

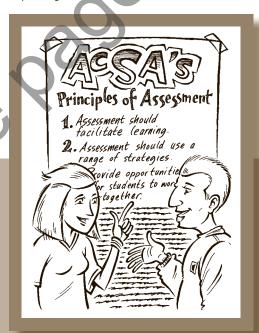
# PRINCIPLES OF ASSESSMENT FOR LEARNING

#### **OBJECTIVES**

By the end of this chapter, you should be able to:

- o recognise different types of assessment and their purposes
- o identify the contexts in which different types of assessment are used
- o understand the different uses of assessment and reporting
- explain the general principles that might be used to develop assessment and reporting processes
- appreciate the role of assessment and reporting as part of the educational process.

Given the contested nature of assessment among different stakeholders, are there principles that can guide assessment and reporting practices? This is an important question, as any society needs to have a common basis on which to make decisions about important social processes. That stakeholders disagree is not important in itself: that there is a way of reconciling the differences is important. One way to do this is to develop



principles on which all stakeholders can agree. Such principles can create a platform on which the assessment and reporting activities of a school or even a whole education system can be based. This chapter investigates the principles underlying different kinds of assessment and the general principles that might be developed to underpin assessment and reporting practices.

#### THE ROLE OF ASSESSMENT

Assessment characterises all stages of schooling. This may include the observations that teachers make of young children in their early years or the end-of-school examinations that are so much a feature of the final years. Some writers have referred to the blurred lines between terms such as 'assessment', 'tests' and 'examinations' (Madaus, Raczek and Clarke 1997), although the current preference seems to be for 'assessment'. Yet assessment itself is not a single-dimensional construct, as was shown in Table 1.1.

Traditional assessment in the form of multiple-choice questions or other forms of forcedchoice answers differs fundamentally from alternative forms of assessment that might include performance-based tasks or other kinds of authentic tasks. Add to these differences such wellworn terms as 'norm-referenced testing' and 'criterion-referenced testing' and the dimensions of assessment soon reveal a complexity that needs to be explored in more detail.

Different forms of assessment—short-answer tests, essays, multiple-choice tests, quizzes and oral presentations—test different kinds of knowledge and skills. Standardised tests administered for diagnostic purposes or to measure the achievement of an entire age group of students can help teachers to plan for learning or help parents to understand how well their child is doing in relation to others. The large-scale assessments used to determine levels of literacy and numeracy can help parents and students but mainly serve public purposes related to the accountability of schools for student achievement. These multiple forms of assessment require investigation so that there can be some appreciation of their purposes, the contexts in which they are used, and the general principles that should inform them.

This chapter will explore five broad themes:

- types of assessment and their purposes
- the contexts for different types of assessment
- the reporting of outcomes for different types of assessment
- general principles for assessment and reporting
- the educational purposes of assessment and reporting.

# TYPES OF ASSESSMENT AND THEIR PURPOSES

There is a relationship between the type of assessment that is chosen and the purposes for conducting the assessment. The New South Wales Board of Studies (Board of Studies NSW 2007) took the view that 'assessment in education involves identifying, gathering and interpreting information about students' learning', and has identified 'modes of assessment'. (These are reproduced in Table 2.1.)

While the modes identified are not mutually exclusive, they do demonstrate both the diversity of types and the purposes of assessment. An informal mode of assessment is probably the one used by most teachers on a daily basis, and very often such assessment is formative in nature. At some stage, however, teachers are required to report on students' progress to parents, as well as to students (e.g. at mid-year and end of year). This will involve a summative assessment, perhaps using formal tasks that are common across grade levels. All this assessment is internal, but as students progress towards the end of their formal schooling they are likely to face external assessment (e.g. Years 10 and 12 in New South Wales, and Year 12 in most other

teacher.

Table 2.1 Modes of assessment

**Formal:** carried out as a discrete, structured information-gathering task. **Formative:** where the purpose is to acquire information on which to base further teaching.

**Continuous:** happening throughout a term/semester/year/stage.

**Coursework:** what the student does or produces during the term/semester/year/ stage, which may be in response to set tasks.

**Process-orientated:** focused on what is done—assessed in 'real time' (e.g. participating, talking, moving). **Internal:** assessed by someone within the teaching situation, usually the classroom

Informal: carried out as part of an everyday teaching/learning activity.

Summative: where the purpose is to acquire information for reporting about the student at the end of a term/semester/ year/stage and on which to base further teaching.

**Terminal:** happening at the end of a term/semester/year/stage.

**Examination:** what the student does or produces in response to set items, at a set time and under particular conditions. **Product-orientated:** focused on what is produced—tangible, concrete evidence (e.g. written texts, artworks, projects). **External:** assessed by a person/people outside the teaching situation or by way of tasks set outside the school.

Source: Board of Studies NSW (2007), 'Standards-Referenced Assessment in Primary Schools', <a href="http://bosnsw-k6.nsw.edu.au/go/parents/standards-referenced-assessment-in-primary-schools">http://bosnsw-k6.nsw.edu.au/go/parents/standards-referenced-assessment-in-primary-schools</a>, accessed 29 June 2008. © Board of Studies NSW for and on behalf of the Crown in right of the State of NSW 2011.

states/territories, except Queensland and the Australian Capital Territory where there are no end-of-school external assessment). The modes, therefore, are helpful ways of categorising different types of assessment and their purposes. Yet they are somewhat generic, and they do not focus on specific types of assessment.

A different way of classifying types of assessment is with specific reference to literacy assessment. Wyatt-Smith and Ludwig (1998, p. 3) identified four broad categories of assessment, and these are summarised in Table 2.2.

What Table 2.2 alers us to is the external nature of different types of assessment and the varying roles that teachers play in relation to them. The contexts that determine the use of these different types of assessment are discussed in the next section. Wyatt-Smith and Ludwig (1998) have documented these teacher roles. They range from the possibility of involvement in test development and marking for some forms of cohort testing and sample surveying, to extensive reliance on teacher judgment for progress mapping and the involvement of teachers at all stages of course design and assessment for school-based forms of assessment. Thus, teachers' roles will differ, depending on the form of assessment that is being used. But one thing is clear: assessment is not an optional extra. Assessment is a set of pervasive practices that characterises schools and schooling at all stages and takes many forms. Whatever these forms, the intent is always to collect information that will provide some indication of a student's learning progress.

Given the diversity of forms of assessment and the variations in their functions, are there common forms of assessment in which all teachers engage? Taking the modes in Table 2.1, it is probably informal and formative assessments that most characterise teachers' assessment work, along with summative assessment. Yet these modes can take many forms.

Table 2.2 Wyatt-Smith and Ludwig's (1998) categories of assessment

Category	Description	Example
Cohort testing	All students (i.e. the whole	National Assessment
	population of students)	Program-Literacy and
	from a particular year	Numeracy (NAPLAN)
	level within or across	
	jurisdictions (e.g. a state or	
	territory) take a common	
	test or respond to common	
	assessment tasks.	
Survey sampling	A selection of students (i.e.	Trends in International
	a sample) from a particular	Mathematics and Science
	year level within or across	Study (TIMSS)
	given jurisdictions take a	
	common test or respond	
	to common assessment	
	tasks.	
Progress mapping	A typical developmental	Year 2 Diagnostic Net
	continuum (sometimes	(Qld)
	referred to as a 'profile') is	Performance Indicators
	drawn up from a learning	in Primary Schools (PIPS)
	area (e.g. mathematics)	(ACT)
	and individual student	
	progress can be mapped	
	against what is considered	
	to be typical.	
School-based assessment	Teachers and schools	Years 11 and 12 in both
	take responsibility for the	Qld and the ACT
	assessment of students'	
	achievement.	

Informal assessment consists of any process that will allow the teacher to make judgments about what students are learning (e.g. observations of students, seeking feedback from students during teaching, checking on homework, asking questions, a short-answer test during the course of a unit of work). In this sense, informal assessment is always formative in nature—seeking feedback on student progress. The results may or may not be documented, but they provide the teacher with an indication of how learning is progressing. Such information allows the teacher to make further decisions about the pace and complexity of the teaching process. Informal assessment relies to a large extent on teacher judgment and the ability of teachers to map the progress of a range of students in a single teaching and learning context. Following such an assessment, teaching can be pitched at a level that will benefit all students.

At some stage, however, teachers need to report on students' learning progress in a summative way—at the end of a unit of work or at the end of a school term. Such summative assessment is usually devised in relation to key learning areas in the school curriculum. It may involve *continuous* assessment, in which the results of a number of assessment tasks are collated to provide a final mark or grade. Or it may involve an examination as a final assessment task, to test what students know and are able to do as a result of a unit of work, a series of lessons or a particular topic. The outcomes of either the continuous assessment or the examination will be reported in a public way so that the learning progress of students can be discussed, explained and understood by an audience other than the teacher. Some kind of specific reporting mechanism such as a report card might be used for this purpose, and further details might be provided to parents at a special evening on which teachers and parents come together to talk about the progress students are making in their learning.

Against this background of ongoing daily assessment work by teachers, and the ever-growing external assessment processes often mandated by governments, there has been in recent times a great deal of emphasis on seeking improvements in assessment practices. Hattie and Jaeger (1998, p. 112) urged that assessment no longer be regarded as an 'add on' but as an integral part of the teaching/learning process. Black and Wiliam (1998, p. 7) pointed to the centrality of formative assessment to effective teaching. Sadler (1998, p. 82) highlighted the knowledge that teachers themselves bring to assessment and suggested that students should be made aware of the different kinds of knowledge teachers use when making assessments. Broadfoot (1996, p. 32) also made the point that the way assessment is conducted has the potential to influence both student attitudes to learning and the strategies they use to further their own learning. Given the pervasiveness of assessment in schools, what advances have there been in developing better assessment practices?

One such advance has been in an area referred to as 'authentic assessment'. For Goodwin and Macdonald (1997, p. 223), 'the term [authentic assessment] is used to depict holistic assessments that are embedded in classroom contexts and enable children to demonstrate learning by integrating and applying knowledge and skills to real-world tasks'. It is easy to see that such an approach to assessment is a long way from the decontextualised assessment tasks that often characterise standardised tests, multiple-choice tests, or surveys of student knowledge and understanding in a particular learning area. But genuine authentic assessment is probably also a long way from the different forms of paper-and-pencil tests, essays or short-answer tests that form so much of the summative assessment activities of students' learning. Authentic assessment challenges assessment practices to be relevant, meaningful and engaging for students. The assumption is that under such conditions students will have a much greater opportunity to perform at their best.

Authentic assessment, sometimes referred to as performance-based assessment—although the two terms are not strictly synonymous (Meyer 1992)—has its basis more in the sociocultural contexts that define schools than in notions relating to test theory and construction. Goodwin and Macdonald (1997) pointed out that standardised approaches to assessment are often unable to take into account background variables such as students' socioeconomic status and race, and this often leads to students who are poor or who are members of different racial groups doing badly in such tests. Authentic assessment can take into account the personal histories of students and thus engage them more in assessment tasks that are meaningful. On the other hand, writers such as Sanders and Horn (1995) have pointed to the limitations of performance-based assessment in the context of large-scale assessment where it is seen to lack generalisability,

take up considerable amounts of instructional time and be very costly. Yet, it should be noted that performance-based assessment is not only for large-scale assessment programs such as the California Assessment Program, or the Standardised Assessment Tasks in the United Kingdom. The principles of performance-based assessment can also be used in designing classroom assessment (Brualdi 1998). The debate, however, is an ongoing one, and its practical implications are taken up in Chapter 3.

Given the different types of assessment and their purpose, what are the contexts in which different types of assessment are used? This question is addressed in the following section.

### THE CONTEXTS FOR DIFFERENT TYPES OF ASSESSMENT

Assessment is carried out in a context. One context is the classroom where assessment takes place on a daily basis. Another context is the broader social and political context in which schools are embedded. These different contexts drive different types of assessment. Largescale assessments that test an entire age group in areas such as literacy and numeracy must be formal, objective, time-efficient, cost-efficient, widely applicable, and centrally processed. Most importantly, results must be in a form useful to policy makers and this usually means reducing complexity to a single score. In contrast, assessments designed to support classroom learning are informal, teacher mandated, adapted to local context, locally scored, sensitive to short-term change in students' knowledge, and meaningful to students. They provide immediate, detailed and complex feedback; and they incorporate tasks that have instructional value in themselves. (Shepard 1989, p. 4)

The rationale for large-scale assessment is embedded in social, political and economic contexts which were discussed in Chapter 1. These contexts are related to issues such as accountability, monitoring, standards and public investment in education. The people mainly concerned with these issues are politicians, policy makers, the media and the general public. Indeed, large-scale assessment might well be called 'public interest' assessment because of the large constituency external to schools that has a stake in the outcomes of schooling and in the progress young people make throughout their school careers.

Parents, of course, are also part of the general public, and they too have a stake in 'public interest' assessment. This often provides them with what seems to be objective data about the progress their child is making in school and is often comparative in nature. From this assessment parents can get some sense of where their child is in relation to others, not only within a single school but also across an entire age cohort. This kind of comparative information is not always seen as useful by teachers, but to people external to schools and their operations it does serve a purpose.

Another form of large-scale assessment is the end-of-school examinations that take place in all states and territories except Queensland and the Australian Capital Territory, where externally moderated school-based assessments are used. On the basis of these examinations and schoolbased assessments, students are provided with a statement of attainment often referred to as a Year 12 Certificate. In addition, a rank is given and is used for the purposes of determining university entrance. Thus, examinations and school-based assessments are used for the purposes

of certification and for selecting students bound for university study, vocational education and training, or the workforce.

The contexts that drive assessment in schools and classrooms are quite different from the social, economic and political drivers of large-scale assessment. Classroom assessment, whether informal or formal, is always designed to provide some indication of the progress a student is making in relation to a particular key learning area. Most often this information is used to develop further learning activities, but sometimes it is used in reports prepared for parents and the school community. These are the twin drivers of assessment at the classroom/school level: learning and reporting on learning progress. More often than not, this focus on learning means the emphasis is on individual students rather than a comparison of one student with the other, as happens with large-scale assessment. The contexts that drive each of these forms of assessment also mean that large-scale assessment is technically more sophisticated than classroom-based assessment. The issue of the technical requirements for assessment is discussed in Chapter 7.

An important issue for both large-scale assessment and classroom assessment is the extent to which they are able to contribute to school environments that encourage creative and critical thinking, problem solving, teamwork, good interpersonal skills, and literacy and numeracy. Brown's (1989) advice was 'to scrutinize tests and testing practices and determine to what degree they constrain efforts to teach critical and creative thinking, problem solving, the reasoning arts, and other dimensions of thoughtfulness in your school' (p. 33). Such advice applies equally to large-scale assessment and classroom assessment. The contexts of assessment should not be allowed to drive the forms that assessment takes. This is why there has been such strong support from educators for authentic or performance-based assessment: because such forms of assessment are seen to have educational value, irrespective of the contexts in which they might be used. Making assessment meaningful for students, and relating it to their interests and cultural backgrounds, are ways of integrating assessment into the teaching/learning process. This is as important for large-scale assessment as it is for classroom assessment. Contexts may shape assessment practices, but they should not be allowed to determine forms of assessment that have little educational value.

# THE REPORTING OF OUTCOMES FOR DIFFERENT TYPES OF ASSESSMENT

At the end of any formal assessment process, some kind of reporting usually takes place. The reporting process involves presenting the results of the assessment to an audience. The audience might be the students themselves or their parents or the community. The outcomes of assessment can be reported in different ways, depending on the audience and the message to be conveyed.

Perhaps the most abstract form of reporting occurs in relation to international studies of comparative student performance, such as the 2002/03 Trends in International Mathematics and Science Study (TIMSS). The science results for Australian Year 4 students were reported in this way:

- Singapore scored significantly higher in Year 4 science than any other country.
- Australia's score in Year 4 science was significantly higher than the international average.

- Australia's performance in Year 4 science has remained the same since TIMSS 1994/95; however, the performance of other countries has improved so that, of the countries that participated in TIMSS 1994/95 and TIMSS 2002/03, half now have an average score that is significantly higher than that of Australia, compared with only one in TIMSS 1994/95.
- There was no gender difference in Year 4 science in Australia. Internationally, there were significant gender differences in about one-third of the countries, evenly split between advantage for females and advantage for males. (Australian Council for Educational Research n.d., p. 6)

This kind of reporting, based on the results of a common assessment instrument used across countries, seeks to compare the performance of a sample of Australian students with samples from other countries. While individual students took the original tests, the results are reported in an aggregated form at the country level. Such reporting does not have much influence or relevance at the school or classroom level, but very often it attracts the interest of politicians who are keen to make some judgment about Australia's international competitiveness.

Another form of reporting is related to standards of achievement that are expected at different levels of schooling. This is the basis for reporting results in NAPLAN:

The second lowest band on the achievement scale represents the national minimum standard expected of students at each year level. Students whose results are in the minimum standard band have typically demonstrated only the basic elements of literacy and numeracy for the year level. Students whose results are in the lowest band for the year level have not achieved the national minimum standard for that year. (NAPLAN 2010, p. 3)

The performance of all Australian Years 3, 5, 7 and 9 students is now measured against this standard and it is publicly reported, although not at the individual student level. Such is the interest in this kind of reporting that newspapers will often report where students from different states/territories rank in relation to each other and in relation to the benchmark. So it is not unusual to read a headline like NSW ranks in the top three states behind Victoria and the ACT'. This kind of reporting does very little for individual students in classrooms.

A very new form of reporting has come from the Australian Curriculum, Assessment and Reporting Authority's website, <www.myschool.edu.au>. Here you can access every school in Australia and gain access to its NAPLAN results. To contextualise these results, an Index of Community Socio-Educational Advantage (ICSEA) is also provided so you can cross-check the results against the ICSEA. In this form of reporting, a school's average scores on the different NAPLAN domains are provided as well as the Australian average and the average from statistically similar schools. It is possible from these data to form a picture of where a particular school is located in relation to the national assessment as well as the possible reasons. This kind of information is valuable for policy makers who can take action (e.g. directing more resources at those schools where students are not meeting national standards). Nevertheless, this form of public reporting remains controversial because it makes the outcomes of assessment very public and it is as yet not clear exactly how this public information will be used.

Some reporting on student outcomes uses developmental student profiles, and maps individual student progress against the hypothesised stages of development within a key

learning area. A good example is the Year 2 Diagnostic Net used in Queensland, which requires teachers to:

- observe and map children's progress using developmental continua for literacy and numeracy
- validate observations with specifically designed assessment tasks and identify those children who require intervention
- provide support to those children requiring additional assistance
- report to parents. (Department of Education, Training and the Arts 1998)

The results of such mapping are often aggregated for the purposes of state-wide reporting, but the data are also available at the school and classroom level because teachers are so closely involved in the administration of the entire process. It is of particular interest to note that, as the name of the test suggests, it is largely diagnostic in nature. Its purpose is to identify those students who are in need of assistance.

Students can also be ranked against each other. Such reporting is based on norm-referenced assessment. End-of-school examinations, and even school-based assessments, can be used to rank students one against the other, with university entrance often being the prize for those in the top ranks. This kind of ranking can be done within a key learning area, within a class, or across classes with the same age cohort. Thus, all mathematics students in Year 3 can be given the same assessment tasks and their performance on those tasks can be ranked. These results might be reported as letter grades (A, B, C, D) or simply as raw scores, with 50 per cent representing a pass mark. Norm-referenced assessment, with the emphasis on how students perform in relation to each other, is a popular form of assessment in schools. But it is important to understand that such assessment does not always tell you what students know and are able to do. Rather, it ranks students against each other, and there is no guarantee that absolute or specified levels of knowledge and skills have been attained.

Yet another way to report on assessment outcomes is to focus on how well students do, not so much in relation to each other but in relation to a set of criteria. This involves criterion-referenced assessment where the criteria for success are specified in advance. All students who meet the criteria are judged to be successful. To some extent, the Year 2 Diagnostic Net referred to earlier works on this principle, as do the original national curriculum profiles. The NAPLAN standards also represent a criterion-referenced device, because the criteria for success are specified in advance. The standards do not require individual students' performance to be compared. Criterion-referenced assessment can easily be used at the classroom level and reported to both students and parents, although parents often prefer norm-referenced assessment and reporting.

Finally, assessment of outcomes can be reported without recourse to numbers at all. A popular form of reporting is to develop portfolios of students' work samples where students have demonstrated their best work. These portfolios can be discussed with parents, and students' learning progress can be judged from the work samples. Students themselves can be asked to choose what goes into their portfolios. Teachers can use the work samples as a basis for discussion with both students and parents about the progress they are making. The involvement of students in this way is likely to engage them more in the assessment process and enables discussion and debate to take place between teachers, students and their parents. With portfolios, there is no comparison with other students, but student work is judged against a standard or a criterion that

demonstrates the kind of progress that is being made. Teachers are in the best position to make these judgments, and studies have shown that they are very skilled at doing so.

## GENERAL PRINCIPLES FOR ASSESSMENT AND REPORTING

Given the variety of forms of assessment, the contexts that shape assessment and the range of ways in which the outcomes of assessment might be reported, are there some common principles that might be used to guide assessment policies in schools? A number of attempts have been made to develop such principles, and these are reviewed below.

State and territory education authorities have placed some value on articulating principles for assessment, a selection of which are shown in Table 2.3. The principles are expressed in different ways, but it is clear that teachers in different jurisdictions get similar messages about assessment.

Table 2.3 Principles of assessment identified by selected states

Victoriaª	Tasmania <sup>b</sup>	New South Wales <sup>c</sup>
The primary purpose of assessment is to improve student performance.  Assessment should be based on an understanding of how students learn.	<ul> <li>The primary purpose for assessment is to improve learning.</li> <li>Assessment provides all learners with the capacity to demonstrate what they know, value and are able to do.</li> <li>Assessment focuses on demonstrations of understanding moving beyond gathering and recalling information.</li> </ul>	Effective and informative assessment and reporting practice:  • has clear, direct links with outcomes  • is integral to teaching and learning
<ul> <li>Assessment should be an integral component of course design and not something to add afterwards.</li> <li>Good assessment provides useful information to report credibly to parents on student achievement.</li> </ul>	<ul> <li>Assessment judgments are moderated through professional collaboration to enhance fairness, reliability and validity.</li> <li>Learners self-assess and develop their capacity to monitor their own learning.</li> <li>Learners negotiate assessment criteria and assessment tasks.</li> </ul>	is integral to teaching and learning

TABLE 2.3 Continued

ctoriaª	Tasmania <sup>b</sup>	New South Wales <sup>c</sup>
Good assessment requires clarity of purpose, goals, standards and criteria. Good assessment requires a variety of measures.	A range of valid and inclusive assessment and monitoring processes are used to gather information about what learners know, value and are able to do.      Assessment about what learners know, value and are able to do is used to plan teaching sequences and to diagnose areas for challenge and intervention.      Assessment respects and includes different ways of knowing and works towards equitable outcomes for all learners.	• is balanced, comprehensive and varied
Assessment methods used should be valid, reliable and consistent. Assessment requires attention to outcomes and processes.	<ul> <li>Assessment is fair, free from bias and inclusive for all learners.</li> <li>Assessment incorporates judgments from a range of sources, including learners, peers, educators, parents and others.</li> <li>Assessment includes evidence of the work of groups as well as individuals.</li> </ul>	is valid     is fair
Assessment works best when it is ongoing, rather than episodic. Assessment for improved performance involves feedback and reflection.	<ul> <li>Assessment includes the monitoring of learners' emotional wellbeing.</li> <li>Learners monitor the extent to which emotions affect and influence their learning.</li> <li>Assessment provides timely, precise, genuine and constructive feedback.</li> </ul>	engages the learner     values teacher     judgment.

 $<sup>^{\</sup>rm b}$  <www.ydae.purdue.edu/lct/hbcu/documents/Assessguide.pdf>, p. 9

<sup>° &</sup>lt;www.schools.nsw.edu.au/learning/k-6assessments/principles.php>

A national initiative has also focused on the development of assessment principles. In February 1995, the Australian Curriculum Studies Association (ACSA) distributed a poster to all Australian schools with the bold heading 'Principles of Student Assessment'. The poster set out the essence of ACSA's Policy Statement with the same name. The focus of the principles was some very strong statements on the rationale for assessment and reporting, and these are worth quoting in full:

#### Assessment should:

- facilitate learning;
- refer to criteria that are explicit;
- identify strengths and achievements;
- cover all aspects of the curriculum;
- encourage a variety of intended learning outcomes;
- use a range of strategies;
- involve teacher judgment;
- enable self-assessment;
- provide opportunities for students to work together;
- provide opportunities for students to negotiate required tasks
- provide more than one opportunity for students to meet requirements; and
- be sensitive to gender, culture, linguistic, physical disability, socioeconomic status and geographical location. (Australian Curriculum Studies Association 1994)

It is clear from the way these principles are stated that ACSA's vision for assessment is not far from those expressed by various state education authorities in Table 2.3. There is general agreement that assessment should be student-centred, curriculum-related, constructive, cooperative and inclusive. The clear focus for these principles is the classroom, but ACSA also sends an underlying message about any form of assessment that does not meet these criteria. For example, would the different types of large-scale assessment referred to earlier always meet these criteria? The answer is probably that they would not. ACSA's principles therefore serve as a kind of benchmark for good assessment practice.

In addition to these general principles for assessment, the ACSA poster turned its attention to the reporting of assessment outcomes, and stated a number of principles for good reporting practice:

#### Reporting procedures should:

- be appropriate to the intended purpose and audience for the report;
- acknowledge that the assessment process involves imprecision;
- ensure that reports of formative assessments are made available to others only with the explicit permission of parents and/or students; and
- ensure that publicly available reports emphasise student achievement. (Australian Curriculum Studies Association 1994)

Again, the focus of these principles is that the reporting of outcomes is a constructive process for students and their families. Above all, ACSA was strongly opposed to the kind of reporting so prevalent in other countries, where 'league tables' of schools are often published in the media based on the results of students' assessment (Edwards 1995). For ACSA, the reporting of outcomes should be an opportunity to celebrate achievement rather than criticise teachers and students for poor performance, especially where that performance is judged relative to other students or other schools.

Do these principles apply to classroom and school-level assessment only, or can they also be applied to different kinds of large-scale assessment processes? Clearly, it is harder to apply these principles to external forms of assessment, but there is considerable evidence to suggest that external forms of assessment have moved a long way from the multiple-choice standardised formats that were so common several decades ago. The Australian Council for Educational Research, for example, has gone to some lengths to show how information from both international and local large-scale assessments can be used to help improve student learning (Forster 2000; 2001). One important set of issues relates to the design of the study, the kinds of questions that are asked and the way results are reported:

. . . it is essential that large-scale programs are designed to reflect and reinforce learning priorities. This paper argues that large-scale programs are most likely to support the kinds of learning now considered important for successful functioning in society if they are designed with the primary purpose of collecting reliable information about students' current levels of achievement, if they incorporate assessments of higher-order skills and thinking, if they include a variety of assessment methods and procedures capable of providing information about a range of valued learning outcomes, and if results are reported in ways that recognise and encourage high achievement. (Masters and Forster n.d., p. 1)

Here at least is a commitment to place student learning at the forefront of considerations about large-scale assessment. It is an important advance in the area of external assessment.

On a different front, changes that were implemented in New South Wales relating to the Higher School Certificate were also focused on student learning. As a result of the review of the Higher School Certificate, examinations in New South Wales should now have the following characteristics:

- a thorough assessment of key syllabus content and outcomes
- questions that focus on finding out what students know and are able to do
- a variety of question types to measure knowledge and skills
- access for all students to the range of questions through short-answer items and structured questions that guide student answers
- opportunities for sophisticated and original answers through open-ended, essay-style questions and problem-solving questions
- where appropriate, projects, practical and performance tasks. (Board of Studies NSW 1998)

There were also changes to reporting practices:

The new form of HSC reporting will describe the standards achieved by students. Information about how many students in the cohort have achieved a particular standard will also be provided. Students will be awarded the marks that they earn (in contrast to scaled marks) and these will be reported against clear standards. (Board of Studies NSW 1998)

The significant shift here was away from norm-referenced assessment to criterion- or standardsreferenced assessment. This was a recognition that students themselves and their individual achievements should be at the heart of the assessment process. That this is now being recognised in large-scale assessments is an important step forward.

# THE EDUCATIONAL PURPOSES OF ASSESSMENT AND REPORTING

The plea from progressivist educators has always been for assessment and reporting practices that respect individual students, relate assessment integrally to curriculum experiences and learning, and seek to encourage and celebrate student achievements. Blackmore (1988, p. 46) has referred to this as 'educative assessment', at the heart of which is 'commitment to the improvement of practice, the sharing of information, collaborative processes and just outcomes'. For Brown (1989), education is about creating thoughtful school communities; where assessment practices do not contribute towards this goal, they should be discontinued. Yet, as Griffin (1998) has reported, many Australian schools have a long way to go before the best features of studentcentred assessment and reporting are in place. To move in the direction of student-centred assessment, teachers require extensive professional development and a real will at the system and school level to change existing practices and existing culture. This is the challenge for all those involved in school-level education: to create 'learning communities' in which assessment's role is to monitor learning and create an environment in which all students are valued and their achievements celebrated.

#### SUMMARY

- Different types of assessment have different purposes. This makes the search for common principles difficult. Yet, there is agreement that all forms of assessment should in some way seek to enhance student learning.
- This principle is relatively easy to adhere to at the level of the classroom. For large-scale assessments it is less easy. To some extent the difficulty is related to the nature of internal and external forms of assessment, but it is also related to the purposes of assessment and their contexts
- Reporting processes should focus on student achievement and success, rather than on comparisons with other students and schools. This has not meant the disappearance of norm-referenced assessment (where individual student performance is determined by its relationship to the performance of all other students). However, it has meant a more widespread acceptance of the relevance of criterion-referenced assessment (where individual student performance is determined by its relationship to a standard).
- Assessment should facilitate learning; refer to explicit criteria; identify achievements; cover all of the curriculum; encourage a variety of learning outcomes; involve teacher judgment, self-assessment and a range of strategies; provide opportunities for students to negotiate required tasks and to work together; allow a number of opportunities for students to meet requirements; and be sensitive to background factors (culture, gender, language, disability and socioeconomic status).

#### QUESTIONS AND EXERCISES

- **1.** What are the purposes of the different forms of assessment?
- 2. How would you rank these different forms of assessment in relation to their potential to facilitate student learning?
- **3.** What do you see as the role for the <www.myschool.edu.au> website as a way of reporting assessment results?
- **4.** How relevant are the ACSA principles of assessment to the different forms of assessment?
- **5.** Why are classroom assessment and reporting important to the community?

#### REFERENCES

- Australian Council for Educational Research (n.d.), Highlights from TIMSS from Australia's Perspective, ACER, Melbourne, <www.acer.edu.au/documents/timss\_02\_brief.pdf>, accessed 29 June 2008.
- Australian Curriculum Studies Association (1994), 'Principles of Student Assessment: An ACSA Policy Statement', Curriculum Perspectives, 14(2), pp. 38–9.
- Black, P. and Wiliam, D. (1998), 'Assessment and Classroom Learning', Assessment in Education, 5(1), pp. 7–74.
- Blackmore, J. (1988), Assessment and Accountability, Deakin University Press, Geelong. Board of Studies NSW (1998), Securing Their Future, Newsletter No. 11, 16 September, <www.boardofstudies.nsw.edu.au/archives/stfreview/stf\_11.html>, accessed 29 June 2008.
- Board of Studies NSW (2007), 'Standards-Referenced Assessment in Primary Schools', <a href="http://bosnsw-k6.nsw.edu.au/go/parents/standards-referenced-assessment-in-primary-">http://bosnsw-k6.nsw.edu.au/go/parents/standards-referenced-assessment-in-primary-</a> schools>, accessed 29 June 2008.
- Broadfoot, P. (1996), 'Liberating the Learner through Assessment', in G. Claxton, T. Atkinson, M. Osborn and M. Wallace (eds), Liberating the Learner, Routledge, London, pp. 32–44.
- Brown, R. (1989), 'Testing and Thoughtfulness', Educational Leadership, 46, pp. 31-4. Brualdi, A. (1998), 'Implementing Performance Assessment in the Classroom', Practical Assessment, Research and Evaluation, 6(2), <a href="http://pareonline.net/getvn.asp?v=6&n=2">http://pareonline.net/getvn.asp?v=6&n=2</a>, accessed 29 June 2008.
- Department of Education, Training and the Arts (1998), 'Year 2 Diagnostic Net', <a href="http://education.qld.gov.au/students/policy/assessment/y2dn/index.html">http://education.qld.gov.au/students/policy/assessment/y2dn/index.html</a>, accessed 29 June 2008.
- Edwards, J. (1995), 'British League Tables and Lessons for Australia: Assessment, Quality and Social Justice', Curriculum Perspectives, 15(1), pp. 9–18.
- Forster, M. (2000), A Policy Maker's Guide to International Achievement Studies, ACER, Melbourne.
- Forster, M. (2001), A Policy Maker's Guide to System Wide Assessment Programs, ACER, Melbourne.
- Goodwin, L. and Macdonald, M. (1997), 'Educating the Rainbow: Authentic Assessment and Authentic Practice for Diverse Classrooms', in A. Goodwin (ed.), Assessment for Equity and Inclusion: Embracing All Our Children, Routledge, New York, pp. 211–28.
- Griffin, P. (1998), 'Outcomes and Profiles: Change in Teachers' Assessment Practices', Curriculum Perspectives, 18(1), pp. 9–20.

- Hattie, J. and Jaeger, R. (1998), 'Assessment and Classroom Learning: A Deductive Approach', Assessment in Education, 5(1), pp. 112–20.
- Madaus, G., Raczek, A. and Clarke, M. (1997), 'The Historical and Policy Foundations of the Assessment Movement', in A. Goodwin (ed.), Assessment for Equity and Inclusion: Embracing All Our Children, Routledge, New York, pp. 1–34.
- Masters, G. and Forster, M. (n.d.), 'The Assessments We Need', <a href="http://siteresources.">http://siteresources.</a> worldbank.org/INTINDIA/4371432-1194542322423/21542205/TheAssessmentsWeNeed. pdf>, accessed 23 March 2008.
- Meyer, C. (1992), 'What's the Difference between Authentic and Performance Assessment?', in R. Brandt (ed.), Performance Assessment, Association for Supervision and Curriculum Development, Alexandria, VA, pp. 92–3.
- NAPLAN (2010), NAPLAN Summary Report—Achievement in Reading, Writing, Language Conventions and Numeracy, <www.naplan.edu.au/verve/\_resources/NAPLAN\_2010\_ Summary\_Report.pdf>, accessed 3 January 2011.
- Sadler, R. (1998), 'Formative Assessment: Revisiting the Territory', Assessment in Education, 5(1), pp. 77–84.
- Sanders, W. and Horn, S. (1995), 'Educational Assessment Reassessed. The Usefulness of Standardized and Alternative Measures of Student Achievement as Indicators for the Assessment of Educational Outcomes', Education Policy Analysis Archives, 6(3), <a href="http://olam.ed.asu.edu/epaa/v3n6.html">http://olam.ed.asu.edu/epaa/v3n6.html</a>, accessed 30 December 2010.
- Shepard, L. (1989), 'Why We Need Better Assessments', Educational Leadership, 46, pp. 4–9. Wyatt-Smith, C. and Ludwig, C. (1998), 'Teachers' Roles in Large-Scale Literacy Assessment', Curriculum Perspectives, 18(3), pp. 1–14.