

Directions for Assessment in New Zealand

Developing students' assessment capabilities

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Background

The purpose of this paper is to provide broad advice to the Ministry of Education to guide and inform the design of new and improved strategies, policies, and plans for assessment.

The current National Assessment Strategy introduced in 1999 focused on:

- setting specific and challenging goals with students;
- fostering partnerships in learning;
- using information to improve learning;
- developing high quality assessment tools;
- developing teachers' assessment literacy;
- informing strategic planning.

The current strategy has made a contribution to building stakeholder assessment capability through such measures as the provision of professional learning and the development of assessment tools to support teacher practice in assessment.

An Assessment Strategy Review project, commenced in October 2006, explored the scope for further improvement. The first phase of the review was completed in March 2008 and entailed a stocktake to provide evidence of how the current strategy is meeting its objectives. The second phase has been concerned with the development of a revised National Assessment Strategy for implementation from February 2009.

To facilitate the second phase of the process, the Ministry of Education: developed an outline/structure of a possible draft revised national assessment strategy based on stocktake findings and the assessment information in *The New Zealand Curriculum*; identified several areas where further evidence was required and contracted a number of assessment experts to provide this evidence in a series of review papers; and contracted the writers of this document to propose appropriate future directions for assessment.

The ideas and proposals in this paper are the views of the writers.

In writing this paper, the writers have considered all the ideas and evidence that were collected as part of the Assessment Review, including discussion notes from Assessment Review Reference Group meetings, research and review papers written as part of the Assessment Review process, input from a group of critical friends, and international critique from experts in the field.

Note

As explained above, the advice set out in this document has been informed by the 16 papers commissioned for the review by the Ministry of Education (see Appendix 2). The writers are grateful for the perspectives they have offered, but because this document is not a review of the background papers, they have chosen not to cite them (with the exception of one quotation). The reader is encouraged to access and read these papers.

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Overview

The central premise of this paper is that all young people should be educated in ways that develop their capacity to assess their own learning. Students who have well developed assessment capabilities are able and motivated to access, interpret, and use information from quality assessment in ways that affirm or further their learning.

Achieving this outcome will require assessment capable teachers, school leaders, and Ministry personnel. There are implications, too, for parents, Boards, and teacher education programmes, as well as for the National Education Guidelines, reviews conducted by the Education Review Office, national monitoring systems, reporting and assessment tools, and the National Qualifications Framework.

In placing students at the centre of assessment practice, our advice in this paper is consistent with the best of current thinking, including that behind ‘assessment *for* learning’, the use of assessment feedback to enhance teaching and learning, and professional learning designed to assist teachers to enhance their students’ assessment capabilities.

In Section 1, we introduce a number of important assessment-related imperatives that we set out to address. Section 2 surveys pertinent features of the New Zealand educational context. In Section 3, we describe and justify our vision for student assessment capability. In Sections 4 and 5, we describe the implications of this vision for those who support students in their learning. In Section 6, we pick up a number of concepts that have been introduced earlier and further clarify their meaning. Section 7 discusses the alignments needed if the changes that we advocate are to be achieved.

Directions/recommendations are appended to the major sections as applicable and listed in their entirety in Appendix 1. They are deliberately broad, conceptual statements of direction and need to be understood in terms of the commentary in the document, which generally details the nature of the changes or policy recommended.

1. New directions for assessment

1.1 Introduction

Given the extent of change in the educational landscape over recent years, it is appropriate that we reconsider the purposes for which we assess and the processes by which we pursue these purposes. In doing so in this paper, we identify a priority that ranks above all others: strengthening the assessment capability of students by enhancing the assessment capabilities of teachers, school leaders, parents, and those who support them.

Beginning with the introduction of Tomorrow's Schools almost twenty years ago, New Zealand has developed a school governance model that relies heavily on the professionalism of teachers and leaders and on the quality of the partnership that they establish with their communities. This model places considerable responsibility on school leaders and boards of trustees to determine and implement policies that align with the statutory requirements. It also places considerable responsibility on teachers as principal assessors of their students' learning progress

The regulatory framework within which self-managing schools operate sets out a number of key requirements relating to student achievement. These include identifying students and groups of students who are being under-served and setting in place strategies that will address their needs. This is to be done on the basis of what is referred to as 'good quality assessment information'. While the need for quality assessment information is generally accepted, what its constituents are and how it should be used have been the subject of much debate. What does quality assessment information look like? Who is it for? How should it be gathered? In what form should it be communicated to stakeholders? What should stakeholders do with the information they are given?

What assessment information is gathered, the conditions under which it is gathered, and how it is subsequently used profoundly affect student motivation and capacity to learn. If we get the conditions wrong—if we collect the wrong information in the wrong way for the wrong purposes—we will add to the number of students who disengage from learning and leave school with little to show for it. If we get the conditions right, the reverse will be true: achievement will increase and disparities decrease. Not only that, teachers will be enthused, parents and whānau will know how their children are doing and will have the confidence to support them and their learning, and boards, senior managers, and central agencies will be able to base policy and resourcing decisions on sound information.

In our view, 'getting it right' begins with ensuring that students are placed at the heart of the assessment process and educated in ways that develop their capability to assess their own learning. This means that their assessment capabilities need developing too, not just those of their teachers and school leaders. When we say 'assessment capable', we mean 'able and motivated to access, interpret and use information from quality assessments in ways that affirm or further learning'. We explore this definition in some detail in Section 3.

The assessment statement in *The New Zealand Curriculum* (2007) sets out some fundamentals of effective assessment: it benefits and involves students, it supports teaching and learning goals, it is planned and communicated, it is suited to the purpose, and it is valid and fair. The statement also makes the point that assessment plays a vital part in helping teachers focus and refine learning:

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“Assessment is integral to the teaching inquiry process because it is the basis for both the focusing inquiry and the learning inquiry” (p. 40). Our advice in this paper builds on these principles. The changes we advocate are significant. Putting them in place will require the concerted efforts of teachers, principals, teacher educators, government agencies, politicians, and parents over an extended period of time.

1.2 Assessment and educational imperatives

In many ways this paper affirms the directions of the 1999 Assessment Strategy, but we cannot simply continue as before if policies or practices are to meet the needs of changing times and circumstances and reflect growing understandings about what constitutes good practice. The directions we advocate have the potential to address the following nine educational imperatives.

1.2.1 Curriculum, learning, and assessment

The New Zealand Curriculum signals both continuity and change in educational priorities and outcomes. While the achievement objectives for the learning areas are largely a revision of those in the previous curriculum statements, the vision, principles, values, and key competencies, together with the learning area statements, focus attention on a wider range of purposes for learning and on ways of thinking about learning. These all have implications for assessment. We see the development of students’ assessment capabilities as a way of integrating the values and key competencies with active learning of curriculum ‘content’.

The curriculum also advocates the use of teacher inquiry as a means of assessing the effectiveness of teaching and as the impetus for continuous improvement. If inquiry is to be well informed and provide useful feedback, students need to be actively involved in helping their teachers ascertain what they have learned, what their strengths are, and where the gaps may be. As students become more capable of analysing their own learning and contributing good feedback, their teachers become better informed and more able to meet their students’ learning needs.

1.2.2 Attending to the needs of all our students

To respond appropriately and effectively to the increasing cultural diversity of our classrooms and to the learning needs of those who have been least well served by the system, we need to ensure that our assessment practice is inclusive and informative. Students come to school with a wide variety of backgrounds and experiences. To succeed, they must connect the intended learning with what is already familiar to them. Engaging them as active participants in assessment conversations where they are given opportunities to present—and have heard—their own perspectives on their efforts and achievements is one way of furthering this end.

We believe that what we propose in this document is consistent with the principles of the Treaty of Waitangi because its overriding concern is the learning needs of *all* students, including Māori students who are learning through the medium of English. We anticipate that the developers of *Te Marautanga o Aotearoa* will consider the implications of our work for Māori-medium education but that they will develop their own strategic directions for assessment.

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1.2.3 Greater engagement

In a world where young people exercise personal choice over matters as trivial as the ring tones of their cellphone, or as far reaching as the learning pathways they pursue, denying them opportunities for active involvement in important learning and assessment decisions is likely to promote disengagement, even more so when there is little apparent connection between what happens at school and their out-of-school lives and goals. Disengagement is a significant issue, particularly in the middle-school years. Whether expressed confrontationally or passively, it undermines learning and achievement. Given this paper's emphasis on promoting student ownership of learning by enhancing student assessment capabilities, it has the potential to significantly increase levels of student engagement. We discuss this further in Section 3.

1.2.4 Longer-term outcomes of learning

The vision statement in *The New Zealand Curriculum* highlights qualities and achievements that we would like to see students take into their adult lives. These include the knowledge, skills, values, and competencies that will support them to become life-long learners and active contributors to New Zealand's social, cultural, economic, and environmental well-being. To develop these attributes, students need to be positive in their identities and motivated to participate and contribute. Greater student participation in assessment will support these important curriculum goals. We discuss this further in Section 3.

1.2.5 Greater attention to the effects of assessments

Several of the papers commissioned for this review highlighted the need to better account for the *consequences* of assessments, especially where students have diverse learning needs. Gathering assessment data is not a self-justifying activity. What matters is that data are *used* in ways that benefit student learning and that feedback highlights the importance of building on strengths and experiencing success.

Quality assessment entails anticipating what information is needed to inform decisions, as well as interpreting and weighing evidence from relevant sources. One of these sources should be the students' own evaluations of their learning and progress. With access to this 'inside' information, teachers are in a better position to make decisions that effectively support continued learning and students are less likely to find that assessment discourages them and inclines them to disengage.

1.2.6 Schooling as a partnership

Greater involvement of parents and whānau in support of young people's learning is a goal of all recent initiatives designed to address under-achievement. When students are unequivocally at the heart of assessment decision-making, the potential for genuine learning partnerships and conversations is greatly increased. What we propose in this paper will strengthen home-school partnerships by making parents more aware of intended learning, their children's progress, and priorities for progress. This flow of information should be two-way: as children engage their parents in informed conversations about their learning, they may alert parents to information that could usefully be shared with the teacher. We return to this theme in Section 5.

1.2.7 Standards and progressions

Parents typically want to know how their child is doing relative to others of the same age and level. Some view national testing as the solution, but where national testing regimes have been put in place they have proven inimical to learning. So we want to see this parent need addressed in ways that avoid harmful side effects. We advocate the development of rich descriptions of progress over time (progressions) and clearly defined indicators of achievement relative to different stages of learning (levels). These will provide the required clarity about what is expected at each level and give teachers a sound basis for learning conversations with students and their parents. We return to standards and progressions in Section 6.

1.2.8 Assessment processes are educative

Assessment should be educative even as it meets accountability requirements; assessment that is designed primarily to produce information for governance purposes or systems-level judgments should also be of value to learners and those who support them. This means that it is important that all stakeholders have a broad conception of assessment—one that recognises that a range of information is required as the basis for good judgments and valid interpretations—and that they have some understanding of the different kinds of evidence that are (or could be) used.

The above principles have major implications for the reporting of standards and progressions. If reporting is based on multiple sources of evidence, this is likely to have the added benefit of discouraging the use of so-called league tables with all their associated shortcomings. These matters are discussed in sections 6 and 7.

1.2.9 Agencies and schools as adaptive learning systems

Systems thinkers in education argue that organisational learning is a key to adaptation and growth in times of marked change. Organisational learning is encouraged by knowledge management strategies that foster shared understandings and collective learning, underpinned by working conditions that are open and trusting. This requires relevant, usable feedback on performance and access to dependable long-term information.

Circulation of knowledge across the system is a further condition for continuous learning and adaptation. Student involvement in assessment decision making, moderation conversations between teachers within and across schools, and the sharing of whole-school data between schools and central agencies (Ministry of Education and Education Review Office) are examples of knowledge management that have the potential to foster learning at all levels of the system.

In Section 7, we consider the kinds of knowledge management systems that support student, professional, and systems learning.

1.3 Defining assessment and differentiating purposes

Our primary concern is to develop students' assessment capabilities so that they know how to obtain evidence of learning, how to interpret assessment information, and when to ask for clarification.

Feedback based on assessment is recognised as one of the most powerful ingredients of teaching and learning. Maximising the quality and appropriateness of feedback should be a core aim of all

assessment practice. Indeed, if an assessment is not going to result in worthwhile feedback, its value should be questioned. The concepts ‘feedback from assessment’ and ‘assessment for defensible interpretations that affirm or further learning’ are crucial to the directions we propose.

As this paper was being shaped, we debated the use of the terms ‘formative’ and ‘summative’ to differentiate purposes of assessment. We acknowledge the useful role that these terms have played in broadening teachers’ understanding of assessment, but are of the view that the time has come to move on. The reality is that any assessment information gathered for the purpose of informing learning (formative assessment) could also be used to make a judgment about learning to date (summative assessment), and vice versa. For this reason, we make limited use of the two terms.

Clear specification of what is to be learned and defensible measures of progress are keys to the validity of classroom assessments. This suggests a need for agreed understandings about what evidence of learning looks like, and the importance of students sharing such understandings. We return to this issue in Section 6.

1.4 Teaching, learning, and assessment

Assessment, whether formal or informal, is not something apart from teaching and learning, rather, it arises out of student and teacher decisions—sometimes subconscious—about how it can contribute to further learning. Students are in a better position to make decisions about assessment if they are clear about what they are trying to learn and what indicators or criteria they should use to judge progress, and if they are able to be honest with their teacher about their learning struggles. Teachers require in-depth pedagogical content knowledge if they are to choose the most appropriate form of assessment and, following assessment, the teaching and learning approach that best fits the needs of their students. So while the focus of this paper is assessment, the fact is that assessment, teaching, and learning are inextricably linked: teachers can be meaningfully said to have assessment capability only if they also have curriculum and teaching capability.

2. The New Zealand context

2.1 Introduction

An extensive amount of information, analysis, critique, and comment on assessment policy and practice has been amassed over recent years, and much of this has been considered in preparing this paper. Throughout this period, the Ministry has introduced and supported a number of initiatives to develop approaches to assessment and improve the quality of the information obtained from it. The success of these initiatives has been influenced for better or worse by contextual factors such as the regulatory framework, national curriculum design, professional development programmes, and the use made of the available assessment tools. In some cases, reviews have led to redesign and improvements, and this work needs to continue; in other cases, little has eventuated. Any review of policy and practice, whether past or present, leads to the important if predictable conclusion that there is a need for much greater levels of systems coherence. There is an equity issue here: regardless of which school a student attends, the assessment information gathered about them should be of comparable quality, and it should be used to further their learning.

The following subsections review the current context and consider directions for the regulatory framework, national curriculum, system-level assessment, school-level assessment, and assessment for qualifications.

2.2 System context: education reforms

The education reforms of the late 1980s changed not only the governance and management structures of New Zealand schools, but also the design and practice of curriculum and assessment. While curriculum and assessment reforms have been influenced by international trends, they have generally and advisedly steered clear of policies and practices that have proven highly problematic and not necessarily conducive to quality teaching and learning (for example, Key Stage Assessment [England] and No Child Left Behind [US]).

By introducing a self-management model, the New Zealand reforms gave schools considerable freedom to choose how to interpret and implement national curriculum and how to approach assessment and reporting. The state determines a broad regulatory framework but does not prescribe actual practice. Individual schools shape their own assessment and reporting policies consistent with the National Education Guidelines and decide what assessment tools they will use and how they will report student achievement. This means that schools tend to adopt particular approaches (including those advocated by 'the system') only if they are convinced of their merits. As a consequence, the system, and notably the Ministry, must work alongside schools when sponsoring or promoting the development and use of assessment approaches that they want to see widely adopted.

The Ministry has broadly stated its preferred directions for assessment policy and practice in a number of policy statements including its National Assessment Strategy (1999):

Information about assessment can be used to improve teaching and learning. It enables teachers and schools to report on what students have achieved at certain points in time, and provides assurance to parents, board, and the public about the quality of education.

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Assessment is the process that helps us to focus on teaching, learning, and student achievement at classroom, school, and system levels:

- At classroom level, assessment is at the heart of teaching and learning.
- At school level, it is at the heart of school programme development.
- At system level, it is at the heart of policy development.

The current National Assessment Strategy focuses on:

- setting specific and challenging goals with students;
- fostering partnerships in learning;
- using information to improve learning;
- developing high quality assessment tools;
- developing teachers' assessment literacy;
- informing strategic planning.

What we propose in this paper largely affirms the broad intentions of the 1999 strategy, but seeks to strengthen the direction of both policy and practice. In doing so, (i) we recognise that each school is able to conduct assessment in ways that best serve its students' learning rather than required to follow a prescriptive national approach and (ii) we assert that each school should be obliged to demonstrate that its approaches *are* enhancing students' assessment capabilities and *do* adhere to nationally agreed standards of quality assessment. The system has a central role in determining these standards and providing schools with the support and resources needed to develop and implement quality assessment practice.

2.3 The regulatory framework: the National Education Guidelines

Since 1993, assessment practice in schools (NCEA excluded) has been guided by the government's National Administration Guidelines and based around national curriculum statements. The requirements are broadly and simply stated. The Guidelines, authorised by the Minister of Education, are relevant to the directions proposed in this paper for the reasons already explained: the extent to which schools can be required to implement a particular practice is very limited, which means that, before they will subscribe to centrally promoted approaches to assessment and reporting, schools need to be convinced of their benefits for teaching and learning.

Although the National Education Guidelines (which include the National Administration Guidelines) have been added to and amended over the years, schools continue to be responsible for deciding how to interpret them in practice. Because the regulatory framework is generally non-prescriptive, interpretation (and consistency of interpretation) has been a significant issue. At times, ERO and schools have ended up making quite different interpretations. This is not unexpected, but it is an issue in that, given its position, ERO has tended to dominate the discourse and some schools have responded by adopting a compliance mentality. Internal and external review should be a partnership in which there is space for the testing of ideas and interpretations. This is recognised by ERO, whose current Framework for Reviews states that a key feature of education reviews is the integrated approach to external review and self review.

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The New Zealand Curriculum provides opportunities for rethinking and reformulating approaches to assessment and reporting. Given the self-management principles that are embedded in our educational culture and reinforced by the curriculum, the NEGs will continue to be key drivers for strategy at both the school and systems level. This makes it important that, as the NEGs are revised, the opportunity is taken to clarify standards for assessment practice and so reduce the potential for interpretational inconsistency.

2.4 The New Zealand Curriculum

One of the purposes behind the design of the national curricula introduced from 1993 onwards was to sharpen schools' accountability for student achievement. Each of the seven learning areas was divided into three or four content strands and, for each strand, 'achievement objectives' were prescribed for eight overlapping achievement 'levels' spanning years 1 to 13. The idea was that students would advance to the next level when they demonstrated competence at the current level. It was assumed that the objectives would provide a basis for level-specific discrimination of achievement, making it possible for teachers across the country to be consistent in their judgments. For the first time, parents would have access to nationally benchmarked achievement information on their children, making it possible for them to effectively monitor their children's progress throughout their school years and to judge the effectiveness of the school's teaching. However, it was never mandated that schools report levels to parents, neither was it advocated by the Ministry. Some schools do; others don't.

Some of the assumptions underpinning the national curriculum, particularly those that relate to levels and achievement objectives, continue to be contestable. Analyses show that, by and large, the objectives do not provide a sufficiently clear basis for discriminating levels of achievement or judging learning progress. If schools feel they must accumulate assessment records and data as evidence of curriculum coverage and student learning, loose criteria and surface coverage can undermine the quality of assessment and the validity of the interpretations and decisions that follow.

The Ministry has implemented a number of initiatives to address this systemic dilemma. It has sponsored the development of major curricula-related assessment tools (resource banks, exemplars, and asTTle). More recently, it has produced literacy and numeracy progressions. The extent to which these initiatives answer the purpose requires further debate.

It needs to be noted that the same design features have been carried over into *The New Zealand Curriculum*, so many of the issues for assessment and reporting remain. However, given that many schools previously believed that they were meant to be attempting to assess *all* of the achievement objectives, the new curriculum contains a significant dispensation:

When designing and reviewing their curriculum, schools *select* achievement objectives from each area in response to the identified interests and learning needs of their students (p. 44, our italics).

A Ministry notice published in *The Education Gazette* notice of 4 February 2008 puts a different slant on this requirement:

Each Board of Trustees, through the principal and staff must draw on the achievement objectives in *The New Zealand Curriculum* to ensure that the progress and achievement of

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student learning throughout schooling is enabled; and tailor programmes to the learning needs and interests of the school's students.

Behind this directive is the contestable assumption that student progress and achievement are contingent on the achievement objectives. Furthermore, the directive serves to perpetuate the erroneous assumption that the achievement objectives provide an adequate basis for making judgments about progress and achievement in terms of curriculum level.

To provide a firmer basis for determining students' progress and achievement, we propose that the national curriculum be augmented by learning progressions for literacy and numeracy. While programmes like the Numeracy Project have already introduced progressions to teachers, there is debate about their content, and not every school uses them. For these reasons, we recommend that progressions stand on their own and have status as part of the national curriculum. Progressions, however, have proven to be very hard to define. This is particularly true of areas such as science, the social sciences, the arts, and health. For this reason, it is recommended that the initial focus be on progressions for literacy and numeracy and that progressions in other learning areas be the subject of further serious professional dialogue and research. Coming up with defensible sets of progressions will take time.

2.5 System-level assessment

2.5.1 International surveys of student achievement

Since the 1970s, New Zealand has participated in a number of international surveys of student achievement in literacy, mathematics, and science. These surveys, now scheduled on a cyclical basis, include the Trends in International Mathematics and Science Study (TIMSS), the Progress in International Reading Literacy Study (PIRLS), and the Programme for International Student Achievement (PISA). They are administered to students in a national sample of schools.

Planning for these assessments and then analysing and reporting the results involves significant investment and work for the Ministry. The primary purpose is to obtain system-level indicators of student performance in selected learning areas (reading, writing, mathematics, and science), which can then feed into policy development and review. The tests are not directly aligned to New Zealand's national curriculum and, although reports of the results are widely disseminated, anecdotal observations suggest that few schools or teachers relate them to their programme planning or teaching.

The usefulness of international surveys needs to be further explored in relation to national assessment programmes. We propose that test items and achievement data from international surveys be systematically investigated and, wherever possible, used to advantage in our own assessment programmes and tools (for example, ARBs, asTTle, NEMP, and NCEA). We also propose that continued participation in international surveys be contingent on the outcome of an investigation into their usefulness for improving teaching and learning and informing policy and provision. It is our view that we would obtain greater value from international surveys if they were to become part of a coherent framework for collecting, analysing, and reporting student achievement. By design, this framework could become a vital resource for helping schools and teachers reflect on their own practice.

2.5.2 National Education Monitoring Project (NEMP)

NEMP came into being in 1995, following 50 years of major government commissions, reports, and reviews that identified the need for regular system monitoring. NEMP surveys learning areas in a four-yearly cycle. To date, it has produced 44 detailed reports. In addition to providing results and commentary for individual tasks grouped by learning area strand, reports provide system performance data by school size, type, and decile rating, gender, ethnicity, community size, and region. They also provide data on student engagement in the learning area concerned.

Independent reviews by international experts in assessment have strongly supported the design and operation of NEMP. In many respects, it is unique. While not required to participate, schools have also consistently supported the project. Hundreds of teachers from all parts of the country have trained as administrators or markers. Many teachers use NEMP tasks in some way in their own schools. Many have gained professionally through their participation in the project and through the use of NEMP reports.

While every year NEMP provides the Ministry with rich and trustworthy data on the achievement of our students, its continuing relevance is sometimes questioned because shifts from one four-year cycle to the next tend to be quite small, even following major investments in curriculum and teacher development. We propose that NEMP's design and approach be retained because of the breadth and depth of the achievement information it provides, but that greater value be extracted from the project. For example, NEMP assessment tasks and performance data can inform assessment tools such as the ARBs and asTTle. And, within the coherent reporting framework proposed above, NEMP reports should generate much more professional and public discussion on learning and achievement in New Zealand.

2.6 School-level assessment

In schools, assessment is typically seen to have three functions:

- obtaining feedback that is used for informing teaching and learning through what can be called pedagogical, teacher, or formative assessment;
- compiling accounts of student achievement to provide a basis for individual, summative reports;
- obtaining data that will be used to analyse and report the achievement of groups of students, particularly in relation to regulatory requirements for target setting.

Assessment methods and tools may be purpose-specific or they may serve two or even more purposes. In recent years, teacher professional development in assessment has been strongly influenced by a 'prepositional divide': assessment *for* learning ('formative'), assessment *of* learning ('summative'), and, occasionally, 'assessment *as* learning'. Of the three, assessment *for* learning has been the major focus. As explained in section 1.3, these distinctions now seem less clear-cut than they once did, which challenges us to better understand how the different uses relate to each other in both theory and practice.

While professional learning that looks at the relationship between theory and practice and at distinctions between purposes and approaches can be valuable, translating such learning into practice is not without its problems. For example, formative assessment can become mechanistic and formalised

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(teachers have been asked to ‘show’ their formative assessments—with the expectation that they will have collected written evidence). In place of the formative/summative duality we advocate an emphasis on assessment capability in which practice is aligned to purpose and defensible interpretations of student performance are made in relation to well defined learning goals.

2.6.1 Teacher assessment of student learning

Teacher assessment of student learning has a strong theoretical rationale and solid empirical backing. The heart of teacher assessment is supporting the learner and learning in the everyday instructional context. It avoids ritualised testing, marking, and record keeping and emphasises interactive teacher–student processes that involve regular analysis, instructional feedback, and monitoring of learning against clear and publicly known achievement criteria. The success of such assessment depends largely on high but appropriate expectations of students, well-conceived achievement criteria, and high-quality feedback. The Ministry has made significant investment in teacher development programmes directed towards assessment for better learning. Research suggests that this investment can lead to substantial returns in terms of improved teacher practice and improved student outcomes.

2.6.2 ‘Summing up’ assessments

Schools and teachers are expected to compile accounts of evidence that support their summative judgments of student achievement. There can be difficulties when these accounts are derived mainly from units of learning and associated achievement objectives. Most often, the achievement objectives are specific to a particular unit of learning and apply to all students in the class. Students’ work is usually assessed against a semi-qualitative scale with three categories: has not met the objective, is making progress towards the objective, has met the objective. Sometimes the teacher’s judgment is based on the student’s response to a specific assessment task, at other times, on their response to a range of learning activities.

The dependability of such information is not always what it should be. It is not always possible to summarise achievement simply by aggregating data from markedly different achievement objectives, topics, and strands in a particular learning area. Furthermore, teachers vary considerably in the interpretations and judgments they make when assessing students against achievement objectives. These issues are closely linked to the design of national curriculum and expectations of how that design should relate to assessment and reporting practices.

While achievement objectives organised by levels provide a useful guide for programme planning and teacher assessment they should not be used for ‘summing up’ judgments. Recognising the difficulties that teachers have had in trying to make judgments based on the achievement objectives, the Ministry has sponsored a number of initiatives designed to increase the quality and dependability of assessment. In doing so, they have called into question the notion that there is a clear-cut boundary between ongoing teacher assessment (assessment *for* learning) and summing up assessment (assessment *of* learning).

We advocate the continued development of approaches to assessment and reporting that have strong validity. A national assessment and reporting system (see Section 7.5.3) would assist schools in selecting approaches and tools that can provide regular, dependable information about student progress and achievement. Such a system would provide students, teachers, and parents with guidance and

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support to interpret and use assessment information, and it would facilitate longitudinal tracking and evaluation of student progress. It might also be designed to track student performance patterns nationally. There are, however, a number of complex issues that will need to be resolved before a national system is implemented (for example, where data should be held, who owns it, who provides and has access to it, and how its quality can be assured). If these issues can be resolved, we foresee a coherent system that will play a central role in supporting teaching, learning, and evaluation at both school and system levels.

2.6.3 Planning and reporting

In 2001 the Education Act (1989) was amended to introduce new planning and reporting requirements for boards of trustees. These included the requirement that charters include a long-term strategic planning section that:

establishes for the next 3 to 5 years the Board's aims, objectives, directions, and priorities for intended student outcomes, the school's performance, and the use of resources.

Sec. 61 (3) (b)

and an annually updated section that:

establishes for the relevant year the Board's aims, objectives, directions, and priorities and targets relating to intended student outcomes, the school's performance, and the use of resources, and

sets targets for the key activities and achievement of objectives for the year.

Sec. 61 (3) (c)

Moreover, each Board of Trustees is required to annually report to the Ministry on its performance in relation to its charter intentions. It must provide:

a statement in which schools provide an analysis of any variance between the school's performance and the relevant aims, objectives, directions, priorities, or targets set out in the school charter.

Sec. 87 (e)

Clearly, these statutory requirements have significance for how schools identify, define, pursue, and assess objectives for student learning. Equally significant is that the legislation, consistent with self-management, does not prescribe the nature or number of annual targets or how achievement will be assessed, analysed, or reported. Consequently, schools tend to set targets that are very broad (for example, '80 percent of students in year 4 will be reading at or above their chronological age'), or very specific (for example, '80 percent of year 4 students will have mastery of basic addition and subtraction facts').

Done well, annual targets for student achievement serve to strongly focus a school's endeavours on aspects of learning that are identified as priorities for groups of students. But given the broadly defined nature of the statutory and external reporting requirements, target setting, assessment, analysis, and reporting practices vary widely from school to school—and in value. What happens in practice inevitably reflects the assessment capability of the school leaders. The directions we propose are designed to bring about more credible school-based target setting, achievement analysis, and reporting.

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The statutory requirements themselves need to be reviewed and redefined so that they give clearer direction to schools in terms of the choice and scope of annual goals, and how progress towards those goals is to be evaluated and reported. The requirement that schools submit targets and reports to the Ministry each year should be amended because it has proved to be of little use to either the system or schools. ERO could be given responsibility for validating school planning and reporting when it makes its regular on-site visits, with a focus on the quality of information gathered, how it is interpreted by teachers, and how these interpretations are used to benefit teaching and learning. Alternatively, standards could be defined for assessment and reporting. Regardless of the approach taken, it is essential that planning and reporting policy and practice be improved. Equally important, changes must come out of well conducted professional collaboration involving policy makers and leading practitioners.

2.7 Assessment for qualifications: NCEA

The National Certificate of Educational Achievement, New Zealand's senior secondary school qualification, was launched in 1998 under the auspices of a project called Achievement 2001 and implemented in all secondary schools beginning in 2002. NCEA represents the single biggest development in fifty or so years of national examinations. Its introduction coincided with (and, some argue, contributed to) a dramatic rise in the percentage of students remaining at school until year 12 or 13.

With its standards and mastery approach, NCEA quickly gained acceptance from providers of trade and vocational education and from many school teachers and leaders. Others have challenged it on a number of grounds: that it does not adequately respect academic traditions, that the large number of 'standards' may be leading to fragmented qualifications; excess teacher workload; credibility of internal assessment; inter-teacher moderation; student motivation; lack of information that students, parents, and employers can understand; and misalignment with the national curriculum. Some of these concerns could be viewed as implementational, and work has been done to address many of them.

Notwithstanding the concerns, NCEA has led to clarification of standards in the different learning areas, demanded higher levels of investment of students throughout the year, and involved students more in the assessment process and the interpretation of assessment information. Moves to strengthen moderation across and between schools should increase parent and employer confidence that NCEA feedback can be trusted.

We propose that requirements for student progression be tightened throughout the curriculum, including levels 6–8, along with the expectation that schools will be able to show evidence of student progress. We also recommend that standards be revised so that they more clearly reflect valued learning as expressed in *The New Zealand Curriculum*.

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3. Student assessment capability

3.1 Students at the centre

All our young people should be educated in ways that develop their capability to assess their own learning.

The central premise of this paper is that young people should be educated in ways that support them to assume control of their own learning and that they can only do this if they develop the capability to assess their own learning. At present the most important assessment decisions tend to be made by adults on behalf of students. While teachers do involve students in some assessment decisions, this tends to be in low-stakes situations and to happen occasionally and informally. Students should be involved in assessment as a matter of course because it is a core aspect of their learning, and they should contribute to any assessment decisions that are used to inform their learning goals. Students need to participate as fully in assessment as in learning. What we aspire to for the one, we should aspire to for the other.

We emphasise that assessment's primary function is to support learning by generating feedback that students can act upon in terms of where they are going, how they are going, and where they might go next. Such assessment involves active student–teacher collaboration. Information gathered for this purpose may also be used for other purposes, but the focus is always on addressing each student's own mix of learning needs. This is in contrast with assessment information gathered for accountability or reporting purposes, which typically targets selected aspects of the wider picture and aggregates data from groups of students.

When students participate in the assessment of their own learning, they learn to recognise and understand main ideas and to apply new learning in different ways and situations. While at school, students have teachers on hand who can help them get better at making such judgments. If we want them to be able to assess their own learning later on, beyond school, we need to help them develop their assessment capabilities now.

Students who have developed their assessment capabilities are able and motivated to access, interpret, and use information from quality assessments in ways that affirm or further their learning.

Students cannot get there without help and support. To give the necessary support, many teachers may first need to strengthen their own assessment capabilities. Parents and the wider school community will also need to get better at understanding assessment information and interpreting it in ways that support learning; most of all, they need to expect and encourage young people to be making well-founded interpretations and inferences based on their own assessment of their learning.

Section 3.2 expands on what we mean by 'all our young people' (see statement in bold at the head of this section); sections 3.3–3.5 expand on what we mean by 'assessment capabilities' (see definition in bold, above).

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3.2 All our young people

International studies and NEMP show that the New Zealand education system is of high quality but that it does not serve all our students equally effectively. Given the role that assessment plays in learning and motivation to learn, it is imperative that it benefit *all* students, not just some.

This paper emphasises the importance of assisting all students to develop their own assessment capabilities. It is critical, therefore, that students' identities and voices are heard, developed, and valued, and that differences among students are acknowledged and accounted for in systems design. No student or group of students should be pathologised (viewed in deficit terms) or assumed incapable of developing assessment capabilities; rather, it is important that teachers foster confidence, engagement, and achievement for *all* students and *all* groups of students. Likewise, it is imperative that the system monitor and evaluate the progress and achievement of all students and all groups.

The cultural and linguistic aspects of any assessment need to be carefully analysed and their implications understood. Only by doing this will actual skills and/or knowledge be assessed rather than the medium of instruction or the cultural understandings on which task interpretation depends. Teachers need to understand their students' cultural and linguistic backgrounds before they can give feedback that will further learning, and to make sure that the cultures of all students are present in the contexts chosen for assessment purposes, just as for learning.

Assessment need not necessarily be individual and particular to a student—it can be a collective, collaborative exercise involving a group of students. Assessment does not always have to compartmentalise and decontextualise knowledge—knowledge can also be effectively assessed through direct experience in the natural world, for example.

3.3 Able and motivated

The words 'able *and* motivated' acknowledge two important aspects of assessment capability: knowledge and disposition. Together, students and the teacher develop a shared understanding of what they are trying to achieve and how to access information that will help them in this quest. Students need to understand the significance of the assessment feedback they receive, and what to do next. Knowledge and understanding are not sufficient, however—students must also *want* to make the effort and be willing to keep on engaging even when they find it difficult to do so.

When students are actively involved in assessment they are well placed to recognise moments of important personal learning and, as they develop their assessment capabilities, they find learning to be real and relevant, prove that they can learn and make progress, and discover how to make where-to-next decisions.

In its vision statement, *The New Zealand Curriculum* talks about young people who are confident, connected, actively involved, lifelong learners. 'Learning to learn' ('the curriculum encourages all students to reflect on their own learning processes and to learn how to learn') is one of the eight principles that 'underpin all school decision-making'. It is our view that students will only learn how to learn if they are active participants in the assessment of their own learning. As long as their cumulative experiences reinforce the idea that assessment is something done to them by others—not necessarily for their benefit—their engagement is likely to be passive. When they discover that assessment supports their learning, they are likely to find it empowering.

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At times, the act of learning itself may be the focus of assessment. Students need to acquire the language with which to discuss how they learn, and to gain insight into their own particular learning strengths and needs. Good assessment feedback is not only about the *act* of learning and its immediate results, it can also strengthen students' learning capabilities when used to develop appropriate new challenges. Students' self-confidence grows as they become aware of the conditions for learning and find they can control some of these conditions.

Students can also gain insight into their own learning via awareness of the differences that exist between them and their peers. When given non-judgmental opportunities to explore their own cultural values and assumptions about assessment and learning, students can use the differences that surface to further develop their own strengths and identify areas for improvement.

3.4 Access, interpret, and use information

Students need to experience assessment judgments as acts of interpretation that support their learning. It is important, therefore, that teachers model ways of using assessment information that help students meet their learning goals. In this way, students learn about:

1. Setting and clarifying challenging learning goals. Like adults, students need to see learning as worthwhile, meaningful, and challenging before they will participate fully. They need to have at least a broad idea what they are attempting to achieve, why it matters, and what ultimate success might look like. They need to be actively involved in developing their own learning goals and establishing success criteria. Some of these will be short-term and quickly achieved; others will be long-term and require considerable persistence. Some goals can be specified in detail and will look much the same for all students; others will be open-ended and allow for considerable variation within defined parameters.

2. How to access, interpret and use evidence. Students need to be shown what constitutes learning progress, what evidence is, and how to go about seeking it. They need to learn that the sources of evidence may be different, depending on the context and goals, and that they will vary in terms of their usefulness for learning. They need to understand that the *meaning* of assessment information is not necessarily self-evident, and that skills of interpretation are needed for deciding when and how to act on feedback. In this way, using appropriate assessment methods, tools, and exemplars, and determining the meaning and relevance of the information those tools generate, students learn to make judgments about their own progress. These judgments become more informed as they compare them with their teachers' judgments. With help, students also learn how to use the feedback they receive to work out where they might go next with their learning. Where good reporting systems are used, they can track their progress towards longer-term goals and be encouraged by evidence of growth. Where the partnership between home and school is well established, parents know what progress their child is making and provide support from their end.

3. The "understanding" dimensions of engagement. Learning to learn has a number of important cognitive and metacognitive dimensions. Better understanding rarely comes about without the active engagement of the learner. The richer the connections students build between the ideas and skills they already have and those that are new, the deeper and more durable their learning will be. This means that teachers must connect with what students bring to school from home, from their

culture, and by way of previous learning. Both teachers and students need good tools, strategies, and exemplars that can help them make dependable assessment decisions.

As they get older, students should be given more practice at making judgments about their learning. This supports them to become less reliant on the judgments of their teachers and others and better able to reflect critically on assessment evidence of their own learning progress and goals. Resources are needed that can help students develop a range of strategies for self and peer assessment.

Students also need practice in thinking about their learning so they can discuss their developing understandings with their peers, teachers, and parents. By comparing their own approaches with those of their peers, they become aware of a wider range of possibilities.

4. The emotional dimensions of engagement. Students need to learn how their emotional responses can support or hinder their learning and assessment. What conditions trigger disengagement and what strategies best address these? The ways in which students respond emotionally to challenges and difficulties are grounded in their earlier experiences of learning and assessment, the learning reputation they have acquired over time, and how they, their peers, and their teachers view their capabilities. Any negative views of their own capabilities need to be addressed. If students are taught how to make their own assessment decisions and then go on to develop these skills throughout the school years, they are more likely to have a positive view of themselves as learners. To get to this point, they need the active support of their teachers.

5. The social and cultural dimensions of engagement. Learning is not a discrete and tidy package that 'works' regardless of context. *The New Zealand Curriculum* identifies other people, community knowledge and values, and cultural tools as resources that are able to support learning. All can provide impetus for learning and engagement when they support students to view their intellectual efforts as relevant and rewarding. Assessment evidence for these dimensions might consist of students demonstrating how they adapt and use new knowledge in different, even unfamiliar, contexts and when interacting with different people.

Mahuika and Bishop (Appendix 2, paper 6) argue that Māori students will only be offered the educational opportunities that they are currently denied when there is a radical shift in the cultural dimensions of engagement:

In contrast to those contexts for learning and assessment that are currently dominant, mainstream classrooms [need to be] places where power is shared between self-determining individuals within non-dominating relations of interdependence; where culture counts; where learning and assessment is interactive, dialogic, and spirals; where participants are connected and committed to one another and where there is a common vision of excellence.

3.5 Affirm or further learning

Learning is *affirmed* when assessment leads to a consensus of what has been achieved: the teacher and student together recognise and value the evidence of learning. Progress can then be documented and celebrated, either privately or publically.

Students are likely to feel more in control of and accountable for their own learning if they can access and engage with their own assessment records. We suggest that electronic portfolios and databases offer considerable potential for the interactive compilation of records of learning.

Learning is *furthered* when assessment provides direction, new challenges, and indicates what support is needed. Assessment for this purpose can be thought of as an 'inquiry into learning'. It may involve the student working on their own, working with peers, or the student and teacher working together. The language found in any materials used for organising evidence and making judgments (rubrics, criteria, scales, portfolio frameworks, etc.) should be accessible to students and have meaning for them. Students should be able to use feedback to clarify their learning needs in relation to goals that matter to them and those who support them.

Recommendation

- 3.1 That all our young people be educated in ways that develop their capability to assess their own learning.
- 3.2 That the success of any national assessment strategy be judged by whether all students are developing the capability and motivation to assess, interpret, and use information from quality assessments in ways that affirm or further their own learning.

4. Teacher and school leader assessment capability

Students will develop assessment capability of the kind we have described only if teachers and school leaders themselves have genuine assessment capability and are appropriately resourced. Empirical evidence shows that the only level (international, national, school, or classroom) at which sound assessment practice has proven its capacity to enhance student achievement is the classroom (studies from around the world have reported effect sizes of one half to nearly a whole standard deviation). Because of this, it makes sense to invest our greatest efforts in teacher and school leader capability.

In this section, we look at what teachers and leaders need and how these needs might be resourced.

4.1 Assessment capable teachers

Teachers are the orchestrators, encouragers, interpreters, and mediators of learning. They need to understand how students can use and value assessment as a powerful means of furthering their own learning. As the experts in the learning partnership, teachers need to take the lead in all assessment that students cannot manage without support. But they need to do so in ways that encourage students to feel deeply accountable for their own progress and support them to become motivated, effective, self-regulating learners. To do this, teachers clearly need to be knowledgeable about the curriculum and teaching, but they also require well developed assessment capabilities and the motivation to use these to forge learning partnerships with their students.

Teachers also need to know how to gather the assessment information that other stakeholders require, and how to pass it on in ways that are consistent with, and supportive of, student learning.

4.1.1 Able and motivated

Just as for students, the words ‘able *and* motivated’ point to two important aspects of teacher assessment capability: knowledge and disposition. Together, students and teacher construct a shared understanding of what they are trying to achieve, what information will help them in their quest, and how that information can be obtained.

Teacher assessment capability includes awareness of the effects of assessment on learners. Any given assessment activity either supports or diminishes motivation for learning, depending on who initiates it, how it is designed and enacted, who owns the information that is gained, and the use that is made of it. Teachers need to know exactly how an assessment should assist students to learn, and how to check whether it has done so. They also need to understand the meaning that students read into an assessment—and into the feedback that they subsequently receive.

None of the benefits of participatory assessment practices will be realised if students do not feel safe and supported to take risks, make errors, and extend themselves. This requires a classroom climate where mistakes are seen as opportunities, and where shared conversations about the nature of learning are commonplace. Students need to be able to discuss not only *what* but *how* they are learning, and to cite evidence of achievement on both these dimensions. The nature of learning is often treated as a given; teachers need the knowledge and skills that enable them to make the implicit explicit, and therefore a topic of discussion.

There are important cultural considerations involved when thinking about learning and assessment. What is valued in one context may not be valued in another. For example, some cultures have a collectivist view of learning. For students from such cultures, collaborative demonstration of shared progress may motivate learning in ways that individualistic, competitive assessments will not. It is important, however, that teachers do not make assumptions that amount to little more than replacing one set of stereotypes with another. Rather, they need to develop strategies for supporting their students to construct meaning from assessments.

4.1.2 Accessing, interpreting, and using information

Once learning goals have been clarified, teachers need to be able to choose from the available assessment approaches and tools those that will best help them and their students (i) judge how well those goals have been met and (ii) determine future directions for learning. When teachers have used an approach or tool, they need to be able to interpret the information that has been gained and to share it with students (and, where appropriate, with parents) so that they can understand it too.

It is crucial that both the evidence used and the decisions made are dependable. It is also crucial that teachers recognise when they have insufficient evidence (or the wrong kind of evidence) on which to base a good judgment—in other words, that they recognise what the available data *cannot* tell them. Teacher capability in these areas can be strengthened by participation in pre- and post-moderation processes and the use of good exemplars.

Many would find it helpful to have an additional layer of curriculum support that gives them a clearer sense of ‘where to next’. Where appropriate and possible, the development of clearly specified learning progressions and resources indexed to them could provide this support. Such tools would be educative for teachers, a means of building their assessment capability.

4.1.3 Affirming and furthering learning

Formal, documented assessment judgments must be seen to be dependable and consistent across different learning contexts if they are to meaningfully affirm learning and progress. Teachers need access to assessment tools that will allow them and their students to make such judgments. As mentioned in the previous section, teachers need tools that not only make learning transparent but also support continued learning by identifying possible future directions.

Other partners in learning, especially parents, need meaningful, documented assessment information so that they can play an informed role in supporting the learning of their children. Because students have numerous teachers over their years at school, assessment information needs to be available in forms that can constructively be shared at the transitions, whether class-to-class or school-to-school. Assessment information is often stored piecemeal, meaning that it cannot always be retrieved in timely fashion and that its potential usefulness is diminished. We return to the issue of information transfer in Section 7.5.3.

Teachers and school leaders need to have their professional learning affirmed and furthered. It is important that they can analyse student assessment data without the anxiety that their findings might be used as evidence against them. This means that school leaders need to recognise assessment as a vital part of teaching as inquiry and ensure that assessment information is used in ways that respect teachers as well as students and affirm and further teacher learning. It also means that school leaders need to be

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able to frankly analyse whole-school assessment data without fearing that their findings may be used against them by central agencies.

4.2 What is needed of school leaders?

School leaders need assessment capability so that they can establish goals and expectations, provide appropriate support and feedback for classroom teachers, plan assessment-related professional development, recognise the implications for assessment of other professional learning, ensure that teachers have the resources they need for their assessment programme, and provide additional support for students whose achievement is lagging behind. Principals do not have to have all the expertise, but it is important that they show by their actions and words that assessment matters, and that they position themselves as learners alongside their colleagues.

A school needs aggregated achievement information to determine how successful it is in helping all its students make worthwhile progress. Leaders need to rationalise formal school-wide assessment to ensure that assessment activities do not actually get in the way of student learning and that judgments made for evaluative purposes also contribute to the pursuit of the school's vision. Appropriate choice of tools is important. Preference should be given to tools that further learning at the same time as they provide dependable information about the standard and/or rate of learning.

Leaders need to be able to effectively articulate their school's approach to assessment. The strategic plan should be readily understood by all members of the school community and have the support of the board of trustees and parents. Methods of communicating progress need to align with the school's vision for student learning, promoting dialogue with and the active participation of parents and whānau.

To achieve these goals, school leaders need access to models of good assessment practice and be able to recognise implications for their own professional learning.

4.3 Building teacher and leader assessment capabilities

4.3.1 An unmet need

There is a substantial unmet need for assessment professional learning for both teachers and leaders. Evidence for this can be found in an analysis of information on the impact of Assess to Learn (AtoL), the current assessment professional learning programme. Over the period 2002–07, teachers in approximately 35% of primary schools and 11% of secondary schools participated in the programme. An ERO study in 2007 found that just over half of our primary schools and fewer of our secondary schools were demonstrating effective assessment practice. There are far more schools wanting to be a part of the programme than can be accommodated.

4.3.2 What professional learning?

Assessment is part of a cycle of inquiry and learning and needs to be understood in terms of how it contributes to the evaluation of a lesson, teaching, and the school. Furthermore, teachers face assessment issues that are not specific to particular learning areas, subjects, or key competencies. They are unlikely to develop the capability to deal with such issues from professional learning that backgrounds assessment. Professional learning that foregrounds assessment is most likely to be able to shape the evaluative understandings that teachers, managers, and facilitators often lack.

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Assessment is an academic and educational discipline that offers understandings that transcend context. If it remains in the background in both pre-service and in-service teacher education, teachers will largely miss out on a major strand of professional learning. Relatively few of the schools entering the current AtoL programme demonstrate high levels of assessment capability even although many have been involved in major curriculum-related professional learning in the recent past. It appears that teachers do not typically 'catch' assessment capability from other professional learning.

While the national evaluation of the AtoL programme shows that it has been successful and has had substantial impacts on student learning and achievement, there is much that it was never designed to do (and, in its present form, would not be able to do) in terms of meeting in-service professional learning needs. One reason for this is a lack of clarity about intended outcomes. While the programme has focused on 'assessment for learning' strategies and understandings, providers have often been uncertain about the specific knowledge, skills, and understandings that students, teachers, and leaders should be developing.

The current AtoL programme was not designed to address the capabilities that boards need, particularly for the purposes of school self-review and evaluation, nor was it designed to support schools to develop better school-home partnerships for learning. Also, given the available funding, it has only been able to reach a limited proportion of schools. The experience of AtoL reinforces the rather obvious point that there are limits to what can be accomplished by a single programme on modest resources within a limited time.

Ideally, during the time that they work with each school, facilitators would want to build capacity or understanding in these areas: student assessment capabilities; learning-focused relationships in the classroom; assessment for learning practices across subject areas; recognition of the relevance of assessment for learning practices to teaching of the key competencies; development of valid, teacher-designed classroom assessments and consistent inter-observer judgments for complex assessment tasks; analysis, evaluation, reporting and use of assessment information; use of information from national and international surveys to inform teaching and learning and school resourcing.

4.3.3 Systemic issues

There are systemic issues that often diminish the impact and sustainability of professional learning programmes in schools. These include the wary professional learning climate that exists in some schools and, sometimes, an 'if you say so' attitude towards what are seen as demands from the Ministry and ERO. When schools receive advice in this spirit, there is little hope for genuine inquiry into school performance and little motivation for improvement.

Timely access to professional learning is also an issue. Because the application processes are often protracted and the probability of being accepted for some initiatives is low, schools sometimes apply for several to increase their chances of being accepted for at least one that will more or less fit their needs. They don't always get accepted for the programme they most urgently need and they can find themselves in a dilemma when they are offered places in more than one. Capacity needs to be increased so that schools can access programmes when they need them.

Another systemic issue is that different programmes are developed and run largely independently of each other. For example, forty per cent of the schools in the AtoL programme are also involved in at

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least one other initiative, most commonly numeracy, literacy, or ICT. Even if there are major pedagogical overlaps and synergies, these are not always recognised by those participating. There needs to be clear alignment of Ministry-funded professional development programmes so that all consolidate in-depth teacher understanding of learning, teaching, curriculum, and assessment. Current professional learning programmes segregate these interrelated areas, creating teacher confusion and lack of confidence.

4.4 Directions for professional learning

To address the issues raised above, we see the need for adequately resourced opportunities for professional learning, both pre-service and in-service, that are explicitly designed to build the assessment capabilities of teachers and leaders so that they are equipped to build the assessment capabilities of their students.

No one programme should necessarily be expected to do all of this, but the total mix of programmes should. As noted earlier, the existing assessment professional learning programme does not adequately address a number of areas. Some of these (for example, use of data for class and school evaluation) are given priority in other Ministry-funded professional learning programmes (for example, schooling improvement). It is not known, however, how effectively these programmes enhance teacher and leader assessment capability, or even if all schools are covered. There needs to be greater alignment of all Ministry-funded programmes.

While we argue that professional learning focused on assessment is absolutely necessary, it is vital that curriculum-specific professional learning also build assessment capability as envisioned in this paper. Teachers need to know how to apply their assessment understandings in specific curriculum contexts and they need to receive consistent and appropriate messages about assessment from all professional learning.

We also need to be mindful of value-for-money considerations. The Ministry invests significant sums of money each year in teacher professional support and professional learning programmes. Without doubt, these programmes will vary greatly in terms of cost per teacher and efficacy. All resource allocations for professional learning should be closely monitored both for efficiency and for outcomes.

It is important that all programmes of teacher professional learning take advantage of the insights provided by the Ministry's own *Teacher Professional Learning and Development Best Evidence Synthesis Iteration*. The conditions for sustainable professional learning that impacts positively on student outcomes are complex, but much is known about them.

Recommendation

- 4.1 That professional learning focused on developing student assessment capabilities be provided for all school leaders and teachers. Resource allocations made for this purpose should be monitored for equity of access, outcomes, and value for money.

5. Parent, board, teacher educator, and central agency assessment capability

What is true for teachers and school leaders in terms of assessment capability is equally true for others who contribute to the wider educational enterprise. In this section, we look at what parents/whānau, boards, teacher educators, and central agency personnel need, and how these needs might be resourced.

5.1 Building the assessment capability of parents and whānau

The one-way flow of information from school to parents that has typically constituted ‘reporting’ is not sufficient if parents are to play a full role in supporting their children’s learning. The notion of ‘reporting to’ parents implies a power relationship that stands in the way of meaningful, effective partnership and dialogue. It also suggests that parents are passive recipients of information instead of active contributors to their children’s learning.

For parents to support their children’s learning, they need quality information about where their children are at, what progress they have made, and what the priorities for further learning are. They should know, for example, the levels that their child has reached and the progress they are making in comparison with expected standards and with their peers. This information should be shared as part of a reciprocal flow of information in which parents also share their knowledge and understanding of their child with the school. Schools can encourage reciprocity by ensuring that the information they make available to parents is clear, contextualised, and not harmful to motivation, and by checking that parents understand its meaning.

Student-led conferences are an effective means of achieving school–home information flows and can support student learning, build the capacity of parents to assist, and show parents that they are receiving quality, accurate information. Together with paper-based tools and web technologies, student-led conferences can improve the ease and quality of information exchange. An increasing number of schools have the capacity to provide parents with rich evidence of student learning on an everyday basis, along with commentary (for example, via webinars). As the technology improves and the number of homes with the resources to interact in this way increases, so do the opportunities for building valuable partnerships.

For student-led conferences to work well there is a need for substantial planning and capability-building. Students need to be assessment capable and so do teachers if they are to be able to guide parents to play their part. Parents need to know how to talk with their children in ways that support and encourage their learning. For many, this requires abandoning interrogation-type questions (for example, ‘What did you do?’, ‘Did you behave?’, ‘Have you done your homework?’, or ‘Have you achieved?’) in favour of inquiry-type questions such as ‘What were you thinking about that led you to do that?’ or ‘How did you go about solving that?’ This shift is a major one and very much in line with our conception of assessment and learning.

While we advocate that students be the main vehicles for mediating the transfer of assessment information to parents—whether this is done face to face, using paper records, or via the Internet—it is important that schools supply information in a form that acts as a record of progress, learning, and

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achievement. This record needs to be compiled in ways that are fully compatible with learning, to be available to the students themselves and to their teachers and parents/whānau, and to follow the students through their years at school.

5.2 Building the assessment capability of boards of trustees

In our self-managing context, it is important that each board of trustees:

- has a well-articulated notion of its vision and its goals for students and that it appreciates what a good school looks like;
- understands the measures that will be used to assess the school against its vision and goals;
- appreciates the range of evidence necessary for defensible interpretations of progress (towards vision and goals) and consequential decision making;
- understands that school assessment practices must first and foremost serve student learning;
- can evaluate reports from the principal and ERO about the extent to which the school is realising its vision and meeting its goals;
- takes considered, improvement-oriented action on the basis of what evaluations reveal.

In other words, school trustees, like other stakeholders, need to be able to make sense of the assessment and evaluative information that they receive. Given the voluntary, community-based nature of the position, building trustee capability is not a simple matter—and it needs doing after every board elections. There is an ongoing resource issue here.

Boards have opportunities to receive training through programmes offered by NZSTA and other providers. The content of these programmes should be reviewed to ensure that there is a sufficient emphasis on evaluation, especially evaluation that is based on assessment information.

5.3 Building the assessment capability of pre-service and in-service teacher educators

In this group, we include in-service teacher educators (facilitators), pre-service educators, and all those support them as managers or academic mentors.

While literacy, numeracy, and learning areas have people and departments in pre-service teacher education programmes with designated responsibility for them, assessment has lacked effective infrastructural equivalents. The New Zealand ‘assessment community’ is small—very small indeed when compared with the literacy, numeracy, and ICT communities. There are no departments of assessment in universities and very few people in education with assessment-specific qualifications. Only some pre-service teacher education programmes have much in the way of studies that focus specifically on assessment. Too often, teachers graduate from pre-service education and enter schools without being required to meet any agreed standard for assessment capability.

Despite good intentions and enthusiasm, the depth of in-service assessment facilitators’ knowledge is often thin. Facilitators have usually been successful classroom teachers and, in this role, have learned to apply assessment-for-learning approaches. Sometimes they also have senior management experience. But few have done formal assessment-related study. The AtoL evaluation highlights the

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variable quality of professional development facilitation. Lack of formal training may go some way towards explaining this issue, as may the part-time status of so many facilitators.

A suitable infrastructure is needed to support the development of the assessment capability of those who support schools and teachers and who generate the academic knowledge upon which professional learning rests. The recently established New Zealand Assessment Academy (NZAA) may be a good first step. This organisation has identified an urgent need for postgraduate studies in assessment in order to build assessment research, scholarship, and practice.

Effective teacher education—both pre-service and in-service—is of crucial importance if we are to see self-regulating learners and self-regulating learning systems. Teachers can only support and model this goal for students when they are self-regulating learners themselves, existing within and contributing towards wider learning systems.

The *Teacher Professional Learning and Development BES*, referred to in Section 4.4, ably outlines the conditions under which in-service education is likely to effectively impact on student outcomes. Central to the *TPL & D* is the notion of a ‘teacher inquiry and knowledge-building cycle’ in which teachers ask themselves what they need to learn in order to help their students learn and then assess the effectiveness of their activities and actions in terms of student outcomes. This is the heart of teacher self-regulation. What is true for in-service education is likely to be just as true for pre-service education.

We support graduating standards for assessment, believing that they will highlight the importance of assessment capabilities both for teacher educators and teachers.

5.4 Building the assessment capability of central agencies

By central agencies, we mean in particular, the Ministry and ERO. While the Ministry is charged with developing policy settings for education and ERO has responsibility for evaluating the extent to which schools are carrying out Ministry policy, both agencies have an obligation to operate in ways that support the learning and achievement of students. As is true of similar agencies in other countries, the Ministry and ERO are always under pressure from the public to introduce standards and increase accountability. How these agencies respond to such pressures largely determines the long-term health or otherwise of the system and schools’ ability to foster learning and achievement.

Overseas experience shows that, without exception, measures such as national testing drive down quality of teaching and learning and narrow the curriculum—any gains are short-term and superficial. A major reason for this is that such measures focus school leaders on meeting external testing requirements at the expense of building the professional capabilities of their staff. It is our view that the range of quality information available from NEMP and the international studies in which we participate is quite sufficient to tell us how New Zealand is doing both nationally and internationally. The extensive information collected for these studies is done without adverse impact on teaching and learning.

‘League tables’ are sometimes promoted as a means of holding schools accountable. The merit of league tables (or any other mechanism intended to incentivise learning and achievement) needs to be judged by the impact they have on those that stand to be least advantaged by them. While inter-country comparisons offer potentially useful information, there is evidence that the ranking of schools and

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classes can have the effect of further disengaging those in the bottom quartile and is, therefore, destructive of a nation's educational and moral purposes.

It is often argued that there is a fundamental incompatibility between serving the purposes of learning and serving the purposes of accountability. The 'formative' and 'summative' labels have often become banners for this argument. The fact is that, for learning to be optimised, all those in a position of influence need to address both, usually simultaneously, without forgetting that the learning purpose is paramount.

Recommendations

- 5.1 That exemplars be developed to show how schools can involve students and parents/whānau in learning partnerships that involve the exchange of quality assessment information.
- 5.2 That school trustees, teacher educators and central agencies personnel be provided with professional learning opportunities that support them to fulfil their role-related assessment responsibilities.
- 5.3 That all assessment used for accountability purposes, whether school-based or national, be demonstrably compatible with educative purposes.

6. Key concepts

Assessment, as we conceive it, is inextricably bound up with the twin notions of quality information and defensible decision making. In this section, we examine these notions further, together with some implications.

6.1 Quality assessment information

Assessment is a powerful tool that can either optimise or inhibit learning, depending on how it is used. Quality assessment information is *informative of learning*. It can be used to determine progress and provide direction; it can highlight strengths, gaps, and misconceptions. Because so much of assessment's potential is dependent on quality, there is a need for more widespread understanding of what is meant by quality, coupled with more general access to tools and strategies that facilitate quality assessment interpretations and the knowledge to use them well.

6.1.1 *Reliable and consistent decision making*

An important characteristic of quality assessments is that they are *reliable*, but like all measurement, assessment is subject to inconsistency and error. For this reason, assessments are said to be *reliable* when inconsistency and error are reduced to a level that is reasonable, considering the nature of the interpretations and decisions to be made. It is important that users of assessment tools can recognise and minimise factors that will undermine the assumptions on which performance is predicated and on which interpretations and inferences depend. It is our view that teachers and students should be able to justify all interpretations of, and inferences made on the basis of assessment feedback, and the reliability of judgments.

6.1.2 *Defensible decision making*

Any statement that concerns the amount, level, value, worth, quality, or success of teaching or learning is based on some kind of assessment. The question is, given the available information, is the statement defensible? That is, does the evidence support the statement? If the primary purpose of assessment is to improve learning and teaching, then students and teachers need to be able to use the information it provides in appropriate ways. Where assessment leads to both defensible interpretations and appropriate decisions and actions, it can be described as quality assessment.

For many people, assessment = tests. This perception is often accompanied by the belief that more testing is the key to better information about student learning. We advocate the use of a much wider range of strategies where the information acquired is to be used to inform further learning. Opportunities for gathering assessment information can occur at any stage in a learning cycle: before, during, or at the end of a lesson, unit of work, or programme. Defensible interpretations can be based not only on test data, but on the teacher's judgment, self and peer judgments, lesson artefacts, and observation of classroom interaction.

Assessment involves the focused and timely gathering, analysis, interpretation, and use of information to yield interpretations about student progress. Analysis and interpretation often take place in the minds of the teacher and the student concerned, who then use the insights gained to shape their

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decisions and actions for further learning. It follows that, as students develop the skills and proficiencies to evaluate their own learning and teachers to evaluate their own teaching, the likelihood is increased that their decisions will be defensible. In the classroom context, quality assessments are facilitated by clear learning specifications, worthwhile learning goals, and defensible means of assessing progress.

6.1.3 Valid interpretations and decisions

When we use the term *valid*, we mean that the descriptive (scores, levels, observations etc) and prescriptive (what to do next) interpretations and inferences made are defensible in their consequences. It is not the test, test score, or observation that is *validated* so much as the decisions and actions that flow from the test, score, or observation. Validity is a function of both parts of the decision-making process: if the descriptive part is good but the prescriptive part is poor (in other words, if a student's performance is correctly determined but consequential decisions are detrimental to learning) or vice versa, the assessment lacks validity.

There is no formula for determining what evidence is sufficient for a particular purpose, including for the high-stakes decisions that are often made on the basis of educational test scores. Validity is a continuum, not an all-or-nothing attribute. Our concern is the extent to which the accumulated evidence supports a particular interpretation or decision. Ultimately, a lot depends on informed professional judgment, so the more effort we put into strengthening teachers' assessment capabilities, and the greater the effort that teachers put into strengthening students' assessment capabilities, the more we can expect that interpretations and consequential actions will be valid.

When assessing the teaching and learning in a school, the same issues are relevant. Because interpretations are as critical as the assessments, a system that is based solely on the use of tests is not defensible. National testing, 'league tables' and the like fail to take account of the most important factor in the teaching and learning process: the quality of the interpretations that students, teachers, and school leaders make.

6.2 Standards

The term 'standards' can refer either to expected levels of performance or to the rate at which a student advances relative to established performance levels. However, when people refer to standards, they typically mean normative descriptions of what students at a particular age or stage of schooling should know and be able to do. This conception is often accompanied by the belief that such standards should be used as the basis for testing and reporting student achievement. The assumption is that standards are the lever that will have all students achieving at specified levels and that standards can be used to hold the system, including individual teachers, accountable for their performance. As stated earlier, this narrow understanding has proven counterproductive to learning when adopted elsewhere and would seriously undermine the directions for assessment that we are recommending.

Nationally standardised tests do provide information about the achievement of any student relative to all others of the same age or in the same year of schooling. Some tests (for example, asTTle, ARBs, and SEA/AKA) also provide useful content- and item-based information that can be used to support teaching and learning. Parents are entitled to know where their child stands in relation to others, but

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there are no guarantees that this information, by itself, will contribute to greater progress over time or enhance their achievement or motivation to learn. Indeed, the converse can apply.

Internationally accepted good practice requires that achievement levels and progress be determined from multiple sources of information, typically including a standardised test. Standardised tests give teachers a profile of student achievement in their class, which can help them plan and structure programmes according to their students' needs. When scores from standardised tests are reported for whole-school or class groups, it should be made very clear that they relate only to a narrow part of the curriculum, and they should be accompanied by other sources of evidence, analysis, and an explanation of implications for teaching and learning.

6.3 Learning/achievement progressions

Teachers require a well-conceived and consistent basis for determining student progress, whether for teaching or reporting. As active participants in their own learning, students also need to know what progress looks like. However, descriptions and examples of progress that can support their judgments are not as readily available as might be hoped. With the notable exceptions of numeracy and literacy progressions for parts of the current curriculum, this is a significant gap in the current assessment landscape.

In *The New Zealand Curriculum*, the learning areas are framed around levels of achievement, but analysis of the achievement objectives shows that they do not provide a sufficient or plausible basis for dependable, level-differentiated judgments of learning. The manner in which they are constructed invites surface coverage at the expense of in-depth learning and the sheer number of objectives (across eight learning areas and 27 strands) can lead to fragmented learning, loss of clarity, and unmanageability, particularly in the primary school. (See also Section 2.)

Given the shortage of good examples of progressions (whether local or international), exactly what making progress means for different areas of the curriculum needs to be determined through research and the professional deliberations of teachers and school leaders. It is our view, consistent with *The New Zealand Curriculum*, that all progressions should be derived from and closely reflect the knowledge and understandings identified in the learning area statements (pages 18–33 in *The New Zealand Curriculum*) and that they should embody, as appropriate, the values and key competencies.

6.4 Student use of assessment information

The most important measure of the success of a national assessment strategy will be found in the answer to the question: 'How effectively do *all* students use and interpret assessment information in ways that further their own learning?' This answer will be found in a variety of evidence, including: student involvement in the assessment and interpretation process; student access to their own learning records; student-mediated conversations with parents about learning and progress; student self-assessment information and data from other appropriate sources feeding into learning; peer assessment skills driving real change; defensible student interpretation of test scores and task performance; student use of learning stories; student awareness of their own achievements, gaps, and strengths and where to head next in terms of learning.

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Recommendations

- 6.1 That the quality of assessment in schools be judged on the evidence for the interpretations and decisions teachers make, the effectiveness of the actions they take, and their success in developing their students' assessment capabilities.
- 6.2 That standards be developed for both achievement levels and rates of progress.

7. Systems alignment

In this section, we consider how to design an assessment system in which all parts work together to support a strategy based on the directions we recommend. Given the rapid, often unpredictable change that confronts us, we need a system that learns—one that can evolve, adapt, and allow new priorities to emerge. Five conditions necessary for learning systems are discussed in Section 7.1. The remainder of Section 7 discusses what is needed for an assessment system that meets these conditions.

7.1 A system that learns

In a learning system, the parts have sufficient in common to allow interactions between them.

This means, firstly, that it is vital to build *shared understandings*: everyone with a stake in assessment needs to understand what the system is designed to achieve and how its various elements contribute to this purpose. In other words, school leaders, teachers, parents, students, teacher educators, employers, and so on must understand why building students' assessment capabilities is crucial for their learning and achievement. This will necessitate a comprehensive communications plan focused on the understandings outlined in Sections 1 and 3.

Secondly, policy settings must *encourage and enable conversations* within and between stakeholder groups because, while shared understandings facilitate interactions, they do not guarantee them. This condition has implications for the management and sharing of assessment information. Sections 4 and 5 outline other implications.

Each stakeholder group inevitably brings a different perspective to the same challenge, so it is important that groups are enabled to learn together. This means, thirdly, that the system must have *sufficient diversity*, allowing different ideas and solutions to emerge and be brought into play. One-size-fits-all approaches will not work. This is why we recommend the use of a diversity of tools and sources of evidence of learning and why we affirm school self-management of curriculum and assessment. It is our view that standards and progressions must also be consistent with this condition.

Decentralised control (which is closely allied to self-management) is the fourth systems condition. Instead of relying on traditional, linear models of accountability, dynamic networks spread accountability in ways that are designed to optimise gains in relation to risks. For example, we want to see students with a strong sense of accountability for their own learning, but surrounded by supports at all levels of the system, ensuring that what they are accountable for is both achievable and fair.

The fifth condition is encapsulated by the apparently contradictory term *enabling constraints*. In terms of an assessment strategy, there must be a balance between what is required of teachers and the freedom they are given to determine what their students need to make best progress. This is where assessment tools have a role. These offer a structured framework of expectations (the constraint) at the same time as they allow the teacher (the enabler) to respond to the particular learning needs of their students.

7.2 What should be aligned?

Broadly, we need to align:

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- how we regulate to ensure the system functions as intended;
- how we develop the necessary expertise (both in and out of schools);
- how we monitor the extent to which we are achieving the directions outlined in this document.

In terms of the overall regulatory framework, the requirements of the NEGs and the work of ERO need to be aligned with each other and with this vision for assessment. (See Section 2.3.)

Structures and policies cannot achieve their intent without people who understand them and have the professional knowledge and skills to make them work. (See Sections 4 and 5.)

The various means used to monitor implementation of this strategy need to be aligned.

7.3 The regulatory framework

At present, the National Administration Guidelines (part of the National Education Guidelines) set out schools' responsibilities for assessing the progress of students:

Each Board, through the principal and staff, is required to: (ii) through a range of assessment practices, gather information that is sufficiently comprehensive to enable the progress and achievement of students to be evaluated.

Another part of the NAGS stipulate that each

Board, through the principal and staff, is required to: In consultation with the school's Māori community, develop and make known to the school's community policies, plans and targets for improving the achievement of Māori students.

We would argue that the two key questions for schools in relation to these Guidelines are: 'What is your assessment policy?' and 'What evidence is there that this policy is enhancing students' assessment capabilities with the effect that their learning is affirmed and furthered?' ERO reviews already ask probing questions on the effective use of assessment information to improve student achievement. ERO should also be asking to see evidence that students, teachers, and leaders have shared conceptions of levels and progress, evidence that the school is making defensible interpretations of levels and progress based on a wide range of assessment information, and evidence that these interpretations are understood by students, recognised as valid, and being used to inform teaching and learning.

Given that revisions to the NEGs are currently being discussed, it is essential that they provide greater guidance on what constitutes quality assessment and reporting practice. It is our recommendation that the revised guidelines include the following assessment-related requirements:

- that schools support all students to develop the ability and disposition to access, interpret, and use information from quality assessments in ways that affirm or further their learning.
- that schools evaluate their assessment practice on the basis of the quality of the evidence used, the interpretations made, and the effectiveness in terms of student outcomes of actions taken.
- that schools communicate effectively with parents/whānau about their children's learning, including how that learning relates to national standards.

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7.4 The Education Review Office

ERO plays a pivotal role in evaluating and judging the performance of schools, individually and collectively. Because of its statutory powers and because its reviewers' observations and conclusions are made public, ERO exercises significant influence over schools' practices and processes, including those that relate to assessment and reporting.

The scope of ERO reviews is determined largely by a variety of regulatory and government policy statements. For the most part, the requirements are broadly stated, giving the agency considerable latitude in deciding how it will interpret effectiveness and performance and what constitutes good evidence and practice. To achieve the quality assessment and reporting that we envisage, clearly defined criteria are needed; determining these should be a collaborative exercise involving both ERO and school leaders. There are two particular challenges to be surmounted: (i) consistent with self-management, schools should be able to align their practice to the criteria in ways that best meet the learning needs of their students and not have practice prescribed for them; (ii) schools and agencies, including ERO, need to have common interpretations of what the criteria mean in practice.

In terms of the directions we are advising, it is crucial that ERO continue to evaluate schools' assessment practice on the basis of the quality of the evidence they use, the interpretations they make, and the effectiveness of their actions. ERO should also evaluate how successfully they are developing their students' assessment capabilities. The agency has a key role to play in evaluating the quality and consistency of the interpretations and uses of assessment information that teachers and students make within and between schools—and in discouraging any data accumulation that is an end in itself.

7.5 Ministry of Education

The following subsections identify a number of important alignments that require the Ministry to take the initiative.

7.5.1 Curriculum, assessment, and NCEA

Our advice in this paper aligns closely with the directions signalled in *The New Zealand Curriculum*. The challenge is to ensure that what happens *in practice* aligns with those directions and—in assessment related matters—with this advice. As noted earlier, where appropriate and possible, development of clearly specified learning progressions and resources indexed to these progressions could achieve this. Such tools would be educative for teachers, a means of building their assessment capability.

Whether we like it or not, assessment requirements tend to drive the curriculum in the senior secondary school. For this reason, it is particularly important that the NCEA standards registered on the NQF support and exemplify *The New Zealand Curriculum* at levels 6–8. Alignment of this kind was not widely or consistently attempted when NCEA was first designed, but the advent of a new national curriculum, coinciding as it does with a review of achievement and unit standards that can be credited to NCEA, provides an opportunity to rectify the situation. We understand that such a review is currently in progress and that the time originally allocated for the process has been extended substantially. This means that the process will overlap with the release of this paper. Allowance needs to be made for resourcing and pacing the redevelopment of the standards and the associated assessments that are in need of more substantial change.

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As in other contexts, the meaning of ‘making progress’ needs careful consideration from those involved in the review of standards. Both progress over time and discrimination of relative achievement (Not achieved, Achieved, Merit, and Excellence) need to be much clearer than at present and to rely less on semantic incrementalism (for example, ‘describe’ → ‘explain’ → ‘discuss’). Discriminations should be meaningful to the students themselves, show them what they can aspire to, and allow them to feel more in control of and responsible for their own learning. Trust in NCEA will be increased if the review is successfully concluded and then understood, and accepted by students and teachers in the senior secondary school.

The broad structures of the NQF and the NCEA are consistent with our vision of students playing an active role in assessing their own learning and achievement. Levels 1–3 of the NQF create a flexible platform for qualifications that match each learner’s mix of interests and abilities and their plans for future study, work, and life. With good support and advice, students can create learning plans and pursue unit/achievement standards that get them started on a learning pathway that continues well beyond the school years. If, however, achievement data from the NQF and NCEA continue to be used as the basis for ‘league table’ comparisons, the student-centred purposes of the qualifications will increasingly be subverted.

It is a strength of NCEA that students are assessed when ‘ready’—when both teachers and students believe that the desired learning has taken place. This feature of NCEA aligns well with the advice in this paper and should be retained whatever changes are made to the regulations. It should be a principle that underpins any assessment of standards throughout the years of schooling.

7.5.2 Planning and reporting requirements

As discussed in Section 2.6.3, the requirement that schools submit targets and reports to the Ministry each year should be amended. ERO could be given responsibility for validating school planning and reporting in relation to statutory requirements, looking specifically at the quality of the evidence gathered and how it is used to benefit teaching and learning. The requirements for planning and reporting should be aligned with the recommended new NEGs to ensure that targets set by schools are meaningful for their students’ learning. It would be helpful if schools could have access to a range of examples of best practice.

7.5.3 Resourcing the recommended directions

Professional Development

Assessment should benefit *all* students, not just some. For this reason, all school leaders and teachers need to understand the substantive directions that we recommend and have the capabilities to pursue them with their students. This will only be achieved through coordinated professional development that is based on these directions and designed, resourced, and implemented in such a way that it provides a convincing demonstration of the directions in action and their benefits for learning. A challenge for the Ministry is to develop accountability measures that will demonstrate the success of these professional development programmes in terms of enhancing students’ assessment capabilities and affirming and furthering their learning. (See Sections 4 and 5.)

Assessment Tools

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When used appropriately, good tools educate both teachers and students. Currently we have a reasonable range of reliable, nationally accessible tools for literacy and numeracy but few are available for other areas. Those that we do have are not always used in ways that are consistent with the recommendations contained in this paper. Many schools use them primarily for reporting purposes but do not realise they also have potential for engaging students in the in-depth learning conversations that we envisage. The emphasis needs to be on professional learning that supports teachers to use the available tools more effectively to promote student assessment capabilities. Other tools that may be developed must also promote such capabilities.

Assessment information systems

It is important that the Ministry support the provision of efficient computerised reporting systems that allow timely access to assessment information, aggregated or disaggregated depending on need. Such a system could allow students and teachers to access information from a wide variety of assessments; allow for the inclusion of teacher assessments and learning stories; store the interpretations that are made; provide a dynamic interface between students, parents, and teachers; indicate where the student currently is in terms of learning progressions and levels. A system of this kind would allow everyone concerned to see assessment interpretations, become more aware of the full range of evidence able to demonstrate learning, and focus on the interpretation of assessment information and feedback about learning.

If these systems were coordinated across schools, assessment information could follow the student through school and across transitions and provide national evidence of the success of our schools. This would require common understandings of progressions and levels.

7.5.4 National and international monitoring and evaluation

The various research groups in the Ministry need to look very carefully at how the evidence gathered by international studies [such as the Progress in International Reading Literacy Study (PIRLS), Trends in Mathematics and Science Study (TIMSS), Program for International Student Assessment (PISA), and International Civics and Civic Education Study (ICCS)] and national monitoring (NEMP) can feed into to an overall, system-level diagnosis of the success of our schools. These various system-level studies should be incorporated by a process of alignment into an overall framework for interpretation and use of evidence, making it easier for the Ministry to ensure that its usefulness is maximised. Within such a framework, the Ministry would be able to:

- clearly articulate the policy objectives to be informed or addressed;
- ensure that national and international studies were relevant to policy objectives;
- assess trends in learner outcomes over time;
- obtain data across all school levels;
- benchmark performance for sub-populations, nationally, and internationally.

Within such a framework, findings would contribute to a coherent picture of the school system and its constituent parts, and trustworthy information from multiple sources would provide the basis for research into educational change over time, a broad range of achievement, and best assessment practice. A framework would also facilitate reporting on all areas of the curriculum, minimise the

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negative effects of national assessments, and encourage use of accumulated data for educational improvement.

Many teachers are largely unaware of how the findings from these studies might be relevant to their work, so they pay them little attention. With Ministry support and backing, researchers, teacher educators, and professional developers need to accept responsibility for ensuring that the messages in the data are heard and the implications for professional learning pursued.

7.5.5 Communications

Nationally shared understandings of the purposes for assessment are necessary if we are to gain traction in terms of systems change. There is a need for a comprehensive and coordinated communications plan to ensure that all stakeholders are engaged with the ideas and their implications. In-depth understanding will take time. There needs to be opportunity to revisit important ideas time and time again, and opportunity to contribute to ongoing dialogue. The Ministry has a key role in initiating and continuing communication until assessment's fuller role in learning (as outlined in this paper) is widely understood and accepted by diverse stakeholders.

Recommendations

- 7.1 That the means by which we regulate our assessment system, develop the necessary expertise, and monitor the success of our assessment strategy be aligned.
- 7.2 That any revision to the NEG's include the following:
 - that schools support all students to develop the ability and disposition to access, interpret, and use information from quality assessments in ways that affirm or further their learning.
 - that schools evaluate their assessment practice on the basis of the quality of the evidence used, the interpretations made, and the effectiveness in terms of student outcomes of actions taken.
 - that schools communicate effectively with parents/whānau about their children's learning, including how that learning relates to national standards.
- 7.3 That school planning and reporting align with the recommended changes to the NEG's (above)
- 7.4 That the Ministry develop clearly specified learning progressions, initially for literacy and numeracy, together with resources indexed to these progressions. These progressions to be for levels 1–8 of *The New Zealand Curriculum* and to align with NCEA levels 1–3.
- 7.5 That the Ministry support the provision of computerised reporting systems that allow timely access to assessment information, aggregated or disaggregated depending on need.
- 7.6 That evidence from all national and international monitoring and evaluation surveys be incorporated into an overall diagnostic framework that allows the contribution of each survey to be assessed and its use maximised.

7.7 That a comprehensive, ongoing, and coordinated communications plan be implemented with the aim of ensuring that all stakeholders understand what developing students' assessment capabilities means, why this is important, and how it can be achieved.

Appendix 1: Directions/Recommendations

Aiming to build on the best features of current assessment practice and policy, we recommend:

- 3.1 That all our young people be educated in ways that develop their capability to assess their own learning.
- 3.2 That the success of any national assessment strategy be judged by whether all students are developing the capability and motivation to assess, interpret, and use information from quality assessments in ways that affirm or further their own learning.
- 4.1 That professional learning focused on developing student assessment capabilities be provided for all school leaders and teachers. Resource allocations made for this purpose should be monitored for equity of access, outcomes, and value for money.
- 5.1 That exemplars be developed to show how schools can involve students and parents/whānau in learning partnerships that involve the exchange of quality assessment information.
- 5.2 That school trustees, teacher educators and central agencies personnel be provided with professional learning opportunities that support them to fulfil their role-related assessment responsibilities.
- 5.3 That all assessment used for accountability purposes, whether school-based or national, be demonstrably compatible with educative purposes.
- 6.1 That the quality of assessment in schools be judged on the evidence for the interpretations and decisions teachers make, the effectiveness of the actions they take, and their success in developing their students' assessment capabilities.
- 6.2 That standards be developed for both achievement levels and rates of progress.
- 7.1 That the means by which we regulate our assessment system, develop the necessary expertise, and monitor the success of our national assessment strategy be aligned.
- 7.2 That any revision to the NEGs include the following:
 - that schools support all students to develop the ability and disposition to access, interpret, and use information from quality assessments in ways that affirm or further their learning.
 - that schools evaluate their assessment practice on the basis of the quality of the evidence used, the interpretations made, and the effectiveness in terms of student outcomes of actions taken.
 - that schools communicate effectively with parents/whānau about their children's learning, including how that learning relates to national standards.
- 7.3 That school planning and reporting align with the recommended changes to the NEGs (above)

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(<http://www.tki.org.nz/r/assessment/research/mainpage/directions/>)

- 7.4 That the Ministry develop clearly specified learning progressions, initially for literacy and numeracy, together with resources indexed to these progressions. These progressions to be for levels 1–8 of *The New Zealand Curriculum* and to align with NCEA levels 1–3.
- 7.5 That the Ministry support the provision of computerised reporting systems that allow timely access to assessment information, aggregated or disaggregated depending on need.
- 7.6 That evidence from all national and international monitoring and evaluation surveys be incorporated into an overall diagnostic framework that allows the contribution of each survey to be assessed and its use maximised.
- 7.7 That a comprehensive, ongoing, and coordinated communications plan be implemented with the aim of ensuring that all stakeholders understand what developing students' assessment capabilities means, why this is important, and how it can be achieved.

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(<http://www.tki.org.nz/r/assessment/research/mainpage/directions/>)

Appendix 2: Papers commissioned to inform this document

1. *Assessing the hard-to-measure* R. Hipkins (NZCER)
2. *Systems mapping—assessment in the primary and secondary education sectors in New Zealand*
R. Y. Cavana (Cavana Consulting)
3. *Results of the survey of assessment tools and usage*
H. Green, H. Visser (Ministry of Education)
4. *How information gained from national and international studies is used to inform Ministry policies and processes*
L. Whitney, R. Parsons (Ministry of Education)
5. *Assessment systems in small countries and states*
C. Hutchinson (Learning and Teaching Scotland)
6. *Issues of culture and assessment in New Zealand education pertaining to Māori students*
R. Mahuika, R. Bishop (University of Waikato)
7. *Cultural issues in relation to Pasifika, Asian, ESOL, immigrant, and refugee learners*
S. May (University of Waikato)
8. *Professional learning in assessment* A. Gilmore (University of Canterbury)
9. *What do teachers, parents, and other stakeholders need to know about young people's progress and achievement?*
A. Jones, B. Cowie, and A. McKim (University of Waikato)
10. *Initial teacher education and assessment*
C. McGee, A. Jones, B. Cowie, University of Waikato
11. *An analysis of the assessment literacy of the New Zealand public, and the sources that inform that literacy*
J. Smith (University of Otago)
12. *The use of technology for assessment* H. Leeson, J. Hattie (University of Auckland)
13. *How do current assessment policies motivate schools?* J. Poskitt (Massey University)
14. *Students' experience of assessment* A. Gilmore, J. Smith (University of Otago)
15. *Barriers and enablers for effective assessment practice* M. Hill (University of Auckland)
16. *Assessing student progress at the national level* J. Smith (University of Otago)