PROFILES OF EDUCATIONAL ASSESSMENT SYSTEMS WORLDWIDE

Assessment in Australian schools: current practice and trends

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This paper explores ten common themes concerning assessment practice in Australian education across the six states and two territories. The themes are: (1) a strong curriculum base influencing assessment, (2) the incorporation of school-based assessment in all certification, (3) preference for standards-referenced assessment, (4) respect for teacher judgement, (5) increasing vocational education delivery within schooling, (6) multiple pathways to future study and careers, (7) school-based assessment in the compulsory years of schooling, (8) moves towards outcomes-based frameworks, (9) issues relating to national benchmark data, and (10) equity issues.

Introduction

This snapshot of assessment in Australian school education can only provide an overview of major practices and trends. For almost every statement in the following discussion, an exception may exist. The multiplicity of the Australian education systems allows independent and individualized educational practices to be recognized, from home-schooling to the International Baccalaureate. Research on innovative curriculum and assessment projects occurs on a regular basis. Screening, intervention and alternative programs, especially for early literacy and numeracy, students with special needs, and children and youth at risk, are continuing focuses.

The discussion aims to provide sufficient information to provide an understanding of current principles and practice in Australia, and the resources for readers to make further enquiries. We have endeavoured to represent the activities of each state and territory fairly, and statements have been validated wherever possible, drawing on resource material from each state and territory.

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Understanding Australia

Australia is a federation of six states—Queensland, New South Wales, Victoria, Tasmania, South Australia and Western Australia—and two territories—the Australian Capital Territory (ACT) and the Northern Territory—known as the Commonwealth of Australia. Education is constitutionally a state/territory matter, an autonomy that is strongly protected. (In any subsequent discussion, the word ‘state’ used in isolation refers to both states and territories.) This is sometimes an enigma to those outside Australia given the total population of only 19 million people.

A common Australian objection to a single centralized system is based on the likelihood that a centralized national control would be based in the more densely populated south-east of the continent, hence raising anxiety about the system’s responsiveness to, and remoteness from, localized issues. The physical size and uneven population distribution of most Australian states already cause intrastate concerns about control from centralized offices in the most heavily populated regions. As an example, in the state of Queensland, central offices in Brisbane manage educational policy for schools in small remote, rural communities some 2000 kilometres away, comparable to a centralized European office in Brussels managing the educational practice of a school in a small town east of Kiev.

Most public expenditure on education is sourced directly or indirectly from taxes collected at the Commonwealth level and distributed through the state governments. The Commonwealth Government (also referred to as the Federal Government or the Australian Government) has gradually increased its influence on educational practices through the ‘power of the purse strings’. As in other countries, and discussed later, one area of pressure has been comparative assessments of state and territory literacy and numeracy performance in schools. A single national approach is resisted by the states because they perceive that it would erode state control of their own education systems.

While the existence of eight different state systems of education may appear an extravagant use of national resources, it does mean that these state systems act as eight different laboratories of educational experiments with the opportunities to share successful policies and practices. However, in most respects, the commonalities of the state systems outweigh their differences and present a more homogeneous front to the world than might first be perceived.

Three sectors of schooling are very visible in Australia: public (also referred to as state or government); Catholic; and Independent (the latter two grouped as non-government). Most schools in remote areas are government schools but may not offer the final two years of secondary schooling, Years 11 and 12, known as the upper secondary. Non-government schools can be single-sex or coeducational (and some offer boarding facilities). Government schools are predominantly coeducational although some state systems have introduced single-sex schools as well as Schools of Excellence in areas such as performing arts or sport.

In 2000, approximately 31% of students (20% Catholic, 10% Independent) were attending non-government schools, with a slightly higher percentage, at 36% overall, for secondary school students (MCEETYA, 2002). Federal funding supports all

government and non-government school students, the latter through a formula that adjusts for the apparent wealth of the school community. As most non-government schools also charge fees, the proportion of public funding allocated to non-government schools comparative to government schools is an ongoing issue.

Ten-and-a-half per cent of indigenous primary students (12 years or under) and 16.5% of indigenous secondary students were enrolled in non-government schools in 2000. Indigenous students comprise 3.4% of all Australian primary and secondary students (MCEETYA, 2002).

The commonalities of Australian educational and assessment systems

1. Curriculum

The *first common theme* of Australian education systems is that assessment systems cannot be discussed without reference to curriculum. Each state has at least one authority responsible for developing curriculum frameworks for school use. These typically provide valued outcomes, suggested resources and pedagogy, and assessment guidelines.

In some states, one authority develops the curriculum framework for all levels of schooling, usually with a governing body representing the three sectors of education discussed previously. An example is the newly formed Queensland Studies Authority. In other states, one body is responsible for the later years of schooling, for example, the Senior Secondary Assessment Board of South Australia (SSABSA); in those states, the state school sector generally has major responsibility for developing curriculum frameworks for the remaining years of schooling. (A useful reference for links to the various bodies in each state is www.curriculum.edu.au)

While a small number of schools follow specific independent curriculum, such as Montessori schools or small religious schools, most non-government schools choose to operate within the curriculum, assessment and certification frameworks of the relevant state or territory public system, although this is not mandatory. Their own independent authorities provide further elaboration of educational content relevant to them, such as values education or religious education and strategic policy organization.

The major commonality of the role of curriculum in assessment relates to the outcomes of two key national strategy documents: the Hobart Declaration and the Adelaide Declaration. *The Hobart declaration on schooling* (AEC, 1989) provided a set of common and agreed national goals for schooling in Australia supported by state, territory and Commonwealth ministers (a group known as the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA)). This declaration provided the first framework for cooperation between schools, states, territories and the Commonwealth. Its goals included, amongst others:

- preparation of an Annual National Report on Schooling
- national collaboration in curriculum development
- establishment of the Curriculum Corporation of Australia
- the goal of a common age of entry for Australian Schools.

Considerable effort was made to develop a national curriculum. However, in the end, it was not supported unanimously by the states. The Hobart Declaration was superseded by the *Adelaide declaration (1999) on national goals for schooling in the twenty-first century* (MCEEYTA, 1999). The following expectations for state-based but nationally focused education are among its goals (see www.curriculum.edu.au/mceetya/nationalgoals/natgoals.htm).

In terms of curriculum, students should have:

- 2.1 attained high standards of knowledge, skills and understanding through a comprehensive and balanced curriculum in the compulsory years of schooling encompassing the agreed eight key learning areas:
 - the arts (music, art, drama);
 - English;
 - health and physical education;
 - languages other than English;
 - mathematics;
 - science;
 - studies of society and environment;
 - technology;and the interrelationships between them.
- 2.2 attained the skills of numeracy and English literacy; such that, every student should be numerate, able to read, write, spell and communicate at an appropriate level
- 2.3 participated in programs of vocational learning during the compulsory years and have had access to vocational education and training programs as part of their senior secondary studies
- 2.4 participated in programs and activities which foster and develop enterprise skills, including those skills which will allow them maximum flexibility and adaptability in the future.
3. Schooling should be socially just, so that:
 - 3.1 students' outcomes from schooling are free from the effects of negative forms of discrimination based on sex, language, culture and ethnicity, religion or disability; and of differences arising from students' socioeconomic background or geographic location...

Here, Goal 2.1 supported the eight key learning areas (KLAs) that continue to underpin the curriculum frameworks for each state. Even though the initial attempt to establish a national curriculum did not succeed, considerable commonality and collaboration have emerged from the effort. Goal 2.2 provided the basis for reporting national literacy and numeracy performance against agreed national literacy and numeracy benchmarks, developed through the Curriculum Corporation. Goal 2.3 provided an impetus for all states to provide vocational education opportunities within school education (Australia has long had strong vocational training through the Technical and Further Education College sector, which students have traditionally entered after compulsory school-leaving age), discussed later, while Goal 2.4 provided opportunities for students to undertake work experience and other studies deemed to have practical value. Goal 3.1 reinforced and underpinned the ongoing concern with equity issues in education provision and outcomes.

Historically, state curriculum frameworks and accompanying assessment regimes

have focused on three groupings of students: early childhood/primary, lower secondary, and upper secondary schooling. Over time, formal centralized certification at the end of primary and lower secondary has eroded, in keeping with increases in legal school leaving ages and therefore the lack of utility for certificates earlier than the end of secondary schooling. Primary and lower secondary have tended to be combined into one framework, for example, Preschool to Year 10. The following discussion uses these levels of schooling as a focus for discussion of curriculum and assessment practices.

2,3,4. Assessment at the end of secondary schooling

At the end of secondary schooling, the stakes for students (and schools) increase, with employment and further education contingent on school outcomes. Assessment and reporting issues become much more critical and have been the subject of many reviews. However, the *second common theme* of Australian assessment and education, and perhaps the most significant, is that high-stakes assessment and reporting at the end of secondary schooling in all states and territories in Australia incorporate school-based assessment (internal assessment), typically in addition to centralized assessments (external examinations). In two cases, final subject assessments are wholly based on school assessments that are peer-moderated (ACT, Queensland). Elsewhere, school-based assessments are combined with external examination results. In some states, different subjects can have different combinations of internal assessments and external assessments. Assessments for school-leaving certificates are usually based on the last two years of school work (Years 11 and 12), although most states have arrangements whereby students can take subjects over a longer period. (Details on leaving school and entry to university for each state are available through the association of Australian Curriculum, Assessment and Certification Authorities (ACACA) at www.acaca.org.au and www.boardofstudies.nsw.edu.au/acaca/.)

Assessment reform at the upper secondary level has developed in Australia over the last 30 years for at least two reasons: first, to reduce the curriculum control exercised by universities through externally set examinations, in order to address the needs of the majority of students; and, second, to respond to the need to broaden the curriculum to include more practical and contextualized learning.

Two additional themes emerging from this reform are: first, the preference for standards-based (or criteria-referenced) assessment reinforcing the work undertaken in developing an appropriate and broad school curriculum; and second, respect for teacher professionalism in judging student achievement. These are our *third and fourth common themes*. While the nature of standards may be set slightly differently from state to state, the general principles are common. For example:

The standards-based Higher School Certificate offers syllabuses that set clear expectations of what students must learn and measures student performance against set standards. A student's mark in each course is reported against descriptive performance bands that show what the student knows, understands and can do. (Board of Studies NSW, 2002, p. 7)

Standards-based assessment is sometimes referred to in conjunction with criteria—further elaborations of aspects of standards against which a student’s work is judged and the characteristics or quality of performance expected of students at different levels. (The Guidelines for Assessment Quality and Equity developed by ACACA (www.acaca.org.au) indicate the common understandings of necessary elaboration, presentation and use of the term ‘criteria’ in Australian assessment systems.)

Anticipated evidence could also be referred to as:

- assessment task criteria
- assessment expectations

What might statements of anticipated evidence look like?

Statements of anticipated evidence are intended to make explicit the basis for judgements about students’ demonstrations of learning outcomes. The level of specificity of the statements will vary according to the needs of the students, the nature of the learning outcome(s) and the context of the assessment activity. At times, a statement of anticipated evidence for an assessment task might reflect the learning outcome in its entirety ... At other times, particularly where the learning outcomes are multidimensional in nature, teachers may prefer to develop more detailed statements. (QSA, QSSC, 2002a, p. 17)

Over time the state education systems have evolved respect for the professionalism of teachers in their work and respect for teacher judgement in assessing student performance. Curriculum for the twenty-first century is seen as incorporating aspects of learning that are important, cannot be assessed centrally, and require judgement to occur at a point of performance, usually the classroom (Pellegrino *et al.*, 2001). Necessarily, in such a situation, teachers become the primary assessors. Equally, each system recognizes that such expectations of teachers need two requirements of practice to be in place. The first requirement is the need for student performance expectations to be made as explicit as possible through curriculum guidelines while allowing appropriate school-level contextualization. Embedded within this, in standards-referenced assessment systems, is the principle that these performance goals are available to (and transparent to) students, prior to assessment activities.

The second requirement is the need for a system of strong, supportive and properly resourced moderation practices. State authority web sites detail the processes of moderation of work programs and standards of assessment, and the rationale behind the use of teacher judgement for student assessment. Some states use statistical procedures to adjust teacher assessments to provide students’ final results in certification, while other states rely on expert feedback to achieve consistency of teacher judgement.

Three states can be used as examples. First, South Australia uses two procedures to moderate teacher judgement for different groups of subjects:

- Non-statistical moderation—student materials that have been marked by teachers are inspected by moderators.

Statistical moderation—the school assessment marks given by teachers are compared with the public examination marks.¹

In non-statistical moderation:

Teachers are given guidance during their teaching program;
Any necessary adjustments are made at the end of the course at final moderation.

The Chief Moderator uses some of the following procedures to guide teachers during their teaching program:

Teachers are allocated a SSABSA contact moderator from the Moderation Panel. The contact moderator advises on assessment standards, the interpretation of objectives, and assessment criteria.

Teachers are given assessment examples, to help them to compare their assessment standards.

Teachers give their assessment plans and teaching programs to their SSABSA contact moderator for approval.

Teachers send marked student materials to be moderated in one place by the Moderation Panel.

Teachers give marked student materials to their contact moderator for moderation.

Teachers bring their assessment plans and teaching programs and/or marked student materials to a meeting with their contact moderator. (SSABSA, 2000, p. 1)

As a second example, the Queensland upper secondary education follows a system of externally moderated school-based assessment.

In this system, students are assessed by their teachers who are the people most familiar with students' achievements in a subject. The basis for judging a student's achievements in the subject are the criteria and standards specified in the subject syllabus, but the teachers' judgements must be able to stand up to scrutiny by expert practitioners external to the school. This process of quality assurance is referred to as 'moderation', and involves both the QSA and the school.²

Through external moderation the QSA is able to ensure that:³

Authority subjects taught in schools are of the highest possible standards, student results in the same subject are comparable across the state, and match the requirements of the syllabus, and the process used is transparent and publicly accountable.

...The system of moderation is based on a close partnership between the QSA and the schools. The QSA contributes the design, operation and servicing of the structures that allow the system to operate. It accepts the responsibility for training the people who serve on review panels to review school work programs and student results. On their part, schools contribute the services of teachers as review panellists, and are responsible for developing and implementing work programs in line with syllabuses, and for assessing students' work against statewide standards. They collect the student work samples and data necessary for their students to receive Senior Certificates.⁴

The various phases of the moderation process are:

1. approval of work programs
2. monitoring of Year 11 standards
3. verification of Year 12 standards

4. confirmation of Year 12 results
5. random sampling (post hoc (see, for example, QSA, 2003)).⁵

Queensland reports high reliability in teachers' judgements of student performance to accompany increased curriculum validity.⁶

Finally, for the third example, a recent post-compulsory review for the Western Australian government endorsed school-based assessment and moderation procedures and the refinement of moderation procedures to move from partial statistical moderation to full peer moderation over time:

Consensus moderation processes (will be) strengthened and teacher assessment seminars introduced. AQTF⁷ quality assurance procedures will complement the Council's moderation processes.

A modified form of statistical moderation (will be) retained until there is agreement that standards are being applied consistently. (Curriculum Council/Government of Western Australia, 2002, p. 13)

The increasing uses of school-based assessment and peer moderation have had three further impacts. First, statements have evolved that embed the right to, and principle of, school-level implementation of curriculum frameworks and assessment activities to suit the community. Second, statements by authorities on appropriate assessment embed the principle that assessment of student performance should incorporate multiple inputs of data. The following specific guidelines from the ACACA *guidelines for assessment quality and equity*⁸ are instructive:

To certify achievement in a subject requires assessment of students' command of the knowledge and skills defined and required by the syllabus. This assessment occurs through a set of assessment instruments. Assessment instruments include such devices as supervised examinations, assignments, projects, practicals, orals, aurals, observational schedules and portfolios. (p. 2)

Each set of assessment instruments used to assess a student's achievement in a subject should:

involve the use of a range and balance of background contexts in which assessment items are presented

involve a range and balance of types of assessment instruments and modes of response, including a balance and range of visual and linguistic material

involve a range and balance of conditions. (p. 3)

A third impact has been the professional development effects of peer moderation and curriculum development activities. These provide an opportunity for teachers to meet and talk, to see examples of student work and assessment tasks from other schools, to participate in focused activities on assessment and to continue to negotiate a mutual construction of standards of performance.

5. Vocational education and training

Vocational education and training (VET) has always been strongly developed in Australia. Historically, VET was undertaken in technical and further education

(TAFE) colleges or in partnership programs with industry. The last 15 years have seen the development of nationally recognized programs defined through Industry Training Packages (ITPs), highly descriptive and articulated competency modules with standards for delivery maintained through the Australian Quality Training Framework (AQTF). The AQTF sets requirements for Registered Training Organisations (RTOs). Specified competencies are assessed as competent/not yet competent, with learners having multiple chances of completion, though there has been some recent development of graded competencies as well.

A *fifth common theme*, relating to VET, flows from the Adelaide Declaration. Increasing numbers of secondary school students are enrolling in vocational subjects, in conjunction with, or instead of, more traditionally focused academic curricula. Students can gain credit towards, or even complete, a VET certificate while still at school. As changes in the nature of the workplace mean fewer jobs for unskilled workers, the increasing diversity of the student cohort in the upper secondary school requires such new directions. Conversely, state and national policies aim to broaden curriculum offerings to improve student retention and inclusion to the end of secondary schooling or its equivalent. The retention rate across Australia from the beginning to the end of secondary schooling was 73% in 2001, with girls having higher rates than boys, non-government schools having higher rates than government schools, and indigenous students having overall lower retention rates. Increased provision for VET in schools has been an important development to support this aim. A major issue being addressed around Australia is the degree of incorporation of VET, not only in leaving certification but also in selection for university.

6. Pathways

Approximately 30% of students who complete Year 12 proceed directly to university courses. Entry to some courses is competitive, requiring a rank ordering of applicants. All states use some form of scaling of achievement data to produce rank orders for university entrance, known generically as 'tertiary entrance ranks'. These have specific names and characteristics in different states, for example, Overall Position (OP) in Queensland, ranking eligible students in bands from OP1 to OP25, and Equivalent National Tertiary Entrance Ranking (ENTER) in Victoria, providing a percentile rank against the notional age cohort. Most students enter universities in their own states and selection is coordinated at the state level. However, an Interstate Transfer Index (ITI) is calculated to enable students to apply for universities elsewhere than their home state.

To be eligible for a tertiary entrance rank, students are usually required to complete a specified number of pre-university subjects (typically five) from a wide range of such subjects. In some states, compulsory subjects such as English are specified for both end of schooling certification and tertiary entrance. Other prerequisites may be set by the universities for specific courses.⁹

A *sixth common theme* in Australian education is the offering of multiple pathways for students towards future study and career goals. The articulations building

between vocational education and schooling are intended to enhance student pathways. Vocational studies articulate from certificates to diplomas which are recognized, and in some cases given credit, by universities. Therefore, a student who leaves before completion of Year 12 could gain entry to university through completion of VET qualifications. Universities also have the flexibility to allow direct entry on any grounds they nominate, from equity to academic acceleration. For the most part, however, entry is based on academic achievement, and not granted until the tertiary entrance ranks are known.

As a result of these pathways, only about 60% of students enrolling for the first year of university studies are direct school leavers. In some universities the proportion of alternative entry students is higher. A new issue now being addressed is how to broaden the recording of student achievement in order to facilitate movement in and out of formal schooling, giving students credit for skills gained along the way. Western Australia is developing a Folio of Achievement as an alternative for some students or to be used in conjunction with the Western Australian Certificate of Education (WACE). Queensland is exploring similar expansion of reporting of student outcomes under its *Education and training reforms for the future*.¹⁰ These directions raise a new range of issues for assessment and reporting, not least of which are data storage and access.

7. School-based assessment in compulsory years of schooling

The *seventh common theme* is the adoption of school-based assessment and reporting practices for the compulsory years of schooling. The structure of schooling in each state incorporates a year prior to Year 1, known variously as preschool, kindergarten, preparatory, transition or reception. The year may or may not be compulsory. Entry to this year and the first year of schooling is age-based and ranges from just under five to six years old. The goal of the Hobart Declaration of a common entry age to schooling has not yet been achieved.

Informal teacher assessments of children may be undertaken in these settings to assess 'readiness' for school, with parents advised if a child is deemed not yet ready. However, the final decision on whether the child should go to school belongs with the parents. Students must then remain enrolled until 15 or 16 years of age.

Children are promoted through schooling with their peer group, a principle endorsed by all states. Australian education systems deliberately refer to 'Year', as indicative of cohorts, as opposed to 'Grade', as indicative of specific curriculum coverage. Nevertheless, most syllabuses indicate target outcomes most students could be expected to demonstrate by particular years.

With the exception of some state-wide tests in New South Wales at the end of Year 10, all assessment and reporting across the eight key learning areas identified in the Adelaide Declaration are school-based (New South Wales has external centralized examinations in a number of subjects at the end of Year 10, reported as the School Certificate Test Results. Other achievement data are provided by schools based on internal assessments for Years 9 and 10. The Board of Studies reports that the School Certificate Test results and the School Certificate Grades 'are not

directly comparable'.) Even so, historically, there has been little attempt to support school-based assessment and reporting with between-school moderation procedures to ensure parity of standards. There are signs of change to this situation as the desire for systemic monitoring of student learning outcomes increases.

8. Moves towards outcomes-based frameworks

Our *eighth common theme* is the direction that curriculum frameworks have taken. Across the states, curriculum development has moved to outcomes-based frameworks with direct impact on assessment and reporting. These frameworks specify anticipated student learning outcomes through descriptions of developmental levels of student performance. Outcomes-based education has been variously defined in implementation. Common to most is identification of a progressively more demanding sequence of achievement or performance in a learning area, with the sequences intended to represent an elaboration of knowledge and expertise from early primary years to the senior years of schooling. The curriculum frameworks of each state, building on the eight key learning areas of the Adelaide Declaration, do not have one-to-one correspondence with school years.

Teachers use the curriculum frameworks to generate a variety of classroom-based assessment procedures to judge and report student progress. Ideally, a student's progress can then be reported as a description of the standard achieved on the sequential continua, in contrast to traditional examination practices where student performance is assessed and reported in terms of how well they have achieved a more singular and static goal (that is, in terms of merit ratings) for particular tasks and particularly years (grades). Two examples of segments of outcomes show the way the frameworks are constructed.

The first example is from the Queensland *Health and Physical Education* syllabus, for a strand called 'Enhancing Personal Development', and the outcomes are for Level 1:¹¹

Level statement

Students understand that they can be described in personal, family and community terms. They understand how they change as they grow and develop. Students understand that the ways they interact with and relate to others differ. They demonstrate the basic skills to communicate and work effectively with others.

Core learning outcomes

- 1.1 Students describe themselves in personal, family and community terms, including the activities and achievements that give them positive feelings.
- 1.2 Students identify relationships they experience in their daily lives, and can demonstrate the behaviours appropriate for these.
- 1.3 Students describe how they have changed as they have grown and developed.
- 1.4 Students demonstrate basic speaking, listening, sharing and cooperation skills to interact effectively with others.

D1.5 Students discuss ideas and feelings about actions and behaviours they or others regard as right or wrong.

The second example is from the New South Wales Board of Studies *Outcomes for English* strand ‘Talking and Listening’, substrand ‘Talking and Listening’—other substrands are Skills and Strategies, Context and Text, Language Structures, and Features.¹² These outcomes are for Early Stage 1, Stage 1, Stage 2 and Stage 3 respectively. The last is the expected outcome by end of Year 6.

TES 1.1 Communicates with peers and known adults in informal situations and structured activities dealing briefly with familiar topics.

TS1.1 Communicates with an increasing range of people for a variety of purposes on both familiar and introduced topics in spontaneous and structured classroom activities.

TS2.1 Communicates in informal and formal classroom activities in school and social situations for an increasing range of purposes on a variety of topics across the curriculum.

TS3.1 Communicates effectively for a range of purposes and with a variety of audiences to express well developed, well organized ideas dealing with more challenging topics.

These statements are the ‘bare bones’ of the information provided. As noted previously, suggested pedagogy, metacognitive strategies, strategies for assessment to make judgements, and resources may also be provided.

In addition, states overlay other dimensions on the key learning area frameworks. Tasmania has an overlay of Essential Learnings¹³ which include thinking, communicating, personal futures, social responsibility and world futures, as well as four Key Elements:¹⁴

Building social capital

Valuing diversity

Acting democratically

Understanding the past and creating preferred futures.

In Queensland the trisectoral authority focuses on the lifelong learner (QSA/QSCC, 2002b, p. 1) as:

a knowledgeable person with deep understanding

a complex thinker

a creative person

an active investigator

an effective communicator

a participant in an interdependent world

a reflective and self-directed learner.

The Catholic Diocese of Brisbane has recast these slightly (Brisbane Catholic Education, 2002, p. 2):

Since July 2001 there has been a structured process of developing and refining applications of life performing roles as the overarching outcomes for learners in Queensland schools, in combination with syllabus outcomes at various levels. These roles take the form of the Roles for Lifelong Learning which are described in the framework as:

Community Contributor
Quality Producer
Leader & Collaborator
Designer & Creator
Effective Communicator
Active Investigator
Reflective, Self Directed Learner.

Education Queensland, which runs the government schools, is currently engaged in a curriculum project (New Basics) using four organizing dimensions and questions:¹⁵

Who am I and where am I going? (Life pathways and social futures)
How do I make sense of and communicate with the world? (Multiliteracies and communications media)
What are my rights and responsibilities in communities, cultures and economies? (Active citizenship)
How do I describe, analyse and shape the world around me? (Environments and technologies).

State authorities emphasize that the curriculum frameworks are guidelines that should be adapted to local needs. For example:

CSF (Victorian Curriculum Standards Framework) standards are made up of two interrelated elements:

Learning outcomes: 'What should students know and be able to do as an outcome of their learning at this level?

Indicators: 'How do we know that students have achieved the learning outcomes?'

The CSF is a framework, not a detailed syllabus or blueprint for the development and delivery of specific programs, teaching methods to be used, allocation of time to particular learning areas, or materials and methods of assessment. These details, along with decisions about staffing, equipment and other resources, and all other aspects of actual programs, are determined by the individual school in the light of that school community's needs, priorities and resources.¹⁶

Several interesting trends in Australia have emerged from the common shift towards outcomes-based education and assessment. The first trend, as shown in the previous discussion, is that the curriculum frameworks are emphasizing dimensions of outcomes of schooling that go beyond the content knowledge focus of the past. An interest in assessing all of the stated goals of education is emerging, including values and life skills. While this is still tentative, ways to assess and report student progress in these aspects of learning and achievement are being investigated.

The second trend is the tentative development of more coherent assessment and reporting practices across schools. This begins with developing understandings of the developmental continua and outcome statements. Guidelines and resources are being developed to assist teachers in their assessment practices. For example, the Tasmanian public education site is particularly rich in these areas.¹⁷

Consider the advice given by various authorities to teachers for assessing students: in NSW for performance indicators for Dance to Year 10, assessment strategies might include:

- teacher observation
- peer assessment
- skills performance tests
- performance based on a set of criteria
- research assignments, e.g. critique of performances, newspaper articles, dance journals and magazines
- worksheets, questionnaires, word puzzles, match-mates
- observation of videos, live performances, television, Bennelong Program
- dance analysis, looking at photographs, film techniques relevant to dance
- knowledge tests—history, techniques, elements of composition

This list is by no means exhaustive. Teachers are free to devise other relevant procedures for appraisal of student achievement. However each task should reflect the course objectives. (Board of Studies New South Wales, 1991, p. 4)

In the Northern Territory:

Information to help teachers make judgements about student achievement of English outcomes

Example: Reading and Viewing Outcomes Level 5

Students read and view texts with some complexity of structure from a range of contemporary contexts. They are beginning to understand how to analyse texts to identify their content, organization and language features. They evaluate the kind and quality of evidence presented in arguments and discussions. They understand some forms and techniques that writers can manipulate to evoke particular responses from readers or viewers. (Northern Territory Board of Studies, 1999, p. 29)

And from the Queensland Studies Authority:

Teachers ... make judgements about students' demonstrations of learning outcomes when satisfied that they have sufficient evidence. In making these judgements, teachers need to:

- analyse what it is that students are expected to know and do with what they know
- consider the learning outcomes at the levels before and after the focus learning outcomes
- use a range of evidence
- make a judgement about which learning outcomes the student has demonstrated.

Judgements about a student's demonstrations of learning outcomes should be made without reference to the performance of other students....

Strategies for ensuring consistency of teacher judgement include:

- sharing of understandings about the learning outcomes (through teacher discussion)
- collaborative planning (cross-years, discipline areas, cross-classes)
- common assessment tasks (by teacher collaboration)
- statements of anticipated evidence, or criteria sheets
- moderation processes (formal and informal)
- samples of typical responses. (QSA/QSCC, 2002c, p. 4)

These statements demonstrate emphasis on teachers' professional capacity to develop *in situ* the appropriate assessment activities for determining student progress along the outcomes continua. The critical issue at this stage, of course, is the degree to which teachers are implementing changes in their assessment approaches to suit

the outcomes-based frameworks, or whether they are merely ‘shoe-horning’ their previous practices to fit the new frameworks as best as possible. However, the directedness of the new frameworks and the expectations and advice about how student achievement and performance are to be reported should facilitate changes in teacher practice. A focus of the Queensland curriculum project previously mentioned¹⁸ is organizing schema for holistic assessment tasks. Other states have other evaluation projects under way for the new frameworks. The outcomes of all this work will provide useful evidence in the future about teacher adaptability to new principles of assessment.

Two final points should be made about the move to outcomes-based frameworks for the compulsory years of schooling. First, it is clear that in some states, despite standards-based approaches at all levels, there is still a disjunction between the design of outcomes-based curriculum for Preschool to Year 10 students and the curriculum of Years 11 and 12. Some states have developed continua to apply across the whole sequence of schooling. However, assessment in the upper secondary school (or post-compulsory years) tends to take on a different (competitive) character because of its contribution to selection for future studies and work. An unresolved issue is the reconciliation of the developmental continua approach of the compulsory years with the typical merit ratings approach of the post-compulsory years. Reconciliation seems achievable through a recognition that both can be framed in terms of explicit outcome standards. This is an area of ongoing discussion and development.¹⁹

The second point is that a benefit of the national move to outcomes-based frameworks has been the degree to which states and territories are cooperating to facilitate such development and share resources. Interstate conferences and discussions and assessment roundtables occur, particularly through the auspices of ACACA.

A sub-theme here is an increasing differentiation of the middle years of schooling. Student learning in the middle years of schooling has been a focus of attention in Australia, as elsewhere, in recognition that attention to early learning in literacy and numeracy and to high-stakes senior schooling has possibly been to the detriment of these equally important years of schooling. The middle years are those years towards the upper end of primary school and into lower secondary school (early adolescence).

Attention to the middle years of schooling has been through curriculum materials and physical school organization. Different approaches to assessment, or special emphases in assessment, are not yet apparent. The main intention is a refocusing on a period of schooling that despite its significance was in danger of neglect between the critical early primary years and the serious upper secondary years.

9. Literacy and numeracy testing and the national benchmark assessment procedures

The *ninth common theme* is the implementation of state literacy and numeracy benchmark assessment procedures. Partly in response to a lack of accountability for

regulated educational outcomes in the compulsory years, and partly as a result of the Adelaide Declaration, the Commonwealth Government and the state and territory governments endorsed a set of national benchmarks for Aspects of Literacy and Numeracy for Years 3, 5 and 7. Statements of goals for percentages of students expected to achieve the benchmarks at a satisfactory level accompany the benchmarks.

Different testing regimes for literacy and numeracy are in place in different states. Literacy assessment includes Reading, Writing and Spelling to match the benchmarks. However, numeracy tests can reflect broader mathematics curriculum domains than the numeracy benchmarks. The Victorian Achievement Improvement Monitor (AIM) program incorporates classroom assessment, homework guidelines, reporting guidelines, a 'learning improvement program', and state-wide testing in Years 3, 5 and 7 in English and Mathematics. The NSW Basic Skills Tests (BST) also test aspects of literacy and numeracy. Benchmark testing is now undertaken in every state and territory for full cohorts of year groups (population testing) and usually takes place in August, just over half-way through the school year. Testing for Year 7 was introduced in all states in 2003.

The state literacy and numeracy tests are usually designed to reflect broader performance levels than just the benchmarks. States then extract benchmark information from test data to report to the Commonwealth Government on benchmark attainment. Raw data for the different states and territories are then equated through statistical and qualitative judgement procedures to enable comparisons of performance against the benchmark standards.

Table 1 reports the comparative data for Year 5 Reading for the states for 2000. Considering curriculum differences across the states, different starting ages and whether a preparatory school year is compulsory or non-compulsory, and not withstanding the considerable technical debates about procedures of setting and equating cut-scores, the comparative data are problematic. That is, it is not clear how the data can be compared across states.

In Queensland, a trial of a preparatory year is under way. When fully implemented, this will effectively increase the age of children taking the tests by six months on average, as well as providing an extra year of education before the tests are taken. The state comparative data show that Queensland is not performing as well as some of the other states on the benchmark data. The new policy is partly a response to this situation.

States use their data differently. Public performance or 'league' tables are not published in all states.²⁰

Student results are returned to the student and family, usually in a graphical representation against the cohort and benchmark standards. Data at school level are returned to schools, usually with comparison data on 'like school' performance, where 'like schools' are schools clustered on similar socio-economic, cultural and enrolment size statistics. Some states publish league tables, some undertake 'value-added' analyses, and some states use the data to affect funding to schools. At the national level, the impact of good or poor performance by a state has yet to be determined.

Table 1. Percentage of Year 5 students achieving the reading benchmark, by state and territory, 2000

1. Average age (a) 2. Yrs of Schooling (b)	% of students achieving the benchmark
<i>New South Wales</i>	89.1
1. 10yrs 9mths	± 1.7
2. 5yrs 7mths	
<i>Victoria</i>	92.1
1. 10yrs 11mths	± 1.9
2. 5yrs 7mths	
<i>Queensland</i>	78.5
1. 10yrs 4mths	± 3.6
2. 4yrs 8mths	
<i>South Australia</i>	84.4
1. 10yrs 6mths	± 1.4
2. 5yrs 3mths	
<i>Western Australia</i>	93.6
1. 10yrs 2mths	± 1.0
2. 4yrs 7mths	
<i>Tasmania</i>	81.4
1. 11yrs 0mths	± 2.9
2. 5yrs 8mths	
<i>Northern Territory</i>	71.2
1. 10yrs 8mths	± 2.8
2. 5yrs 3mths	
<i>Australian Capital Territory</i>	94.0
1. 10yrs 8mths	± 1.3
2. 5yrs 6mths	
<i>Australia</i>	87.4
	± 2.1

Notes: 95% confidence intervals; percentages of indigenous students achieving the benchmark range from $34.2\% \pm 4.1$ for the Northern Territory to $83.7\% \pm 12.1$ for the ACT; in all states, a higher percentage of girls achieve the benchmarks than of boys.

Source: MCEETYA, 2001.

10. Equity issues

The *tenth common theme* has been the impact of awareness of equity issues on education delivery and assessment, due to sensitivity to cultural difference and inclusive education policies. Australian states endorse inclusive education, with only a small percentage of children ascertained as needing separate special education facilities. However, the trend towards inclusion generally allows the choice of educational facility again to lie with parents. Anti-discrimination legal challenges continue to explore the equity and feasibility of integration of children with impairments in common school settings.

The import of cultural issues for appropriate assessment practice is recognized directly by the guidelines of ACACA:²¹

Fundamental to equity in assessment is the recognition that the construction of the knowledge and skills to be assessed should involve a critical evaluation of the extent to which the choice of a particular set of knowledge and skills is likely to privilege certain groups of students and exclude others by virtue of gender, socioeconomic, cultural or linguistic background. A concern with equity also leads to adopting a proactive stance on the appropriate representation in the curriculum of different kinds of cultural knowledge and experience as valued knowledge and skills.

These issues of cultural diversity and inclusivity impact on assessment systems from several directions, especially national expectations with respect to the percentage of students achieving minimal benchmark standards in literacy and numeracy (with possible extensions to other areas) and community pressures for certification that can reflect and value the achievement of all students. Discussion on accommodation for special background or disability does not appear to have reached the same level of significance as in the USA, perhaps as Australian educators are more comfortable with the concept of alternative but comparable forms of assessment, and the extent to which decisions about such matters are made at the local level. Issues concerning equitable student assessment also arise for the large percentage of students whose first or home language is not English, including migrants and indigenous students.

Summary

Interstate differences within a homogeneous culture, and a willingness to innovate and think independently, have led to the development and implementation of responsive assessment practices that reflect student performance across many dimensions and in a positive manner. A range of assessment practices that are believed to enhance student educational development and pathways are firmly in place in Australia. The rhetoric, of course, as in all education, still exceeds the practice. The quality of assessment practice is uneven, most notably in the compulsory years of schooling where collaborative moderation and professional development to explore common understandings of standards and expectations are still developing. Quality still tends to be related to teacher experience (both too limited and too entrenched), familiarity with assessment issues, and resources. The new frameworks, with clearly specified outcomes and guidance for appropriate assessment practices, should guide teachers in constructive ways.

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Notes

1. The terminology of 'moderation' is used here as it appears in the literature. However, in Queensland the term 'moderation' is used to refer only to a process whereby student performance is moderated against expressed standards.
2. www.qsa.qld.edu.au/yrs11_12/assessment/index.html
3. www.qsa.qld.edu.au/yrs11_12/mod/index.html
4. www.qsa.qld.edu.au/yrs11_12/assessment/index.html
5. Random sampling is an after-the-fact quality check resulting in a report. The yearly reports are available at www.qsa.qld.edu.au/yrs11_12/mod/Review.html
6. See *ModerationOfAchievements.pdf* at www.qsa.qld.edu.au/yrs11_12/mod/index.html
7. Australian Quality Training Framework, see www.anta.gov.au/aqtf/What.asp
8. www.acaca.org.au/guide.htm
9. See www.boardofstudies.nsw.edu.au/acaca/
10. www.education.qld.gov.au/etr/
11. www.qsa.qld.edu.au/yrs1_10/kla/hpe/syllabus.html
12. Board of Studies (New South Wales) *K-6 Outcomes*. (k6-outcomes.pdf http://www.bosnsw-k6.nsw.edu.au/english/english_index.html).
13. www.education.tas.gov.au/ocll/currcons/publications/values.htm
14. www.education.tas.gov.au/ooe/curriculumconsultation/publications/values.htm
15. www.education.qld.gov.au/corporate/newbasics
16. www.vcaa.vic.edu.au/csfi/GeneralInfo/csfiII/overview.htm
17. see www.discover.tased.edu.au/netlearn/courselst.htm for teacher-developed modules; www.education.tas.gov.au/ooe/curriculumconsultation/publications/values.htm#LearningTeaching for Learning, Teaching and Assessment Principles.
18. www.education.qld.gov.au/corporate/newbasics
19. see www.qsa.qld.edu.au/publications/1to10/index.html#kla, 'Assessing and Reporting Issues' for a discussion paper on the differences between the two.
20. Similarly, league tables for school performance on end of Year 12 results are not consistently available. According to *The Australian* (2002) in South Australia, New South Wales and Tasmania, the names of top students are released. In ACT a performance index for each school is published. In Western Australia, results are provided for a fee to newspapers which can publish the information. In Queensland, no data are made publicly available. From December 2003, Victoria will publish Victorian Certificate of Education (VCE) performance of schools.
21. www.acaca.org.au

References

- www.qsa.edu.au
www.ssabsa.sa.edu.au
The Australian (2002, October 10) General news, p. 1.
Australian Educational Council (AEC) (1989) *The Hobart declaration on schooling*. Available online at: www.mceetya.edu.au/hobdec.htm
Board of Studies NSW (1991) *Certificate Grading System. Dance descriptors*. *Dance_cpd.pdf* available online at: www.boardofstudies.nsw.edu.au/schoolcertificate/sc_cpd.html (accessed 15 April 2003).
Board of Studies NSW (2002) *Studying for the NSW Higher School Certificate. An information booklet for Year 10 students, 2002*. Available online at: www.boardofstudies.nsw.edu.au/ (accessed 15 April 2003).
Brisbane Catholic Education (2002) *Brisbane Catholic Education Learning Framework. Curriculum Update No. 51* (Brisbane, Brisbane Catholic Education). Available online at: www.bne.catholic.edu.au/pub/reandcurriculum/curric_updates.htm (accessed 15 April 2003).

- Curriculum Council/Government of Western Australia (2002) *Our youth, our future. Post-compulsory education review. Summary of the directions endorsed by the Western Australian Government* (Perth, Government of Western Australia). Available online at: www.curriculum.wa.edu.au/pages/pcreview/stagetwo/cofcontents.htm
- Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) (1999) *Adelaide declaration (1999) on national goals for schooling in the twenty-first century*. Available online at: www.mceetya.edu.au/nationalgoals
- Ministerial Council on Education, Training and Youth Affairs (MCEETYA) (2001) *National report on schooling in Australia 2000. Preliminary paper. National benchmark results. Reading and numeracy Years 3 and 5* (Canberra, MCEETYA). '2000 Benchmarks' 2000benchmarks.pdf available online at: www.curriculum.edu.au/mceetya/aboutmc.htm (accessed 15 April 2003).
- Ministerial Council on Education, Training and Youth Affairs (MCEETYA) (2002) *National report on schooling in Australia 2000* (Canberra, MCEETYA). Available online at: www.curriculum.edu.au/anr/ (accessed 15 April, 2003).
- Northern Territory Board of Studies (1999) *Learning area statement: English including English as a second language transition to Year 10* (Darwin, Northern Territory, Government).
- Pellegrino, J. W., Chudowsky, N. & Glaser, R. (Eds) (2001) *Knowing what students know: the science and design of educational assessment* (Washington DC, National Academy Press).
- Queensland Studies Authority (QSA)/Queensland School Curriculum Council (QSCC) (2002a) *An outcomes approach to assessment and reporting* (Brisbane, QSA/QSCC). ppg_ar.pdf available online at: www.qsa.qld.edu.au/publications/1to10/index.html#assess (accessed 15 April 2003).
- Queensland Studies Authority (QSA)/Queensland School Curriculum Council (QSCC) (2002b) *Overall learning outcomes and the valued attributes of a lifelong learner* (Brisbane, QSA/QSCC). info_sht6.pdf available online at: www.qsa.qld.edu.au/publications/1to10/index.html (accessed 15 April 2003).
- Queensland Studies Authority (QSA)/Queensland School Curriculum Council (QSCC) (2002c) *An outcomes approach to the Queensland Years 1 to 10 curriculum. Assessment and reporting. 'Assessing and reporting' Info_sht1.pdf* available online at: www.qsa.qld.edu.au/publications/1to10/index.html#k1a (accessed 15 April 2003).
- Queensland Studies Authority (QSA) (2003) *Random sampling 2002: a quality assurance process for moderated school-based assessment* (Brisbane, QSA). Available online at: www.qsa.qld.edu.au/ys11_12/mod/Review.html (accessed 15 April 2003).
- Senior Secondary Assessment Board of South Australia (SSABSA) (2000) *Student fact sheet 7: moderation*. Available online at: www.ssabsa.sa.edu.au/fact.htm (accessed 15 April 2003).