparation programs need to become more relevant to standards-based education. Assessment systems need to be aligned more closely to standards. Public support for standards-based reforms needs to be sustained. Then director of standards' development and applied learning for the National Center on Education and the Economy, Ann Borthwick commented on the New Standards Project. She emphasised its role in translating content standards into performance standards, and assembling representative samples of student work. Work in translating the standards produced in the New Standards Project to meet the requirements of school systems in New York City was cited as a significant outcome of the project. Geoff Masters, director of the Australian Council for Educational Research, and Peter Hill, then director of the Centre for Applied Educational Research at the University of Melbourne, commented on outcomes-based education in Australia. Masters reported that the development of outcomes in Australia was focused on seven issues. Outcomes should make explicit what is valued, describe learning outcomes, delineate the direction of intellectual development, be informed by evidence, be illustrated with samples of student work, provide a framework for monitoring growth, and furnish a basis for dialogue. Hill emphasised the need to define performance standards that make explicit standards implied in expected outcomes, establish realistic targets, put in place improvement strategies to meet the targets, and review the targets periodically. The Victorian Board of Studies (1999) published a summary report on the symposium drawn from the keynote presentations and issues raised in panel discussions.

In April and May of 2003, round-table discussions on school improvement, curriculum reform, professional and workforce development, and innovation and excellence led the Minister for Education to deliver a speech calling for reform of the education system. Appointed in August 2003 to develop a ministerial statement, four leadership groups, consisting of principals and teachers, visited more than 50 schools and conducted 27 regional forums across Victoria to inform their views. In addition, an ICT Think Tank was formed to advise on information and communication technology, whilst a web site was established to collect public responses to an on-line survey. Published in November by the Victoria Department of Education and Training (2003), the statement outlined three directions for reform. First, student learning needs should be met by developing a framework of essential learning, improving student assessment, promoting principles for teaching and learning, and applying a new approach for allocating resources. Second, leadership capacity should be built by improving selection of and advice for principals, and establishing focused professional development for teachers. Third, a model for school review that takes account of differences between schools should be implemented, and a fund to drive school improvement should be established.

In 2003, the Victorian Curriculum and Assessment Authority commissioned a review of curriculum and standards' documents used in the other seven Australian states and territories as well as in Ontario, Finland, Hong Kong, the International Baccalaureate Organisation, Singapore, the United Kingdom, and Pennsylvania. The Victorian Curriculum and Assessment Authority (2004a) reported that the analysis of these documents identified that the key attribute for a curriculum was the specification of essential learning reflected in the content of standards and assessments. This conclusion formed the basis for a discussion paper outlining a new approach for the curriculum, which was released in February 2004. Presented for discussion by educators at 18 forums held across Victoria in March 2004, the paper was revised to form a consultation paper published by the Victorian Curriculum and Assessment Authority (2004b). Dissemination of the consultation paper to local, interstate and international education experts occurred at a conference held in March 2004. The consultation included 10 regional seminars convened to assist more than 800 curriculum leaders facilitate discussions on the consultation paper in schools, more than 30 consultations with principals, and focus groups with parents. Almost 1,000 responses, which were collected by an on-line survey, were analysed by the Deakin University Consultancy and Development Unit. Published by the Victorian Curriculum and Assessment Authority (2004c), the report of the consultation indicated a strong level of endorsement for the proposed reform. Following the consultation, 16 reference groups comprising more than 250 educators from across the public, Catholic and independent sectors developed learning standards.

Although launched by the Minister for Education in March 2005, the Victorian Curriculum and Assessment Authority (2005) released the *Victorian Essential Learning Standards* in two stages. The rationale and structure, descriptions of the domains of essential learning, descriptions of the stages of learning, and characteristics of learners at six levels, and a set of assessment principles were released on-line in December 2004. The learning focus statements, standards for each domain across the six levels, and some sample units were released on-line in February 2005, and later distributed to schools on a DVD. The *Victorian Essential Learning Standards* comprise three strands, consisting of several domains, which describe the essential knowledge, skills and behaviours students should learn. Each domain organises learning focus statements and standards by dimensions. The analysis of the learning focus statements outlined in the *Victorian Essential Learning Standards*, which is presented in Table 2, indicated that they are curriculum standards. They are followed by content standards with performance indicators at the end of the preparatory year and years 2, 4, 6, 8 and 10. The sample units are supported by two reference documents. The Teaching and Learning Resource is designed to provide further advice on teaching and learning theory, principles and strategies for teachers working with sample units. The Assessment Resource is designed to provide further advice on assessment, ideas and strategies for teachers working with the sample units.

In November and December of 2004, the Victorian Curriculum and Assessment Authority and the Department of Education and Training convened a series of state-wide seminars for almost 3,000 principals and curriculum leaders to assist

them in planning strategies to implement the *Victorian Essential Learning Standards* in their schools. During 2005, five methods were used to validate the *Victorian Essential Learning Standards*. An independent evaluation of the standards was conducted. A comparability study was undertaken in five learning domains using national and international curriculum documents. Assessment tasks in specific domains at particular levels were trialed in 40 schools. Feedback was provided through an on-line questionnaire. As a consequence of the validation process, revisions to the *Victorian Essential Learning Standards* were published in December 2005. The publications, *Students with Disabilities Guidelines* and the *English as a Second Language Companion to the Victorian Essential Learning Standards* were released in January 2006. The Victorian Curriculum and Assessment Authority, the Department of Education and Training and the Catholic Education Commission collaborated to develop curriculum planning guidelines, principles of learning and teaching for years P to 12, assessment and reporting advice, and a knowledge bank. The curriculum planning guidelines provide a model to support school-based curriculum planning. The model incorporates five phases: understanding the context; planning and reviewing; implementation; continuous monitoring; and evaluation and review. The principles of learning and teaching for years P to 12, which provide a structure to assist teachers focus on their professional development, consist of six statements about quality learning and teaching practices. The knowledge bank provides a resource for education and training providers to share exemplary and promising programs. These additional support materials were distributed to schools on a second DVD in March 2006.

Western Australia

In June 1994, the Minister for Education appointed the Ministerial Committee to Review Curriculum Development to review current processes, examine future options, and evaluate the financial implications and accountability of its recommendations. Consisting of a two-stage process, the review involved evaluating existing curriculum provisions and deriving a set of recommendations, and then preparing an organisational model and an implementation plan. In its report, the Western Australia Ministerial Committee to Review Curriculum Development (1995) recommended that a Curriculum Council should be formed to develop a curriculum framework, consisting of an overarching statement of the whole curriculum together with learning area statements, which specify learning outcomes. Appointed by the Interim Curriculum Council formed in June 1996, learning area committees developed a draft framework in April 1997. The draft framework was distributed to teachers and interest groups in July 1997 for a six-month review involving a series of public meetings, focus group sessions and a student forum. A survey identified from more than 1,800 responses that whilst the respondents agreed the curriculum framework would enable more effective curriculum planning, there were features that some respondents wished to be changed, and that its implementation would require extensive professional development. Revised over six months by the Curriculum Framework Committee, the curriculum framework was approved and published by the Curriculum Council of Western Australia (1998), which had been established in August 1997.

The *Curriculum Framework for Kindergarten to Year 12 Education in Western Australia* consists of an overarching statement and eight learning area statements. The overarching statement outlines seven key principles and 13 overarching learning outcomes to which all learning areas contribute. A further 66 learning outcomes are specified in the learning area statements: four in the Arts; nine in English; five in Health and Physical Education; six in Languages other than English; 19 in Mathematics; nine in Science; seven in Society and Environment; and seven in Technology and Enterprise. The analysis of the overarching and learning area learning outcomes outlined in the *Curriculum Framework for Kindergarten to Year 12 Education in Western Australia*, which is presented in Table 2, indicated that the overarching learning outcomes are curriculum standards, whilst the learning area outcomes are content standards.

The Western Australia Department of Education and Training, the Catholic Education Office of Western Australia and the Association of Independent Schools of Western Australia produced a set of guidelines for professional development to provide a common approach to implement the curriculum framework. Such professional development was based on teachers gaining an understanding of the curriculum framework, exploring ways of implementing it, and implementing the learning area outcomes in their classrooms. School systems were required to establish their own strategic plans that identified the types of professional development and the sequence for achieving this over the implementation phase. In order to support implementation of the curriculum framework, the Curriculum Council of Western Australia released three sets of professional materials. A guide presented a whole-school approach for implementing the curriculum framework. A set of nine books presented case studies focusing on teachers' experiences in a learning area or across the curriculum. A bibliography listed resources. In 2001, the Curriculum Council of Western Australia published a four-part series of professional materials providing an understanding of outcomes, a focus on achievement, a plan for learning, and a statement on curriculum collaboration.

As part of the review reported by the Taskforce on Structures, Services and Resources supporting Government Schools (2001), teachers indicated a need for support materials to provide advice about what students should be taught to improve their achievement of outcomes across the phases of development. With funds provided by the Public Education Endowment Trust, the Curriculum Council of Western Australia, the Department of Education and Training, the Catholic Education Office of Western Australia and the Association of Independent Schools of Western Australia commenced developing curriculum guides in 2003. After identifying the types of curriculum documents that teachers use and consulting curriculum experts, curriculum officers developed a scope and sequence of content for the outcomes in the curriculum framework. The needs of learners and the key focus of learning at each level of development were identified by consulting reference groups of teachers. A curriculum guide for each learning area was written in 2004 in consultation with the particular reference group, and published and distributed to schools in 2005. The content to be taught to students to achieve the overarching and learning area outcomes specified in the curriculum framework is articulated in two types of curriculum guide. The curriculum framework curriculum guides sequence the content over the four phases of development identified in the curriculum framework. They

serve for whole school or faculty level planning to ensure that the full range of outcomes is being adequately addressed, and to inform individual teachers on typical content and to assist in developing an educational program. The elaborated curriculum guides expand the material presented in the curriculum framework curriculum guides, showing typical sequences of content that students should be taught within a particular phase. The elaborated curriculum guides are intended to assist teachers develop detailed educational programs.

In 1990, the Western Australia Ministry of Education began developing student outcome statements closely matching the national profiles. The student outcome statements were trialed in two phases, the first involving 120 schools in 1992 and the second involving 88 schools in 1994 and 1995. The second trial led to student outcome statements' reference groups refining the student outcome statements to ensure their congruence with the curriculum framework, and the Education Department of Western Australia (1998a) publishing the *Outcomes and Standards Framework*. Simultaneously, the Education Department of Western Australia (1998b) published a policy and guidelines for teachers to use the *Outcomes and Standards Framework* to inform planning of educational programs, and to assess and report on student progress and achievement. Introduction of the policy and guidelines from 1999 led the Education Department to design the Curriculum Improvement Program, requiring schools to develop and implement curriculum improvement program plans. District curriculum teams supported schools in implementing their plans, and monitored implementation through school reviews. The initial phase of the Curriculum Improvement Program enhanced the position of the curriculum framework in schools, improved the understanding of progress maps, led teachers to collaborate with other teachers, increased the role of school administrators in curriculum leadership, and extended district curriculum teams to meet schools' needs.

Beginning in 2002, the Curriculum Council of Western Australia coordinated a review of the student outcome statements and progress maps produced by the Catholic Education Office of Western Australia with a view to producing a common set of progress maps. The Australian Council for Educational Research validated a working version produced in 2003. Published by the Western Australia Department of Education and Training (2005), the revised *Outcomes and Standards Framework* presents learning outcomes derived from the curriculum framework organised into the eight learning areas by strands and specified at foundation and eight levels. The analysis of the learning outcomes outlined in the *Outcomes and Standards Framework*, which is presented in Table 2, indicated that they are content standards expressed as benchmarks with performance indicators. Following review based on consultations with stakeholders and representatives of teachers, the Western Australia Department of Education and Training (n.d.) published a revised policy and guidelines. The revised policy removed the requirement to report on every outcome in each learning area once in two years, and linked the policy to new standards in the revised *Outcomes and Standards Framework*. School leaders were involved in professional development during 2004 to ensure they understood the revised policy and guidelines before they came into effect at the beginning of 2005 to guide implementation of the second phase of the

Curriculum Improvement Program. This phase focused on three elements. First, procedures were developed to clarify minimum expectations schools needed to meet regarding the revised policy and guidelines, and a common report form was developed. Second, the revised *Outcomes and Standards Framework* was introduced, focusing on applying its new standards to define student performance. Third, support was provided through professional development and resource materials. To assist in making consistent judgments and lead curriculum improvement, the Department of Education and Training developed modules, which were delivered locally both in formally structured programs and by providing opportunities for individual teachers to explore their own practice. Four types of resource materials were produced. Advice papers on primary reporting, portfolios, values, students with disabilities, and English-as-a-second-language students were released to support schools. The Planning for Teaching project presents four-to-six week teaching units linked to the *Outcomes and Standards Framework* and the curriculum guides. The Reflective Teacher presents a handbook and video, which explain and illustrate how teachers have used action learning in a range of settings. The Education Support Package provides individual education plans, teaching strategies and classroom management to support the foundation outcome statements referring to students with disabilities.

With the publication of the curriculum framework, it became necessary to determine whether the existing system of post-compulsory education was compatible with its intentions. In August 1998, the Curriculum Council of Western Australia appointed the Vision Implementation Working Group, which determined the directions for a Post-Compulsory Review. In consultation with a Community Reference Group, a Student Reference Group and several focus groups, the Vision Implementation Working Group examined the extent to which post-compulsory courses could be aligned to the outcomes, and released a discussion paper in October 1999. Review of the discussion paper involved 350 information sessions and the collection of 600 submissions. Analysis of the responses led to recommendations that a single curriculum structure of approximately 50 courses of study should be aligned to the curriculum framework. After an eight-month review involving information sessions, public meetings and exploratory course of study activities, the recommendations were revised on the basis of responses to an on-line survey and written submissions, and published by the Curriculum Council of Western Australia (2001). In response, the Minister for Education released a report in March 2002 supporting the development of approximately 50 courses of study aligned to the curriculum framework.

Subsequently, the Post-compulsory Education Committee oversaw the work of reference groups in developing the new courses of study beginning in August 2002. Following review by teachers at consultation meetings, the drafts of the new courses of study are revised. The Curriculum Council of Western Australia approved the new course of study in the first round for Aviation in October 2004, to be implemented in year 11 in 2005 and year 12 in 2006. The second round of Engineering Studies, English, and Media Production and Analysis, approved in March 2005, is to be implemented in year 11 in 2006 and year 12 in 2007. The third round of 20 courses of study is to be implemented in year 11 in 2007 and year 12 in 2008, whilst the fourth round of 23 courses of study is to be

implemented in year 11 in 2008 and year 12 in 2009. Beginning in 2005, teachers were provided with a five-day professional development program to assist implementation of the new courses of study in schools.

In March 2005, public controversy arose over the new courses of study. Following appointment as Minister for Education, Ljiljana Ravlich announced an intention to remove older, tired teachers from schools and replace them with younger and more enthusiastic counterparts. Early in April, the Western Australian Secondary School Executives Association reported that there was widespread concern among teachers about the reform of post-compulsory education. Following the failure of the Curriculum Council's chief executive, Norma Jeffery, to clarify whether the new post-compulsory education system was outcomes-based, concerns were raised in the press about the new system's dependence on outcomes-based education. Recognising these concerns, the Curriculum Council extended the time-line for fully implementing the new courses of study by one year until 2009. At the same time, the opposition Liberal Party called for an urgent review of proposed changes involving outcomes-based education. Following the issuing of a joint statement by the vice-chancellors of Western Australia's five universities supporting the proposed changes, the Australian Mathematical Sciences Institute suggested that schools may choose to abandon the new courses of study in favour of the International Baccalaureate. Early in May, the Western Australian Government announced the 12-month Inquiry into Changes to the Post-Compulsory Curriculum in Western Australia to be conducted by the Legislative Assembly's Education and Health Standing Committee. In spite of the Inquiry's lengthy schedule, Minister Ravlich refused to change the time-line for implementing the new courses of study. Soon afterwards, a writer in the physics reference group resigned over concerns about the outcomes-based approach adopted for developing this course of study. A few days later, a writer in the mathematics reference group resigned, stating that there was widespread dissatisfaction among members of reference groups. Early in June, Mercedes College teacher, Gregory Williams, proposed forming a pressure group to lobby against outcomes-based education at a meeting of the Catholic schools' Parents and Friends Federation. Following offers of support from 70 teachers, People Lobbying Against Teaching Outcomes was formed and a web site launched in mid June. At the same time, Minister Ravlich formed the Ministerial Taskforce on Issues surrounding Proposed Changes to Post-Compulsory Education. Late in June, the State School Teachers' Union of WA directed its members to delay implementing the new courses of study for at least a year. Following release of the first reports on outcomes-based assessments, parents expressed their opposition in letters published in the press. A few days later, the Department of Education and Training announced that a standardised report form for years 1 to 10, providing levels of achievement and teachers' comments, would be used in all schools by 2006. Representatives of subject associations responded with varying views about outcomes-based education after Bruce Hancy, president of the Economics Teachers' Association, declared that its implementation had been affected by the involvement of too many stakeholders. In mid July, Premier Geoffrey Gallop defended vigorously the controversial reform amid growing opposition from teachers and parents by relabelling outcomes-based education, standards-based education. Principals of 14 high schools called a crisis meeting with Curriculum Council staff about mounting opposition to outcomes-

based education. Teachers of the Aviation course of study reported excessive workloads, although they were divided in their support for or opposition to outcomes-based education. After Minister Ravlich released the standardised report form, the State School Teachers' Union of WA threatened to impose a ban because the report form included incompatible forms of assessment. The Independent Education Union also called for a delay in implementing the new courses of study. At the end of July, Minister Ravlich announced the introduction of a General Aptitude Test to appease those who believed outcomes-based education diminished academic achievement. After a principal at a Catholic high school spoke out against outcomes-based education, the Catholic Education Office of Western Australia gagged principals from openly opposing it. In mid August, Ministers Nelson and Ravlich clashed in a public debate over the merits and shortcomings of outcomes-based education. The Catholic Secondary Principals Association and the Association of Heads of Independent Schools Australia lobbied politicians to delay implementation of the new courses of study. Although endorsing outcomes-based education, the Western Australian Council of State School Organisations called for its implementation in schools to be delayed. At the end of August, Norma Jeffrey, the chief executive of the Curriculum Council of Western Australia was replaced at the instigation of Minister Ravlich, and an on-line forum for public comment on its web site was removed. The Association of Independent Schools and the Parents and Friends Federation called for the implementation of the new courses of study to be delayed. Early in September, Minister Ravlich acquiesced to the growing opposition by agreeing that implementation of courses of study, scheduled for 2007, could be delayed, if they were not ready. Soon afterwards, the Western Australian Government announced additional funds and professional development would be provided to schools to implement new courses of study. Then Minister Ravlich announced that the Curriculum Section in the Department of Education and Training would be restructured, and syllabus writers would be employed to provide teachers with specific content to be taught to students. A poll of 402 people conducted by *The West Australian* found that 25 percent of respondents supported the change to outcomes-based education, 35 percent opposed the change, and 40 percent were undecided. Furthermore, 22 percent believed outcomes-based education would raise educational standards, 34 percent believed it would lower standards, 16 percent believed it would make no change, and 28 percent were undecided. Late in October, the State School Teachers' Union of WA released the findings of surveying 2,400 teachers on their views about the impact of outcomes-based education. From responses returned by 807 subjects, it was found that 16 percent of respondents had left teaching, 62 percent were considering leaving teaching, 20 percent had taken personal leave, and 11 percent had taken sick leave. In mid December, the Curriculum Council of Western Australia announced that marking keys would be developed to assist teachers assess courses of study for mathematics and science. Late in December, Minister Ravlich agreed to support the recommendations presented by the Education and Health Standing Committee in its interim report.

At the commencement of the Inquiry into Changes to the Post-Compulsory Curriculum in Western Australia, the Education and Health Standing Committee adopted six terms of reference. They included the merit and basis, the readiness of the education system, and the financial implications of the

proposed changes. They also referred to the effects of extending outcomes-based curriculum, assessment and reporting to the post-compulsory level, and amalgamating tertiary entrance examinations' and non-tertiary entrance examinations' subjects and assessment. The Committee was also given scope to investigate any related matter it considered necessary. The Committee advertised widely, receiving 182 written submissions and holding 24 hearings in 2005. A substantial number of the submissions raised concerns about the proposed curriculum, commented on significant issues relating to assessment, moderation and examinations, and discussed details concerning implementation of the new courses of study. In December, the Education and Health Standing Committee (2005) released an interim report, which examined the second term of reference, the issue of readiness for the proposed changes. More than 100 submissions addressed this issue, many arguing that the education system was not ready for the new courses of study. Concerns were raised about uncertainty caused by the lack of curriculum materials, examples of examination papers and other resources, as well as the timeliness in providing professional development and support materials. These shortcomings had led to substantial levels of anxiety among teachers and a perception of a program being implemented before it had been fully developed. Since the release of the report of the Ministerial Taskforce on Issues surrounding Proposed Changes to Post-Compulsory Education, the Committee recognised that resources had been increased to develop support materials, and professional development had been rescheduled to minimise disruption to schools. In the interim report, the Committee recommended that the Curriculum Council should publish a timetable in 2006 for the commencement of all courses of study, a list of support materials, and the dates the materials should be provided. Core support material should be provided by the end of the first term in the year preceding the implementation of a new course of study. In the case when this cannot be met, implementation of a new course of study should be delayed until the following year. The Committee is expected to present a final report to the Legislative Assembly by the end of June 2006.

Concerns expressed within the education community and continuing media attention led to the establishment of the six-member Ministerial Taskforce on Issues surrounding Proposed Changes to Post-Compulsory Education in June 2005. The Taskforce worked with the Curriculum Council's secretariat to recommend processes for resolving issues relating to the provision of support materials and professional development, factors affecting assessment, examinations and moderation, and improving communication. In its report published by the Curriculum Council of Western Australia (2005), the Taskforce presented 10 recommendations relating to assessment and courses of study, external assessment, moderation and scaling, professional development and resources, communication, evaluation, and cross-sector collaboration. At the report's release to a forum of 260 principals in July 2005, Minister Ravlich announced several new measures. A professional development day would be provided in 2006. A General Achievement Test would be implemented. The implementation process would be monitored and evaluated. Assessment and support materials would be developed. Reference groups would be reconvened. Course design would become more flexible, and new courses would be subject to ongoing evaluation.

Conclusion

The processes of national curriculum collaboration in Australia and standards-based reforms in the USA show more similarities than differences. National curriculum collaboration constituted a central element of the Common and Agreed National Goals for Schooling in Australia released by the Australian Education Council in April 1989 as part of the Hobart Declaration on Schooling. The national standards arose from the core curriculum of five subjects incorporated in the six National Education Goals expounded following the Charlottesville Education Summit convened by President George H. W. Bush in September 1989. However, policymakers in Australia entrusted a national curriculum agency to develop the national statements and profiles, a closed process that provided only limited consultation with the wider community. This situation contrasted with the USA, where nationally recognised groups developed national standards for particular subject areas in consultation with the wider community, but largely independent from the work of other subject-based groups. The federal systems of government prevailing in both countries acted against national curriculums being adopted. The action of the Australian Education Council and the Ministers for Vocational Education, Employment and Training in July 1993 of referring the national statements and profiles to the states and territories for endorsement ensured that a prescriptive national curriculum, which overrode states' rights, was not adopted. The tradition of local control and state responsibility for education in the USA hindered the rise of a strong movement for developing a national curriculum, in spite of there being considerable public support during the late 1980s and early 1990s for national initiatives in curriculum reform.

State-level policymakers in Australia and the USA were constrained by similar impediments from utilising the work produced at the national levels. The incorporation of the principles embodied in the national statements and profiles into the curriculums of the Australian states and territories represented a critical challenge for state-level policymakers, especially in light of inadequate information provided by national authorities about the quality of their curriculum documents. Although the Curriculum Corporation surveyed state and territory education agencies in 1994, 1995 and 1996 to identify approaches being taken by the Australian states and territories, the data collected only provided information about the progress of implementation. The investigation into the implementation of the national profiles, reported by Lokan (1997), identified that the pattern of implementation varied from school to school. The study of curriculum documents used by the Australian states and territories, reported by the Curriculum Corporation (2003), examined the quality of these documents, although the analysis focused on comparing their structures. The study of curriculum documents used by the Australian states and the Northern Territory, reported by Donnelly (2005), provided the first analysis of the quality of outcomes in these documents. However, the rationale for the study, the appropriateness of the methodology, and the quality of report writing drew criticisms from some commentators (Derewianka, 2005, Reid, 2005b). The translation of the national standards by state-level policymakers and others in the USA into state standards represented the most critical challenge for developing curriculums around clearly defined sets of expectations, and assessment systems that measured whether students are meeting these

expectations. In spite of the demise of a proposal to establish the National Education Standards and Improvement Council with authority to certify state standards, this role was assumed in a de facto fashion by several organisations. They issued reports viewed by many policymakers and educators as offering endorsements on the progress and quality of state standards. The Making Standards Matter series of reports, released by the American Federation of Teachers in 1995, 1996, 1997, 1998, 1999 and 2001, were held by the education community to reflect a liberal standpoint. The State of State Standards series of reports, released by the Thomas B. Fordham Foundation in 1998, 2000 and 2005, were held by the education community to reflect a conservative standpoint. The Quality Counts series of reports, released annually since 1997 by Editorial Projects in Education, the publisher of the weekly newspaper, *Education Week*, and the monthly journal, *Teacher Magazine*, examine the condition of education in the states. They rank states' performances on developing standards and assessment systems, professional development, school organisation and effectiveness, and quality and allocation of resources.

The findings of the analysis of curriculum documents produced at the national and state levels in Australia undertaken for this study indicate that considerable disparity exists between different jurisdictions, a situation that appears to be widening. These differences are often disguised by the perception that curriculum development in Australia proceeds uniformly according to principles espoused by outcomes-based education. Policymakers, education leaders and curriculum developers use a variety of terms to refer to these principles. For instance, the Curriculum Council of Western Australia states that the *Curriculum Framework for Kindergarten to Year 12 Education in Western Australia* presents an 'outcomes approach'. The Queensland School Curriculum Council describes curriculum development in that state produces 'outcomes-focused syllabuses'. The Northern Territory Department of Employment, Education and Training states that the *NT Curriculum Framework* presents an 'outcomes-focused approach'. The controversy arising in Western Australia in 2005 over outcomes-based education at the post-compulsory level led the state's policymakers to refer to these principles as 'outcomes- and standards-based education'. Although policy statements and curriculum documents from other states and territories fail to make explicit statements of this sort, they are likely to leave teachers, parents and students with superficial impressions that similar principles underpin their policies and documents.

The analysis of this body of curriculum documents suggests that they may not present such a homogenous picture. The historical evidence suggests that the principles underpinning the national statements and profiles were derived mainly from curriculum practices inherent in the National Curriculum being developed at that time for England and Wales. A pilot project conducted between 1988 and 1990 to develop a national statement for Mathematics provided the model for using a 'curriculum map', produced by screening curriculum documents used across Australia, to define the principles and content for particular learning areas. The conceptual framework for the national profiles was first presented in a document released by an Australian Cooperative Assessment Program working party in October 1990. Chaired by Garth Boomer, the working party was influenced by his view that an outcomes-based approach could be

formulated within levels of attainment derived from teacher-centred standards (Ellerton and Clements, 1994; Marsh, 1994). Furthermore, the analysis of these documents revealed that the format and content of some of the national statements resemble the statutory orders for the National Curriculum, suggesting that the latter documents were a prominent influence on the national statements. The organisation of both the national profiles and the attainment targets in the National Curriculum into levels also suggests a common derivation. On the other hand, the specification of the national profiles as outcomes and pointers is so profoundly different to the specification of the attainment targets in the National Curriculum to suggest that another source, outcomes-based education, was becoming an important influence at this time.

The analysis of the curriculum frameworks and syllabuses produced by the Australian states and territories shows that the statements of rationale presented in these documents are substantially different from those presented in the national statements and profiles. Although a classification can be ordered along a continuum to form two distinct classes of 'outcomes-based' or 'standards-based' at the extremes, an analysis applying this typology suggests that the 'outcomes focus' in these documents presents a more complex pattern. It confirms that certain principles of outcomes-based education may be the paramount influence on some aspects of these documents, whilst certain principles of standards-based education may be an important influence on other aspects. In spite of this conclusion, some documents show a stronger influence of outcomes-based education, whilst others show a closer affinity with standards-based education.

Referring to the column headed 'type of standards' in Table 2, the outcomes in the *NT Curriculum Framework*, the *South Australian Curriculum, Standards and Accountability Framework*, the *Victorian Essential Learning Standards*, and the *Curriculum Framework for Kindergarten to Year 12 Education in Western Australia* show an affinity to outcomes-based education. Outcomes in these documents are sometimes expressed as curriculum standards, although measurable content standards are more common. The *NT Curriculum Framework* presents a mixture of curriculum and content standards, whilst the *South Australian Curriculum, Standards and Accountability Framework*, the *Victorian Essential Learning Standards*, and the *Curriculum Framework for Kindergarten to Year 12 Education in Western Australia* follow each curriculum standard with sets of content standards. The *ACT Curriculum Requirements*, New South Wales's syllabuses, Queensland's syllabuses and the *Essential Learnings Framework* show a stronger affinity to standards-based education. Outcomes in these documents are usually expressed in a measurable form as content standards.

Referring to the column headed 'structure' in Table 2, the organisation of subject matter into interdisciplinary and non-disciplinary topics as essential learnings, suggests that some curriculum documents have been influenced by outcomes-based education. The *NT Curriculum Framework* specifies outcomes for interdisciplinary essential learnings referring to the Inner, Communicative, Collaborative, and Constructive learner, and references these outcomes to the outcomes within each learning area. The *South Australian Curriculum*,

Standards and Accountability Framework references interdisciplinary essential learnings for Futures, Identity, Interdependence, Thinking and Communication to key ideas within each learning area. The *Essential Learnings Framework* specifies key element outcomes for non-disciplinary essential learnings referring to Thinking, Communicating, Personal Futures, Social Responsibility and World Futures. The *Victorian Essential Learning Standards* specify standards for interdisciplinary essential learning in Communication, Design, Creativity and Technology, Information and Communications Technology, and Thinking. The *Curriculum Framework for Kindergarten to Year 12 Education in Western Australia* does not define essential learnings, but references links across the curriculum between the overarching statement and the learning area statements, and within the learning area statements. It is also evident that the identification and specification of interdisciplinary and non-disciplinary essential learnings will constitute important elements of the ACT Curriculum Requirements and the *Queensland Curriculum, Assessment and Reporting Framework* currently under development. The organisation of subject matter into learning areas in New South Wales and Queensland's syllabuses shows a stronger affinity in these documents to standards-based education. Outcomes in these documents base content standards on traditional academic disciplines.

In most cases, it is difficult to attribute these effects on curriculum development in Australia to particular external sources. Although William Spady reported working with educators in Queensland, South Australia and the Northern Territory, his involvement in conducting a series of workshops in September 1992 and developing the *NT Curriculum Framework* in September 1999 represents the only direct influence of an advocate of outcomes-based education. Similarly, the involvement of advocates of standards-based education in revising Victoria's *Curriculum and Standards Framework* in July 1999 represents the only direct influence of standards-based education. In the information age, when the exchange of curriculum information between different countries has increased at an expeditious rate, it is likely that curriculum developers have solicited information from diverse sources. This conclusion is evident from an examination of bibliographies in those documents that provide them, showing that references are most commonly made to publications on curriculum reforms in Australia, but also to both outcomes-based and standards-based education in the USA. Undoubtedly, curriculum developers screen the range of available publications, selecting references on the basis of compatibility with their particular philosophic positions on education.

The analyses of these curriculum documents intimates that the philosophic position on education held by many curriculum developers in Australia reflects the principles of outcomes-based education. However, the lack of clarity about some issues, such as the current interest among curriculum developers in specifying interdisciplinary and non-disciplinary essential learnings, raises questions about the extent of their adherence to these principles. Can this interest be attributed to the influence of outcomes-based education, dissatisfaction with politically agreed compromises reached in the 1990s over the arbitrary placement of disciplines into learning areas, or concerns about the scope of an overcrowded curriculum? On the other hand, some educators seem to be open to accepting the principles of standards-based education. This conclusion is based on the opposition gathering among some educators,

particularly in Western Australia, to the dominance of outcomes-based education on curriculum reforms in Australia from a standpoint that its emphases on multi-disciplinary and constructivist approaches to learning have impaired students' academic achievement. With these differences being highlighted at present, there seems little prospect of contending groups within the education community reaching a consensus on a direction to proceed in curriculum policy. Furthermore, it is unclear whether the provision of statements of learning setting out essential knowledge, understanding, skills and capacities will resolve this issue conclusively. Instead, policymakers, education leaders and curriculum developers may need to consider alternative approaches for curriculum planning. In one such proposal, Reid (2005a) has postulated a new direction for future curriculum planning, but its capability for neutralising the issues underpinning divisive debates needs to be assessed, its detailed organisation requires further articulation, and its central propositions need to be disseminated more widely within the education community.

In conclusion, provisions relating to academic standards and assessment in legislation enacted in the USA and Australia should be compared. The No Child Left Behind Act extended previous provisions in the Goals 2000 Educate America Act encouraging the states to develop standards-based assessment systems by requiring them to establish annual assessments in reading language arts and mathematics for every student, and provide accountability that schools need to meet. The provisions in the Schools Assistance (Learning Together – Achievement through Choice and Opportunity) Act move in the same direction by establishing assessments in literacy, numeracy, English, mathematics, science, and civics and citizenship, and providing accountability by requiring schools to publish information on student achievement and other areas of school performance. Whilst there are similarities between the provisions for student assessment, school accountability, teacher quality, and safe schools in The No Child Left Behind Act and the Schools Assistance (Learning Together – Achievement through Choice and Opportunity) Act, an important difference of emphasis exists between the policies generating this legislation. Federal education policy in the USA aims to improve student performance on academic standards through the process of adequate yearly progress that provides some flexibility for the states. On the other hand, the Australian Government aims to bring about greater conformity between the states and territories in academic standards by introducing a common set of statements of learning.

This review identified that the principles underpinning curriculum development in Australia may be shifting from those principles championed by advocates of outcomes-based education to ones espoused by standards-based education. Although it showed that the practice in standards-based education of setting measurable content standards focused on cognitive learning is becoming entrenched in curriculum development, the practice reminiscent of outcomes-based education of organising outcomes around interdisciplinary or non-disciplinary topics has gained some ground. It also suggested that the principles of standards-based education could underpin the initiative to develop statements of learning by shifting curriculum development away from the definition of vague, and inherently unmeasurable, outcomes towards promoting the development of clear and measurable content standards based on cognitive learning. The difficulty in providing definitive conclusions about this issue lies in

the failure of education authorities in Australia to develop criteria to assess the nature and quality of outcomes in curriculum documents. Independent evaluations could be important for identifying the strengths and weaknesses in the quality of outcomes in curriculum documents, but also for clarifying the philosophic positions on education held by curriculum developers. Forming a cadre of educators to evaluate outcomes in curriculum documents may offer policymakers with the best hope of resolving competing needs to identify essential learnings and to specify rigorous academic standards, thereby avoiding the possibility of curriculum development in Australia being held hostage to incompatible ideologies.

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Glossary

Benchmarks refer to sub-components of standards specified at particular developmental levels.

Content standards refer to the knowledge and skills essential to a discipline that students should know and be able to do.

Curriculum standards refer to teaching and learning methods, and activities that should take place in the classroom.

Opportunity-to-learn standards, which address conditions necessary at each level of the education system to provide all students with opportunities to master content standards and meet performance standards, provide criteria covering six elements. These elements refer to the quality and availability of the curriculum, materials and technology, the capability of teachers to meet learning needs, the availability of professional development, the alignment of the curriculum to content standards, the adequacy of school facilities for learning, and the application of non-discriminatory policies.

Performance standards specify how competent a student demonstration must be to indicate attainment of content standards by distinguishing between adequate and outstanding levels of performance.

Performance indicators refer to examples of attainment towards achieving a standard at particular developmental levels.

Pointers (see performance indicators).