Education Review Office
Te Tari Arotake Mātauranga

Evaluation at a Glance:

A Decade of Assessment in New Zealand Primary Schools – Practice and trends

April 2018

Ko te Tamaiti te Pūtake o te Kaupapa

The Child – the Heart of the Matter

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Contents

Introduction

In the New Zealand education system assessment and evaluation inform both improvement and accountability. The Organisation for Economic Development (OECD) has identified key strengths of New Zealand's assessment and evaluation framework:

- *assessment and evaluation build on a high degree of trust and collaborative work - students are expected to take responsibility for their own learning; teacher professionalism is encouraged and supported; the school's own internal evaluation is at the heart of school evaluation; and system evaluation monitors student outcomes while avoiding high stakes testing*
- *the improvement function of assessment and evaluation is strongly emphasised*
- *assessment and evaluation aim to respond to diverse learner needs*
- *there is a strong commitment to evidence based policy and practice* (Nusche et al, 2012).

High quality assessment and evaluation allows us to focus on student progress and outcomes at classroom, school and system levels. It helps teachers, schools and systems to report on student achievement across points in time, and provide information for parents, trustees and the public about the quality of education.

Classroom Level

At the classroom level, assessment information provides feedback to improve learning and teaching. Teachers can use information gathered to inform learning (formative assessment) and to make a judgement about learning at a particular point in time (summative assessment) (Absolum et al, 2009).

Effective teaching integrates deep and flexible knowledge of subject matter, how students learn, and curriculum specific pedagogy. Formative assessment supports teachers' knowledge to improve learning (Young & Kim, 2010), and can have a significant influence on student outcomes (Hattie, 2009).

High quality assessment practice requires that teachers are data literate:

Data literacy for teaching is the ability to transform information into actionable instructional knowledge and practices by collecting, analyzing, and interpreting all types of data (assessment, school climate, behavioural, snapshot, moment-to-moment, and so on) to help determine instructional steps. It combines an understanding of data with standards, disciplinary knowledge and practices, curricular knowledge, pedagogical content knowledge, and an understanding of how children learn (Datnow & Hubbard, 2016).

School Level

At the school level, assessment enables teachers, trustees and the school community to evaluate the success of their curriculum provision and teaching programmes. It informs decision making, strategic planning, resource prioritisation, monitoring and school improvement. It is critical in identifying individuals and groups of students whose progress needs to be accelerated. Together with information gathered through activities such as teachers' professional inquiries and appraisal, assessment supports the provision of focused and responsive professional learning and development opportunities.

In effective schools, internal evaluation processes draw on a range of qualitative and quantitative assessment and evaluation information:

[These processes] *are systematic, coherent and connected at all levels of the school. This alignment ensures that leaders, teachers and boards of trustees are able to purposefully engage with* [the Education Review Office's] *external evaluation, using it as an opportunity to review, validate and support their own improvement actions* (ERO & Ministry of Education, 2016).

System Level

At the system level, assessment and evaluation information provides assurance about the quality of education. It also contributes to the overall evaluation of the effectiveness and impact of policy and its implementation, and provides direction for system improvement.

New Zealand participates in several international assessment studies: the International Mathematics and Science Study (TIMSS); the Progress in International Reading Literacy Study (PIRLS); and the Programme for International Student Assessment (PISA). These studies provide comparative information about our students' achievement compared to other participating countries, and have been part of New Zealand's system level evaluation since the 1970s.

The National Monitoring Study of Student Achievement (NMSSA) provides information about student achievement at Years 4 and 8 across the learning areas of *The New Zealand Curriculum* (Ministry of Education, 2007). The study also identifies strengths and weaknesses and measures change in student achievement over time.

The National Certificate of Educational achievement (NCEA) certifies the achievement of students in senior secondary education. NCEA provides meaningful and useful information for students, tertiary education providers, employers and the public.

ERO undertakes system-wide evaluations to inform the development of education policy and practice, reporting on significant education issues through national evaluations of sector performance; reports about good practice; and policy advice to the education sector.

In effective education systems, the gathering, analysis and use of assessment and evaluation information at every level is fit for purpose and drives improvement and innovation.

Assessment: A Decade of Evolution

This report is a synthesis of findings from evaluations carried out over the past decade by the Education Review Office (ERO).

Each year ERO reviews approximately 800 New Zealand schools. During each school's review, ERO evaluators use assessment information for discussions and reporting on students' progress and achievement.

As well as reviewing individual schools and early learning services, ERO produces system-wide evaluative information on significant educational issues, and publishes national evaluation reports on education sector performance and good practice.

Over the decade spanned by this report, ERO has reviewed and reported on all schools in New Zealand, on average three times each. This work in schools, along with our national evaluation, has given ERO a rich evidential base, enabling us to identify trends in practice and improvement across the sector. ERO has been able to identify aspects of effective and less effective teaching, school leadership, and management practices influencing students' learning. Over the past 10 years, ERO has seen improvement in assessment practice in many schools. In effective schools we are increasingly seeing evidence of:

- teachers analysing data together, asking challenging questions and suggesting ways to respond to the needs they identify together
- teachers collecting data and using it to identify students' progress and plan responsive programmes
- teachers taking a case management approach for students at risk of not achieving; each student's progress regularly discussed and the effectiveness of teaching responses explored
- school leaders working collaboratively to analyse school wide data to determine the diverse and specific needs of students
- leaders promoting teamwork and high quality relationships with students, their peers and whānau
- teachers and leaders seeking others (parents, whānau) to help them raise achievement
- leaders using the required planning and reporting tools to reach key goals, set targets, focus interventions and reduce disparity
- trustees demanding achievement based reports about the impact of their resourcing
- students using rubrics and information to reflect on their learning and set goals
- students able to explain their learning, progress and achievement
- students knowing if they needed to catch up what their goals are, what works for them and how they are going
- greater parent involvement in learning, and school awareness of their role to support parents with this involvement.

These practices, while increasing, are not yet universal in all schools. ERO decided to look across a range of recent evaluations to ascertain patterns in assessment practices in primary schools, with the purpose of identifying recurring themes in schools the Ministry of Education (the Ministry) or other responsible agencies could address.

ERO has identified many successes and challenges for trustees, leaders, teachers, students and their parents when using assessment to positively contribute to teaching and learning. Although ERO acknowledges many assessments are moment-by-moment decisions teachers make, this report focuses on the more formal assessments leaders, teachers and students analyse, record and use.

This report is intended to inform the work of the Ministry of Education and agencies involved in the initial training and ongoing development of teachers and school leaders. It also provides a basis for discussions among primary school trustees, principals, assessment leaders and teachers about the effectiveness and utility of their own assessment practices.

Section One: Leaders and teachers' confidence with collecting and using assessment in 2007

In 2007 ERO reported on *The Collection and Use of Assessment in Schools* (ERO, 2007). The evaluation focused on how well:

- leaders and teachers understood the purpose and use of assessments
- the assessment information they gathered demonstrated students' achievement and progress accurately and effectively
- assessment information was analysed and interpreted so trustees, school managers, teachers, students, parents and school communities could understand it
- information about students' achievements was used by teachers, school managers and trustees
- leaders and teachers were supported to use and understand assessments.

The evaluation showed that many schools still needed help in developing school-wide assessment policies, procedures and practices across all aspects of students' learning.

In 2007, about 90 percent of primary schools sampled were able to share some information about achievement in literacy and numeracy, but many had little information about other curriculum areas.

Although many primary schools collected considerable assessment data, ERO found much of this information was not well used to inform teaching practice. In effective schools, assessment was integral to teaching and learning. In other schools, assessments were only used at the end of a teaching unit to summarise how well students had achieved. In some cases, assessments did not measure the skills they were intended to measure.

Effectiveness of primary schools in demonstrating students' achievement and progress

Highly effective	13%
Effective with minor weaknesses	44%
Partially Effective with substantial weaknesses	42%

ERO investigated how well teachers helped students use information about their achievement for further learning. In the best instances, students understood the purpose of each assessment and were provided with learning intentions and success criteria to help them monitor their learning. At the other extreme, students were not involved in decisions and discussions about their learning, or were overloaded with information in ways detrimental to their learning. Some teachers had little understanding of good quality learning intentions or how to provide ongoing and useful feedback to students.

The effectiveness of the interaction of assessment with teaching and learning in primary schools

Highly effective	10%
Effective with minor weaknesses	44%
Partially Effective with substantial weaknesses	41%

School leaders and trustees' ability to use school-wide assessment information to review the effectiveness of their programmes and resourcing decisions was also variable.

In effective schools, achievement expectations for learning priorities were clear, and collated information provided an accurate picture of students' learning and progress. Some teachers and leaders used this rich information to identify groups of students who were not achieving as well as expected. They also monitored the achievement and progress of these and other selected groups of students.

The effectiveness of students' use of achievement information for further learning in primary schools

Highly effective	9%
Effective with minor weaknesses	33%
Partially Effective with substantial weaknesses	43%
Not Effective	15%

However in many schools, trustees, leaders and teachers did not have the statistical knowledge required to analyse and interpret school-wide achievement information accurately. Teachers had spent time testing students and preparing reports that were of little use, or developed incomplete or misleading conclusions.

ERO evaluated how effectively information about individual students' achievements was reported to them and their parents, and to the school's community on the more general achievement trends. Effective schools provided parents with comprehensive information on their child's actual and expected achievement in *The New Zealand Curriculum* (NZC). Parents also had opportunities to discuss next learning steps with the teachers and, where appropriate, with the child. Some teachers made special arrangements for meeting the parents of groups of students, such as those who identified as Māori, or as Pacific, or those who were achieving very highly.

The effectiveness of the use of school-wide information in primary schools

Highly effective	13%
Effective with minor weaknesses	30%
Partially Effective with substantial weaknesses	45%

Some schools provided little information parents could use to understand their child's achievement and/or progress. Instead, reports provided information about activities the children had participated in or used grading scales with little information about the scales or how the score was determined.

The effectiveness of the reporting of achievement information to the community in primary schools

Highly effective	8%
Effective with minor weaknesses	43%
Partially Effective with substantial weaknesses	39%

Much has changed in the past decade to improve primary school students, teachers, leaders and trustees information literacy. These changes included:

- guidelines and support from the Ministry for setting and monitoring achievement targets
- professional learning and development programmes for teachers on using assessment to improve teaching and learning
- information from the Ministry about students' learning progressions and expectations
- rationalisation and development of computer software to help with collation and analysis of assessment information across each school

- developing systems to provide more detailed reports about individual students' achievement and progress, using standardised assessments such as Progressive Achievement Test (PAT) , Assessment Tools for Teaching and Learning (asTTle) and the Progress and Consistency Tool (PaCT)
- providing other online resources, such as Te Kete Ipurangi (TKI), Assessment Resource Banks (ARB), NZMaths, Science Education Assessment Resources
- ERO resources for schools and parents about assessment, reporting and curriculum.

Over the past decade ERO has also continued to focus on raising student achievement during both the reviews of individual primary schools, reviews for the national evaluation reports, and the review and development of the *School Evaluation Indicators* (ERO, 2016).

Section Two: Evidence of improved assessment literacy since 2007

Through a decade of national evaluations, ERO has identified a trajectory of improvement in the collection and effective use of assessment in primary schools from 2007 to 2016.

2009 Reading and Writing

ERO's report *Reading and Writing in Years 1 and 2* (ERO, 2009) showed more teachers of Years 1 and 2 children collected and used assessment information for their reading and writing programmes than in the 2007. Thirty-two percent made very good use of their reading assessments to inform teaching, while seven percent made little use. The use of assessment in writing was a little lower, with 27 percent of the teachers making very good use, and 19 percent making little use, of any assessments.

However, the report reinforced and expanded on many of the assessment issues found in schools during the previous 2007 evaluation. In the best schools, leaders used their data to inquire into what teaching practices were working, whether these should be modified, and where resources were needed to help children who were not succeeding. Teachers were adept at using a variety of assessment sources to make judgements about children's literacy progress and achievement. They also applied a 'teaching as inquiry' process to find out what children had already learnt, and what changes to their teaching were required based on what children needed to learn next.

Teachers who did not understand or use reading and writing assessment processes well, were more likely to focus on whole-class teaching and activities without a strong instructional literacy emphasis. They used assessment sporadically and did not use the information gained to reflect on or improve their practice.

One of the key issues identified was unclear expectations from leaders and teachers about good achievement for Years 1 and 2 children. Many had minimal expectations for children's achievement in their first two years at school. Only 26 percent of schools had an expectation that Year 1 children would achieve to the reading level later set as part of National Standards (Green, Levels 12-14). Furthermore, about 29 percent of schools had an expectation that matched the end of Year 2 National Standards (Turquoise, Level 17-18). In many of the remaining schools, expectations were unclear, or very low.

For writing, 33 percent of schools used exemplar levels from *The New Zealand Curriculum Exemplars* for Year 1 children, and 28 percent of schools used them for Year 2 expectations. The remainder of schools had either no writing expectations, had unexplained expectations or focused only on a narrow part of writing development. Our report highlighted the need for teachers, school leaders and board members to be clear about their important roles in setting achievement expectations and monitoring how their teaching practices and processes help Years 1 and 2 children to be successful young readers and writers.

2010-2012 working with National Standards

Over the next few years, ERO saw a considerably increased focus on assessment across primary schools. ERO's report *Working with the National Standards to Promote Students' Progress and Achievement (*ERO, 2012a) was one of the final reports of a series published over three years about National Standards. In 2011, most schools were making progress with understanding and working with National Standards. Twenty-two percent (97) of the 439 schools included in this evaluation, were working well with the National Standards. Fifty-nine percent (258 schools) were developing systems and processes to work with them; 19 percent (84 schools) were opposed to the standards and not working with all the requirements associated with implementing them. Another 2012 ERO publication, *Reporting to Parents: National Standards Years 4 to 8* (2012b) highlighted that the new National Standards reporting requirements had led many schools to review their reporting formats. Often this consultation had included parents and students. Seventy-two percent of the schools ERO investigated had met the reporting requirements as set out in the National Administrative Guidelines. The previous year, 60 percent of schools in the sample had met the requirements.

2011 and 2012 Teaching as Inquiry

In *The New Zealand Curriculum*, teaching as inquiry is described as a cyclical process in which teachers identify the learning needs of groups of target students, and respond to them through planned programmes. These programmes are subsequently evaluated for their impact on student outcomes, leading to programme changes if the teaching has not had the desired impact. It may also identify new target groups of students.

Inquiry practices are usually used in the classroom by individual teachers, or amongst groups of teachers working towards a common goal; the focus is the progress and achievement of all learners. Inquiry is particularly beneficial for accelerating the progress of priority learners who are not achieving well. Māori and Pacific students, students with learning needs and students from low socio-economic backgrounds make up a large proportion of these learners. Teaching as inquiry, put into practice well by teachers, and supported effectively by school leaders, has the potential to make a significant difference for these students.

In 2012, ERO identified many schools were using Teaching as Inquiry to investigate the impact of the decisions and practice on students in the report *Teaching as Inquiry: Responding to Learners* (ERO, 2012c). In the most successful schools, leaders had created routines and protocols that facilitated discussion about student achievement and teaching practice.

Levels of Support and guidance for *Teaching as Inquiry* in primary schools (by percentage)

Highly informative and able to support decision making	28%
Somewhat informative and able to support decision making	35%
Minimally informative and able to support decision making	27%
No Teaching as Inquiry	10%

In the schools where Teaching as Inquiry was highly informative, research projects in self-selected areas were carried out by individual and groups of teachers who analysed student data, set targets for groups of students whose progress needed to be accelerated, and reviewed outcomes for those students.

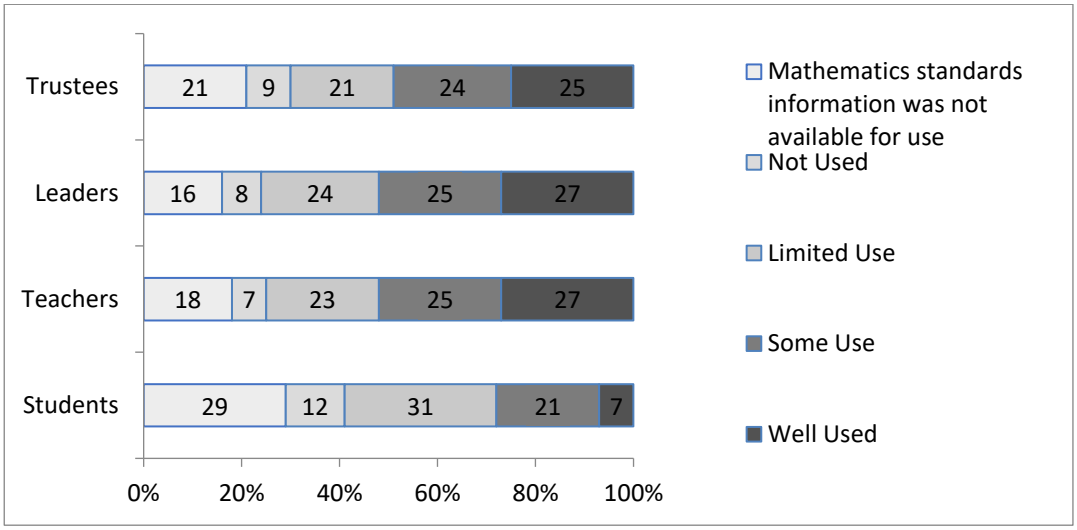
In other schools, while teachers had anecdotal information about the effectiveness of their teaching, they seldom based their claims on evidence of improved outcomes for students. Evaluation documents instead contained descriptions of teaching and learning activities, and students' reactions to them. In some schools, end-of-unit evaluations or compliance with the school's appraisal systems did not contribute to any improvements for students.

2013 Mathematics Years 4 to 8

ERO reported in *Mathematics in Years 4 to 8: Developing a Responsive Curriculum* (ERO, 2013a) that the use of schools' assessment data by trustees, leaders, teachers and students was still highly variable. Often the focus of the schools' self review neglected to look at aspects of teaching practice that might have impacted on achievement outcomes. Leaders often addressed the 'what' (content) of the curriculum that should be taught, without considering the 'how' (teaching approaches and strategies) or the 'so what' (outcomes for students). Many schools failed to adapt their curriculum to respond to successes and challenges identified in their assessment data. Their predetermined or prescriptive curriculum did not always match the identified strengths, interests and learning needs of the current group of students.

In about half the schools, trustees, leaders and teachers had assessment information they were able to use well, or make some use of, to inform decisions. Students' use of achievement information was weaker, as shown below. Over 25 percent of trustees, teachers and leaders were using assessment well compared to less than 20 percent of schools where assessment was not used.

Use of achievement information by trustees, leaders, teachers and students



The table below illustrates the difference in practice when comparing schools where information was well used with those where it was not, for mathematics programmes in 2013.

	Well Used	Not Used
Trustees	• Boards received good quality information regularly from school leaders and were active and engaged – independently questioning the data and seeking to further their own understanding. • They used the data to inform resourcing decisions, which were targeted and responsive to areas of need. • Boards also used the information to set appropriate targets to raise achievement and align them with strategic goals. • Robust self-review processes were evident.	• Boards received some information from school leaders, but this was not analysed and, in some cases, ERO had concerns about the validity of the data. • Boards in this category showed no evidence of considering the information in depth or using it to inform resourcing decisions, strategic planning or target setting. This was sometimes due to paucity of information, and sometimes due to a lack of board capability. • No evidence of self review.
Leaders	• Leaders regularly collected and presented comprehensive student achievement information across all strands of mathematics. • Information was analysed to show progress over time and to assess the efficacy of interventions. • The information was used to inform decisions around PLD and curriculum, allocate additional staffing and set targets. • The information was used as part of school self review.	• Most leaders had not collected and analysed the information. • In many cases ERO had concerns about the validity of the data, or the robustness of overall teacher judgements made after considering achievement information (OTJs). • Data was not used to inform target setting or identify professional learning and development priorities.
Teachers	• Teachers collected high quality data from a range of sources to inform their OTJs. • This information was used to plan programmes and identify teaching strategies. • They focused on learners requiring additional support. • Teachers showed a commitment to and understanding of teaching as inquiry. • They provided regular opportunities to involve students, parents and whānau in learning conferences and goal setting for mathematics standards.	• Teachers were either: making minimal use of assessment information to teach students, with no clear link to the mathematics standards; or making no use of assessment information to inform their planning and practice.
Students	• Teachers had explained the mathematics standards for students. • Students were therefore able to use assessment information to reflect on their own learning. • Students could talk about where they were in relation to the standards and their next steps. • Students took an active role in goal setting and participated fully in learning conferences along with teachers, parents and, whānau. • Students were well supported by teachers to understand their achievement.	• Students were not aware of how well they were achieving in relation to the mathematics standards or informed about their next steps for learning. • They had limited or no knowledge of the standards. • In some cases teachers did not share information with students.

ERO also identified that although many schools were using their data to identify students who needed additional support; they tended to use the same teaching strategies and adopted a 'business as usual' approach to how they responded to the identified students. They used practices such as ability grouping (streaming across classes) and/or used teacher aides to support these students, without any evaluation of how these practices improved outcomes for the children involved.

2013 Priority Learners

ERO's report *Accelerating the Progress of Priority Learners in Primary Schools* (ERO, 2013b) evaluated how well teachers, leaders and trustees contributed to improved outcomes for priority learners. This evaluation focus extended beyond the use of assessment to investigate teachers' confidence with strategies to respond to students needing additional support. However, teachers', leaders and trustees' use of assessment, was key to the support provided for students. Examples of good practices found are shared below.

> *Teachers with many highly effective practices **used assessment data well** to identify those students for whom they needed to accelerate progress. They had good knowledge of their students' strengths and needs. Teachers developed flexible, responsive learning plans for individuals and groups of students. They were reflective practitioners and followed an inquiry cycle of teaching and learning by using assessment data to review the impact of their teaching, and changing strategies as necessary.*
>
> *Principals **used achievement data effectively** to identify priority groups, to monitor their progress and to evaluate the impact of programmes and systems over time. They drew on the knowledge that their teachers had of individual students in these analysis processes. Leaders benefitted from having information about the specific teaching points that needed to be reinforced, rather than just knowing the numbers and names of students below the National Standards.*
>
> *In the boards with effectively used processes, trustees were kept well-informed by the principal about student achievement in general, and received well-considered recommendations for priority learners in particular. Trustees were **committed to raising student achievement**. They were active participants in the charter target-setting process and interrogated achievement data provided by the principal. They allocated appropriate resourcing for programmes to accelerate learning, based on this information.*

We found that well over half of teachers, principals and trustees contributed to improvements for priority learners in the sample of schools reviewed. 'Business as usual' was no longer seen as good enough. Teachers were reflective practitioners who were constantly looking for better ways to improve their students' achievements.

Teachers, principals and trustees' contribution to improved outcomes for priority learners

	To a great extent	To some extent	To a Limited extent	Not at all
The extent to which **teachers** contributed to improved outcomes for priority learners	28% of schools	51% of schools	20% of schools	1% of schools
The extent to which **principals** contributed to improved outcomes for priority learners	29% of schools	37% of schools	33% of schools	1% of schools
The extent to which **trustees** contributed to improved outcomes for priority learners	17% of schools	48% of schools	32% of schools	2% of schools

The schools that had effectively accelerated students' progress fully used school-wide data to determine the specific extra teaching individual students needed. Leaders collated teachers' analysed data identifying individual students' specific strengths and next learning steps. Leaders also looked for achievement trends over time to establish how well their systems and programmes were working.

In contrast, in schools where leaders mostly aggregated the numbers of students who were achieving expectations, they lacked the information to decide on their school-wide professional development or resourcing needs. Issues with the validity, reliability and sufficiency of assessment data meant leaders had difficulties identifying which students needed additional support, and the specific concepts they needed to master to make progress. The lack of aggregation of data about each individual's next learning steps meant that in many schools, students may have participated in an intervention that did not teach the concepts and skills they needed to accelerate their progress.

2014 Raising Achievement

ERO's 2014 report *Raising Achievement in Primary Schools* (ERO, 2014) provided evidence of considerable improvement in teachers and leaders' capability to use assessment data to respond to Years 1 to 8 students achieving below expectations. Half the schools investigated had used deliberate actions to support priority students to accelerate their progress, which had resulted in improved achievement. Many of these schools had not restricted their focus to one particular year group or curriculum area. They focused on students whose achievement needed to accelerate across all year levels, and for mathematics, reading and writing.

About half the schools had moved beyond merely identifying the students needing additional support, to extending their teaching practices by researching and trialling new approaches. They then closely monitored students' progress to identify practices that were successful and should be continued. In the best instances, they were sharing the new strategies and approaches to allow more students to benefit. School leaders in many of these schools promoted teamwork and high quality relationships with students, their parents and whānau, and other professionals, to support acceleration of progress.

Leaders and teachers in these schools were able to explain what had worked for the students and were continuing to use the successful strategies in classrooms. Teachers, leaders and students were energised by their success. Parents and teachers were fully involved and contributing to the improvements.

Schools where the students were active partners in designing the plan to accelerate progress were more likely to improve student outcomes to a greater extent. Their plans included:

- learning contexts based on student interests
- collaborative group tasks
- a lot of oral work
- self and peer assessment
- student feedback to teachers about what worked and what did not.

Many schools developed literacy and mathematics progressions children could understand, that helped them monitor their own progress while describing what they had learnt, what they needed to learn and how they learnt. Parents and whānau were well informed about their child's need to accelerate progress in reading, writing or mathematics. This need was explained in ways that made it clear teachers and leaders knew they were responsible for raising student achievement, but needed help from parents and whānau to do so.

The other half of schools responded to underachievement with 'more of the same'. However, for some students it was not working. The schools were effectively identifying the students needing additional support and were using time, effort and resources to provide extra support. However, they did not have specific implementation plans or evaluation processes to determine the effectiveness of their strategies. Most of these schools were aware of the need to support students to catch up, though some had little sense of urgency. Leaders had not developed a coherent plan to improve achievement that included both long-term preventative and short-term remedial responses. Instead, they often focused on short-term actions that were not well resourced or evaluated for impact. Any gains by students from supplementary instruction programmes were often not maintained, as they did not complement classroom experiences.

Leaders and teachers at the less successful schools tended to work on improvements in isolation, focusing on the student alone. They had analysed achievement data, but used it only to monitor student progress rather than also evaluate the impact of teaching actions. Leaders at these schools knew it was important to develop good learning relationships with students and parents, and often had it as a school goal, but were not willing to be specific in their request for parent and whānau support. This meant many of the actions to develop such relationships appeared superficial.

2010 -2015 Students with Special Needs

The ERO report *Inclusive Practices for Students with Special Needs* (ERO, 2015a) was the fourth national report on inclusive practices in New Zealand schools. The report identified more schools were more inclusive but there was still room for improvement. The most effective schools used high quality teaching practices, developed high quality individual education plans (IEPs) based on evidence, and responded flexibly to individual needs. Features of good IEPs included:

- goals based on data and focused on what the student could do, and their strengths and interests
- well-developed objectives for student learning and development for social, learning, communication, physical, sensory, behaviour and life skills
- SMART (Specific, Measurable, Achievable, Relevant, Time-bound) goals to help the school show learning, progress and next steps
- teaching strategies and clear responsibilities for staff
- regular review of the goals in consultation with parents, staff, specialist teachers, specialists, and sometimes students.

In the best instances, schools collated information about the progress of all students with special education needs in a way that allowed them to analyse where progress had been accelerated, and to identify and share the most successful practices. However, ERO also identified some schools where teachers needed to improve their knowledge of how to modify the curriculum, develop specific IEP goals and use achievement data to inform their teaching for children with special education needs.

An ongoing finding from all four of the reports on inclusive education was that many boards were not well informed about the impact of their resourcing on progress and achievement of students with special education needs. Reports to boards mostly shared what was provided for the students, rather than outcomes for students or the effectiveness of the school's practices. An analysis of school reports to boards showed that only 15 percent of schools provided any achievement information for students with special needs. Without this information, it was difficult for boards and leaders to determine priorities, decide on specific targets, identify PLD needs, and develop a detailed plan to improve provisions for students with special education needs.

In this report ERO also notes the paucity and weaknesses in the available assessment tools for students with low cognitive ability/functioning within Level 1 of the curriculum.

2015 Learner-centred Relationships with Parents

The ERO report *Educationally Powerful Connections with Parents and Whānau* (ERO, 2015b) evaluated how well schools worked with the parents, families and whānau of students at risk of underachievement. Educationally powerful connections and relationships were learning-focused and supported the two-way sharing of expertise, in ways that acknowledged, understood and celebrated similarities and differences. Schools that had learning-centred relationships involved parents, along with their child, to set goals and next steps. Teachers and parents each shared what they knew about the child's strengths, interests and needs and decided how they would contribute to the child's goals.

In schools with low quality learning-centred relationships with parents of students at risk of underachievement, teachers and leaders believed they could only reach a certain proportion of parents, and the lack of involvement of hard-to-reach parents was justified. These schools generally did not seek ways to improve parental involvement. In a few schools, there was a pervasive view from teachers and leaders that 'teachers know best'.

2015 Transition to School

ERO's 2015 report *Continuity of Learning: Transitions from Early Childhood Services to School* (ERO, 2015c) found considerable variability in how well services and schools supported children to transition to school, particularly children at risk of poor educational outcomes. Leaders and teachers in the very responsive schools could demonstrate they had real knowledge about their newly-enrolled children. They took care to translate that knowledge into providing the best possible environment and education for each child. This enabled smooth transitions to the school.

New entrant teachers in the very responsive schools also quickly found out about each child's interests, strengths, culture and capabilities before they started school, through:

- observations in the early learning service and on school visits
- talking with the early learning service's teachers and child's parents and whānau
- referring to the children's portfolio or learning story journal.

After starting school, the new entrant teachers learnt about the child through:

- ongoing observations and discussions with parents and whānau
- formal and informal assessments.

The relationship with parents was very important and an essential, informal way for teachers to build a complete picture of each child. This picture helped teachers to manage transitions.

The less responsive schools tended towards a 'one size fits most' approach. These schools had few strategies in place to recognise or respond to children as individuals with their own interests, strengths and capabilities. They rarely took into account the children's prior knowledge or learning. In the worst cases, the new entrant child had to fit into a rigid system where no part of that system catered for them as an individual.

Most schools worked well with children with special education needs during transition. School leaders and teachers took time to find out about the children before they reached the school. They set up meetings with appropriate people and external agencies to develop IEPs and made sure applications for appropriate funding were made well in advance of children starting school. However, such good assessment practices were not used as often for other children that may have been at risk of not achieving well.

2015 Charter Targets

Primary school leaders and boards have made considerable improvements in setting and responding to charter achievement targets. The report *Raising Student Achievement through Targeted Actions* (ERO, 2015d) investigated the extent that targeted actions supported the rate of progress of students at risk of underachieving.

Findings showed 80 percent of primary schools in the sample responded to specific targets, resulting in progress for some or many of the targeted students.

Although many schools had a focus on underachievement when setting targets, they were less effective in taking actions to raise achievement. Two key conditions were required for effective target setting in successful schools. These were having:

- optimum challenge in the targets, to 'stretch' expectations for success
- maximum visibility of targets, so that those needing to take actions (trustees, leaders, teachers, students, parents and whānau) shared responsibility.

The number of primary and secondary schools effectively setting and responding to targets (during 2014)

Actions too general and not focused on acceleration	Up to 40% of targeted learners accelerated their progress	40-69% of targeted learners accelerated their progress	Over 70% of targeted learners accelerated their progress
Primary: 57 Secondary: 21	Primary: 110 Secondary: 4	Primary: 79 Secondary: 9	Primary: 64 Secondary: 7

The sample included 310 primary schools and 41 secondary schools.

Some of the most successful primary schools set targets for fewer students, rather than the whole cohort. They had a clear understanding of who they needed to target actions to, and were also able to monitor their actions to determine if they resulted in positive gains. Board members, leaders, teachers, parents and whānau and students all knew what they had to do to make the desired improvement. In the best instances, schools provided targeted support for the students not achieving well and, at the same time, built teacher capability to avoid such underachievement in the future. Both students and teachers in these schools were energised by their visible success.

In the less successful schools, targets were often more generalised, without clearly identifying the students teachers needed to focus on. Targets outlined the percentage of students they wanted to reach the target, without identifying specific needs and actions for individual students. As a result, there was less coherence in teachers' response to at-risk students' needs and interests. In other instances, teachers identified actions but these were not clear or followed through. Individual teachers may have been taking actions to raise the achievement for selected students, but these actions were not coordinated across the school.

Newly Graduated Teachers (2017)

In the report *Newly Graduated Teachers: Preparation and Confidence* (ERO 2017b), ERO found newly graduated teachers tended to be more confident about their content and pedagogical knowledge than their ability to use assessment data to show progress, plan strategies and refine their practice. Nearly one-third of teachers that completed the survey were only somewhat confident or not confident at all to use data to inform their planning and teaching. Secondary school teachers rated themselves as more confident than primary school teachers.

Assessment, and its analysis and use to inform teaching and learning, was a common area that needed strengthening. Leaders told ERO that newly graduated teachers often had little understanding of assessment tools, moderation, data analysis or data use. They said NGTs' knowledge and understanding was dependent on what they learnt on practicum, and many were learning about assessment 'on the job'.

Although much progress is evident in leaders and teachers' capacity to collect and use assessment, ERO reports have continued to identify considerable variability in assessment capability between schools. This variability continues to impact negatively on individual children and their families, and New Zealand's national and international achievement results. One of ERO's most recent reports also highlights issues with assessment confidence for some newly graduated teachers that could contribute to ongoing variability in the future.

Shifts in Practice 2007-2017

The table below summarises some of the shifts in assessment practice in effective schools from 2007 to 2017. These improvements, while encouraging, are not yet universal.

Teachers working together in a professional community

FROM 2007	TO 2017
In the effective schools, teachers had good systems for sharing assessment information about student achievement with other staff.	Teachers analysed the data together, asked challenging questions and suggested ways to respond to the needs they identify together.
Some teachers gained little information until the end of the unit of work and summarised achievements without adapting their programmes in response to their students' abilities.	Teachers in over half the schools collected mathematics data, and used it to identify students' achievement and plan responsive programmes.
Many teachers had effective systems for identifying students at risk of not achieving and provided interventions to support them. However, few teachers checked the impact of the intervention on outcomes for students.	Teachers in successful schools had a case management approach for students at risk of not achieving that meant each student's progress, strengths and needs were regularly discussed and the effectiveness of teachers' responses were regularly explored.

Leaders

FROM 2007	TO 2017
The measures used for determining and reporting overall student achievement were too general.	Leaders worked collaboratively to analyse school-wide data, to determine the diverse and specific needs of students at risk of not achieving.
In some schools, assessment generated limited information about students' knowledge and abilities and, in many cases, was not closely linked to learning priorities.	In about half the schools, leaders promoted teamwork and high-quality relationships with students, their peers and whānau. Teachers and leaders were able to explain how others could help them raise achievment, while also being clear that they were responsible for student achievement.
Some school managers reported overall student achievement to the board, to meet a compliance requirement, but did not then use the information to review and improve learning programmes.	In effective schools, leaders used the required planning and reporting tools towards key goals, set targets, focus internal evaluation, plan interventions and reduce disparity.

Boards of Trustees

FROM 2007	TO 2017
In many schools, trustees, leaders and teachers did not have the statistical knowledge to analyse and interpret school-wide achievement information accurately.	In effective schools, trustees demanded achievement-based reports about the impact of their resourcing.

Students

FROM 2007	TO 2017
Students often received superficial feedback comments in their books or writing portfolios that mainly praised effort and neatness.	Students used rubrics and information from assessments to reflect on their learning and took an active role in goal setting. They were able to explain how they were progressing and achieving.
Many students were not well informed about how well they were achieving, or what they needed to do to improve their learning. Students were not involved in discussions. Learning expectations were not clear and sometimes only described teaching activities.	In effective schools, students involved in an intervention knew why they needed to catch up, that teachers believed they could succeed, what their goals were, what worked for them and how they were going.

Working with parents

FROM 2007	TO 2017
Schools used a variety of ways to inform parents about their child's progress, most commonly a combination of interviews and written reports, usually two per year but sometimes more frequently.	Teachers and leaders at schools with successful working relationships with parents and whānau of students at risk of underachievement expected parents to be involved, and knew that the school's role was to help parents be involved. There was a sense of manaakitanga -teachers and leaders recognised their responsibility to care for the wellbeing of parents and whānau when working together.

Section Three: Ongoing successes and challenges when collecting and using assessment

Each year ERO undertakes reviews in approximately 800 New Zealand schools. During each school's review, ERO evaluators use assessment information to inform discussions and for reporting on students' progress and achievement.

Over the decade spanned by this report, ERO has reviewed and reported on all schools in New Zealand, on average three times each. Along with our national evaluation studies, this has provided ERO with a rich evidential base, enabling us to identify trends in practice and improvement across the sector. ERO has recognised ongoing successes and challenges for leaders and teachers collecting and using assessment information.

Assessment in Years 1 to 3

The early years of primary school are a critical time for children, when they learn the reading, writing and mathematics skills they need to engage with all aspects of *The New Zealand Curriculum*. When children start school, each child's literacy and numeracy experience and knowledge is different. How well this experience and knowledge is recognised and used in their education on a daily basis is, to a large extent, in the hands of their teacher.

To effectively build on each child's knowledge and strengths teachers need to:

- seek and use information from parents, whānau and the child's early learning service as the child transitions to school
- judiciously use a range of assessment tools to identify what the child knows already and what they should work on next
- continue to work with parents and whānau to share robust information about the child's interests, achievement and progress
- help the child to understand what they are learning, when they are successful and what they should practise next
- have clear expectations about what a year's progress looks like and an explicit commitment to excellence and equity
- know the teaching strategies to apply to support children to learn to read, write and apply simple mathematical concepts.

Mathematics Successes and Issues

Generally, our children are more confident with and enjoy mathematics earlier in their schooling than they do by the end of primary school. The most recent *National Monitoring Study of Student Achievement* (NMSSA) mathematics and statistics report (2013) found that while 81 percent of Year 4 students were performing at Level 2 of the curriculum as expected, only 41 percent of Year 8 students were performing at the expected Level 4. The report also found that Year 8 students were less positive about mathematics than Year 4 students.

In the past decade, teachers have increased their confidence with assessing and responding to individual children's numeracy achievement and progress.

Considerable professional learning and development has supported teachers to undertake numeracy assessment, and to teach the concepts children need to master next. Teachers use relevant resources to carry out diagnostic interviews, observations and other junior assessments. The assessments are aligned to *The New Zealand Curriculum*, provide considerable formative information, and give more general summative information (as shown in the example below).

After Two Years at School Number Expectation

Working at Curriculum Level 1, Numeracy Strategy Stage 4: Advanced Counting

Curriculum Level 1		Curriculum Level 2		Curriculum Level 3		Curriculum Level 4		Curriculum Level 5
Standard after 1 year	Standard after 2 years	Standard after 3 years	Standard at end of year 4	Standard at end of year 5	Standard at end of year 6	Standard at end of year 7	Standard at end of year 8	
Numeracy Strategy Stages 2 or 3 Count from one	Numeracy Strategy Stage 4 Advanced Counting	Numeracy Strategy Stage 5 Early Additive Part Whole		Numeracy Strategy Stage 6 Advanced Additive Early Multiplicative		Numeracy Strategy Stage 7 Advanced Multiplicative Early Proportional		Numeracy Strategy Stage 8 Advanced Proportional

Mathematics and statistics curriculum coverage

Number and algebra comprise 60 to 80 percent of the programme for Years 1 to 3 students. Teachers are not as likely to have collected, used and responded to assessments related to geometry, measurement and statistics. There are no summative assessments for these areas for children in Years 1 to 3, and often they are not reported to boards or parents.

Progressing to the next knowledge and strategy stage

Some teachers and leaders are not confident about when to move children to the next number stage. In some schools, teachers usefully begin teaching children concepts from the next knowledge and strategy stage while revising concepts from the previous stage when they have mastered most of the concepts. In other cases where teachers group children depending on their knowledge and strategy stage, teachers wait until the child knows all the concepts before moving them to the next group. This type of grouping means some children's progress will be slowed while they are retaught many concepts they already know, while waiting to learn the ones they need to move to the next stage.

Parents and whānau understanding of progress through the stages

The rate that children progress through the knowledge and strategy stages varies depending on the capability and age of the child. Generally, many children move through the first three or four stages quite quickly, and then take much longer to progress through more complex concepts in the next stages. As the stages and the child's likely progression rate are not well known by parents and whānau, they are not easily able to understand how well their child is progressing.

Teachers' Understanding of Progress in Literacy

Generally teachers have a good understanding of expected rates of progress in Years 1 and 2. Most teachers use running records to identify both children's reading levels and their strategies when reading aloud. Schools are provided with texts that indicate the relevant levels when using them for shared, guided, and independent reading.

In 2010, the introduction of *Reading Standards* and *The Literacy Learning Progressions* (Ministry of Education, 2010) gave leaders and teachers clear expectations of what children should achieve and what progress looked like.

The Literacy Learning Progressions are generally well regarded by those leaders and teachers who are familiar with them, and expectations can provide both formative *and* summative information. Most teachers have raised their expectations of what reading and writing levels, and skills, children should achieve during early schooling. However, some teachers have difficulty getting more of their students to reach expectations.
In some schools, where many children reach or exceed expectations, teachers use a wider range of assessments to find out more about children's decoding skills. Many of these teachers also located and used other assessments that provide more detail about children's phonological knowledge and comprehension.

Some teachers' lack of confidence with Reading Running Records
The Ministry's advice to schools about Running Records explains that, for young children, Running Records should be taken only with seen texts. Some teachers are not aware of this and use unseen texts, which makes the assessment much harder. In these cases, children are often held back and engage with simple pre-readers when they should be able to advance more quickly. In other cases teachers use commercially-produced Running Records that have sets of comprehension questions the child must answer correctly. This practice also limits children's progress, as often these questions are not culturally appropriate for some New Zealand children. It is also difficult for children to read aloud and decode text, while at the same time recalling everything they have read.

Teachers in all schools should use *seen texts* when undertaking Running Records for beginning readers, by using the readers the children have previously encountered in their class. They should also recognise that comprehension should be taught and assessed at a lower reading level than they use when teaching children such things as rereading, self-correcting and decoding skills.

One-size-fits-all teaching that ignores assessment results
In some classes, all children engage in the same type of reading activities despite assessment information showing they have different strengths and needs. For example, in some classes, all children are taught a letter a week even though their school-entry data shows some already know the alphabet sounds and names. In other cases, all children experience the same daily phonics programme that they don't necessarily need. These practices limit some children's success and enjoyment with early reading as they fail to engage and challenge them.

Literacy every day
The urgency teachers show for Year 1 children to read and write so they can fully engage in the wider curriculum varies considerably. In some schools, leaders set the expectation that guided, shared and independent reading and writing will happen every day without exception. However, in many schools, instructional reading and writing happens less often. On Fridays, literacy programmes are not as focused and often only involve whole-class shared reading with some type of drawing or colouring-in activity. All children should be engaged in instructional literacy activities that respond to their individual strengths and needs every school day.

Oral language
Some teachers have talked to ERO reviewers about their perceptions that children's oral language levels seemed to be dropping when they start school.

However, ERO's 2017 report *Expanding their Language – Expanding their World: Children's oral Language (birth-8 years)* also identified that the quality of response to children's oral language varied considerably. The table below outlines some of the findings about schools' assessment of oral language for children up to eight years old.

Supporting oral language learning and development in primary schools (by percentage)

Well-focused schools • There was both formal assessment and informal daily monitoring of oral language practices in the early months at school • Oral language progress was regularly shared with students and parents • Levels or indicators guided teacher monitoring and planning for next steps. • School leaders promoted the importance of oral language, monitored progress for targeted learners and refined interventions where necessary.	35%
Schools with some focus • some monitoring of oral language progress in the first year, but typically not continued in any systematic way into Years 2 and 3, except for individuals of particular concern • less well-defined oral language progressions than well-focused schools • little or no internal evaluation of oral language interventions and their impact.	36%
Schools with limited or no focus • no or few formal expectations for oral language development over Years 1 to 3 • little or no monitoring or assessment of student progress in oral language learning • Internal evaluation was weak or non-existent across schools in this group.	29%

This ERO report contains many examples of good practices schools should implement to improve oral language to support children and their reading and writing progress.

Working with Parents and Whānau in the First Two Years

Generally, ERO has observed teachers working more closely with parents in the first two years children are at school, than they do in later years. Projects such as the *Mutukaro Project* have increased the ways teachers in some schools work with parents and whānau to share information about children's strengths, needs and interests. In many schools, teachers meet with parents before the child starts school and again a few weeks later. They share initial achievement information and discuss how well the child has settled in the class. Most junior classes also have some daily written communication focused on the reading book the child is taking home. Teachers also have informal conversations with parents when they bring or collect their child from the classroom each day.

Although ERO has found examples of teachers and parents and whānau working closely together, some leaders and teachers continue to place little value on working together in genuine learner-centred partnerships. Many schools share general assessment results a few weeks after the child has started school, but are more inclined to tell the parent what they should do, rather than actively listen to determine the skills parents and whānau have to support the child both at home and at school. When ERO spoke to parents who have worked in genuine partnerships with the school to support their child, the parents expressed a real gratefulness for the experience and of being so valued and involved.

ERO agrees that all teachers should share actual assessments with parents and whānau to discuss what the child's responses might be telling them to work on, and how they can each contribute to ongoing improvements. Such relationships help the child learn consistent and useful learning strategies at home and at school.

An example of teachers working together to improve learning in Year 1

ERO recently visited a school where the Year 1 teachers were concerned about children's progress in their first year at school. The teachers felt they should be doing better and decided to review their practices to identify how they as teachers could improve.

The team leader formed a review team to inquire into the possible reasons that might have contributed to the Year 1 results. The review team included a board trustee, Year 1 teachers, and their resource teacher: learning and behaviour (RTLB). They identified two key areas to improve. The first related to their relationships with parents and transition to school processes. The second area identified was a lack of urgency for children to progress.

Transition to School

Feedback from parents identified some children needed more transition activities and support than others. After becoming aware of these issues, the teachers immediately changed their transition activities to respond better to those who needed extra support. In some cases, teachers engaged with a child and their parents and whānau for the whole school term before the child started school. Leaders and teachers also introduced new practices, including teachers visiting the child's early learning service a term before the child started, and reviewing and improving the transition letter and information they sent to parents.

Their main change however, was to involve parents in their children's learning during and immediately after the transition. Leaders recognised that to grow learner-focused relationships with parents and whānau, they had to work with them more regularly. They wanted to take more opportunities to hear and respond to the parents' opinions about their child's interests, strengths and needs. They began to meet with parents to hear about and share their child's strengths, interests, achievement, progress, goals and next steps throughout the year. Teachers wanted to take a more strengths-based approach to focus on what the child could do, rather than what might be missing. They subsequently started new sharing-information sessions with parents every 10 weeks for the first 40 weeks the child was at school.

Teachers completed more comprehensive assessments. Ongoing 10-weekly assessments were introduced to determine the child's progress with alphabet knowledge, concepts about print, writing vocab, and their current maths strategy stage. They also undertook initial testing of oral language and some of the child's physical skills. These assessments were shared during the 10-weekly learner-focused meeting with parents. During these meetings, they reviewed goals and set new ones together. Teachers shared what was focused on at school, how the child was responding and what they would do next. Parents shared information about what learning and other things were happening at home and what they could do in the future. If resources were needed for any at-home activities, the teacher provided them.

Increasing the urgency for children to progress

Teachers wanted to make sure they had clear expectations about changes for their own teaching. They agreed to give children a greater sense of purpose, by making sure children knew more about what they were trying to achieve and when they had achieved their goals. They wanted to develop *children's awareness* of the knowledge and skills they were acquiring in their literacy activities. Teachers also aimed to extend opportunities for children to celebrate what they were achieving. They trialled ways of introducing goals and self-reflection activities for children in each of the Year 1 classes.

We observed reading and writing lessons in Year 1 classes and saw children highly focused on their goals. The classrooms had displays featuring the goals children were currently focused on. Teachers constantly reminded children of the links between reading and writing. Before they started reading or writing, teachers asked children to look at relevant rubrics and share what they were doing well with a buddy. They then decided where they were placed on the rubric.

After the reading lesson, the children worked on a short writing activity and ERO talked to them about their goals. They explained their current focus. They were able to explain how they were progressing with spelling some basic words. They also knew their current reading level and what they had to do to read even better. Children focused on their own progress and were not competing with others. They were highly motivated and knew how they could improve.

After the teachers had introduced deliberate teaching and more specific feedback to children, they continued to collaborate across teams to monitor the impacts for children. Teachers from Year 1 classes met together for a day in each of the school holidays to continue to refine their expectations and review progress. Their achievement information clearly identified the positive impacts of changes.

Assessment in Years 4 to 8

Data from the *National Monitoring Study of Student Achievement (NMSSA)* highlights that more Year 4 children achieve at or above the expected curriculum level in mathematics and writing, than Year 8 children. Similarly, more Year 4 children report they enjoy learning in reading, writing and mathematics than Year 8 children. Clear achievement expectations and activities that challenge and engage students are both vital to reverse this trend.

Unless teachers know their students' strengths, needs and interests well, and are knowledgeable about student achievement, they cannot be confident that their teaching is fully engaging students and maximising their progress. Equally, unless leaders and trustees know how well students are achieving when compared to other New Zealand students, they cannot be confident they are setting the student on a pathway to success in secondary schooling and beyond.

Students and their families and whānau need access to high quality, robust and reliable assessment information. Once students have learnt fundamental literacy and numeracy skills, they must explore new ways to solve problems, think critically, organise their thinking and communicate their ideas so they can fully engage with the wider curriculum. At the same time, they need to know more about how they can take greater responsibility for their learning so they can understand what to focus on, and will become energised by their success.

Most formal assessment tools available for Years 4 to 8 students are designed to provide both formative and summative information for individual students, groups of students, whole-class and whole-school performance. Tools such as the New Zealand Progressive Achievement Tests (PAT), the Ministry's Progress and Consistency Tool (PaCT), and Assessment Tools for Teaching and Learning (e-asTTle or asTTle) are aligned to *The New Zealand Curriculum* and provide information about how each student is achieving and progressing compared to other New Zealand students. The tools also provide comprehensive reports about each student's mastery of specific concepts and skills.

However, the extent to which the formal assessments are used and understood by leaders and teachers is variable. In some schools, ERO identified teachers using the formal tools in some areas but not in others.

Decisions were often well considered, such as in some schools where leaders had decided to help teachers to become confident in one area before moving on to another. In other cases, it was often a lack of knowledge of the tools or concerns about how the results may be used by others outside of the school that limited their use.

Understanding the benefits of using formal assessments

Some schools are using no formal assessments to compare their students' performance with others nationally. In some of these schools, long-term improvement plans were not in place. PLD was focused on what teachers thought they needed, rather than leaders focusing PLD on what they thought teachers needed to improve their teaching practice. Sometimes teachers participated in any PLD opportunity available because it looked interesting to them. In these schools, teachers were collecting some assessments but were often not confidently interpreting assessment data or appropriately responding to individual students' strengths and needs.

Some schools lacked sound assessment leadership. In these schools, teachers were often instructed to use assessments the leader preferred rather than to focus on the purpose of the assessment and the benefit for students when selecting assessment tools. In some cases, the assessments leaders stipulated took more time away from teaching and had little benefit for students. As an example, teachers in these schools continued to use Running Records for every Year 1 to 8 student every term even though this assessment provided no useful information for the majority of their students who were fluent readers. (Running Records are meant for non-fluent or beginning readers). In other cases, teachers were instructed to have every student complete a formal writing assessment each term that teachers then marked, analysed and moderated, despite having high quality writing assessments records from ongoing observations that already outlined what the child had mastered that term. Many leaders required more support to make sure the assessments they selected were both useful, valid, reliable and manageable.

Teachers and leaders do not always fully understand the ways they can use asTTle tools to support and reduce the amount of assessments. For example, in some schools teachers use asTTle for pre- and post-tests for every mathematics topic or unit. Teachers and students were not able to use any information from the post-test as they had already moved onto the next topic. The teachers didn't understand the feature of asTTle that allows students' results to be meaningfully compared across schools and year groups, over time, even if they sit a different test. This means it is not necessary to have students repeat an asTTle test as a post-unit test.

As an example, if the student sits a geometry pre-test some of the items are designed to establish what level the student is achieving overall. Teachers would need to be concerned if every test showed the student was achieving at the same sublevel all year (ie 3b). However if subtests show the student has progressed to the next sublevel (3p or 3a) in any of the pre-tests, the teacher can see the child is progressing. The major reason for the comparability is that the difficulty of all items has been carefully estimated (using item response theory) and these difficulties are considered within the asTTle application during the scoring process.

In some schools, teachers were taking considerable time to write and manage their own mathematics pre- and post-tests. These results were not as reliably comparable to national curriculum levels or useful for the next teaching unit. The post-test provided little benefit for students, especially those results that showed the student had made little progress.

Some leaders and teachers would benefit from additional support to help them understand how ongoing asTTle assessments can reduce their workload and contribute to improved outcomes for students.

Assessment Analysis Confusion

ERO continues to encounter a small number of schools who collect information from both formal and informal assessments, but their limited understanding of the tools and data analysis means they use the assessment tools inappropriately.

Using the assessments for summative purposes only

In some schools, although the results from PATs are collated and reported to leaders and boards, ERO found little evidence of changed practices in the classroom. In these schools, long-term teaching plans were not adjusted to take account of assessment results for the current students. Instead, teachers continued to use previously determined programmes and timeframes.

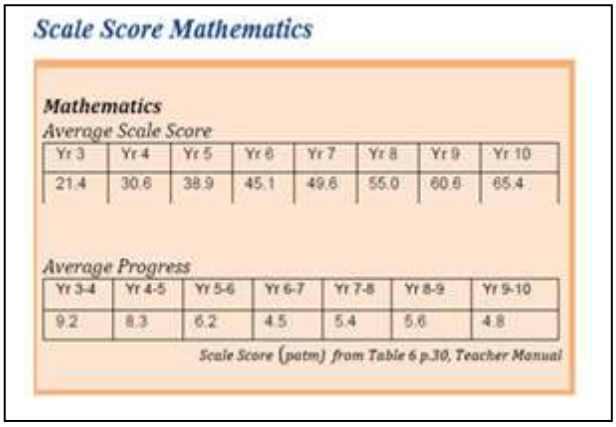
Some schools tended to overuse PATs for summative purposes. The stanine norms are set for tests undertaken in February and early March. Testing at other times is not desirable. However, if testing is done at other times, progress should not be compared to norms, but should focus on a student's progress on the scale. If schools re-test students in November, for example, they should use the norms from the next year level. However, ERO found some schools using the February/March stanine norms for end-of-year testing (or other months). This obviously exaggerated progress during the year and caused an achievement dip again at the beginning of the following year. In some cases, leaders had not recognised this achievement trend, or blamed the summer holiday slump for the dip.

Reporting stanines

This problem was more common before schools began reporting to their board in relation to the National Standards, but still occurs sometimes. Some schools use stanines when reporting their Supplementary Test of Achievement in Reading (STAR) results, PAT or other results, without including the percentile range. This made results appear more positive, as students scoring stanine 4 were identified as average in reports to the board despite this stanine including students scoring as low as 23 percent.

Statistical description of stanine scores

Stanine	Percentile Rank Range	Verbal Description
9	96+	Outstanding 4%
8	89-95	Above Average 19%
7	77-88	
6	60-76	Average 54%
5	40-59	
4	23-39	
3	11-22	Below average 19%
2	4-10	
1	<4	Low 4%



Scale Score Mathematics

Mathematics

Average Scale Score

Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10
21.4	30.6	38.9	45.1	49.6	55.0	60.6	65.4

Average Progress

Yr 3-4	Yr 4-5	Yr 5-6	Yr 6-7	Yr 7-8	Yr 8-9	Yr 9-10
9.2	8.3	6.2	4.5	5.4	5.6	4.8

Scale Score (patm) from Table 6 p.30, Teacher Manual

Improvement-focused schools used *scale scores* that were more useful for leaders and boards, as they made it possible to compare a student's achievement with nationally representative groups of students across different year levels. Each PAT has a different scale score. The mathematic PAT scale score is shown here. Teachers also used the scale score to determine each student's ability level and how far they had progressed since the previous assessment.

Understanding tool-generated assessment reports

asTTle and e-asTTle generate a wide range of reports, such as individual and group pathway results. Schools can also pay for reports generated from PAT results by the New Zealand Council for Educational Research (NZCER). Considerable information is provided about the strengths and weaknesses of each child, class and year level. However, some teachers and leaders had a limited understanding of how to:

- interpret and use all the information provided
- access the information
- transfer the information into their student management system (SMS).

At the other extreme where teachers knew how to use these reports well, they were fully discussed with each student and to a lesser extent with their parents and whānau. Schools, leaders, teachers and students were clear about what they had mastered, what they needed to focus on next, and how much they had improved.

Successes and Challenges from across Primary School Year Levels

Using assessment to improve teaching practice

In many schools, leaders and teachers regularly used assessment information to inquire into their practice. Many inquiries reflected the school's charter targets or followed an individual or group of teachers' interests. Often teachers sought and used additional assessments for more fine-grained information about the strengths and needs of a small group of students. They repeated the assessments to identify how the programme was affecting those students. In some schools, these inquiries were carefully managed and coordinated to make sure successful practices were extended across the school, or a cluster, to benefit more students. This good practice should apply in every school.

Students' Involvement in Assessment

Approaches that involve students in using assessment for learning have increased considerably in the past decade. ERO has spoken with many students who could confidently explain what they had recently mastered, what they were presently striving for, and what they were going to focus on next. They understood how formal assessment would benefit them, and had discussed the results with their teacher. In a few instances ERO was shown students' PowerPoint presentations explaining their asTTle results to their parents and whānau.

In the best instance, teachers worked closely with students to focus on the specific skills and concepts they needed to develop. Students and teachers then set and monitored their goals. Effective teachers helped set goals judiciously, so each student was challenged but not overwhelmed. Teaching the student experienced supported and aligned with the goals, and gave students many opportunities to practise new skills. If a student needed additional support, assessments were also shared with their parents and whānau, and ways to help the student at home and at schools were mutually agreed. Teachers and peers (of both students and parents in some cases) gave targeted feedback related to the goals. The teacher and the student together decided and recorded when the goal was met. These goals were not time bound but were reviewed regularly, celebrated when reached, and new goals were then mutually developed. The information was then used to show how the student progressed over the year, and was collated and included in robust achievement reports to the board.

In less successful schools, when assessment was shared with students, opportunities were often missed to improve learning, or it negatively impacted on a student's learning and/or self-efficacy. Examples of such poor practice included:

- having students participate in assessments with no understanding of the purpose of, or results from, the assessment
- setting goals with students without providing learning opportunities that taught the skills and concepts needed to master those goals
- providing no or poor quality feedback to the student about their goals
- setting up class displays or goal sheets that gave students who were below expectation, an overwhelming number of goals to conquer to achieve success and potentially publically shamed students working at the lowest levels
- telling students what their goals were and then not referring to them again until it was time to measure progress
- leaving the student feeling they were solely responsible for poor performance
- demonstrating low expectations for a student by praising poor quality work or effort.

Parents' and Whānau Understanding of their Child's Achievement and Progress

The quality of assessment information shared with parents and whānau continues to vary considerably. Many schools use parent interviews and conferences, written reports, and portfolios or other students' work samples to share information. Many also use computer software that helps children share some of their schoolwork, and in some cases includes comments from the teacher. Most primary school leaders report high levels of attendance at parent interviews, and positive responses from parents and whānau resulting from easy access to their child's work online.

In a few schools, teachers shared the actual assessments the child completed with parents and whānau (sometimes with the student present). Together, they looked at the child's responses and gave their views of what they indicated, and set goals for the future. Samples of work demonstrating the child's mastery of the goals were also shared with parents and whānau, either online, or in portfolios or exercise books. Where necessary, teachers helped parents and whānau to understand the assessments and informed them about any future assessments.

When parents from these schools spoke with ERO, they showed they were able to understand the assessment information and could tell us about what their child was focused on, how they as parents had helped, and what progress they had made.

However, in many other cases, parents and whānau were not as well informed about their child's achievements. Before the introduction of National Standards, reports provided little information about students' achievement compared to expectation, and had little information about what the expectations were. Over the time that National Standards were used for reporting to parents and whānau, teachers were still developing confidence with making and reporting accurate overall teacher judgements about a child's achievement. Further work is still required to make sure all parents and whānau are provided with information about expected achievement levels for their children including understanding how they are achieving and progressing with their own goals and relative to children in other schools nationally.

Generally, teachers were less inclined to use formal assessment results to make their judgement about a child's overall achievement. A *National Standards: School Sample Monitoring & Evaluation Project* in 2011, identified the sources of assessment information teachers rated as most important as specific class observations in reading, writing, and mathematics, instructional text levels in reading, the collection of samples in writing, and numeracy assessment results in mathematics. Encouraging teachers to also value making comparisons among their students (and others nationally), and then accurately reporting these results to parents and whānau, is key to keeping them well informed.

Although leaders are increasingly involving parents and whānau of students at risk of not achieving well in additional meetings and learner-centred conversations, some leaders are yet to understand the positive benefits for students when these partnerships are in place. When the partnerships worked, teachers held extra meetings to explain what additional activities they were providing for the child, and provided resources for the child to practise at home. In schools with genuine learning partnerships, necessary additional resources were provided for parents to use at home. Teachers sought and valued parents' perspectives about how to further support the child. Many schools that worked in partnership with parents had evidence of accelerated progress. To help equalise the balance of power, teachers had respectfully considered the time and place of meetings as well as the environment where they met together.

Examples of good practice

Careful selection and use of reading assessments

Teachers had reviewed and reduced the number of reading assessments they used. They wanted to know what they should spend time teaching and what the children already knew. They also aimed to fully use the information gained from a small number of assessments, rather than collect a lot of information that wasn't fully used. They accessed a New Zealand Council of Educational Research (NZCER) webinar to extend their data literacy and analysis of some of the standardised PATs they used. They looked for, and noticed, achievement patterns and trends, and then together planned teaching to address the gaps identified. Thoroughly examining questions children struggled with helped them to decide on the deliberate teaching they should focus on. They considered what the children would need to know to answer that question correctly. This provided useful insights to plan activities to match students' interests and needs.

Teachers selected assessment tasks to check how well children applied the strategies they had been taught. ERO evaluators attended a syndicate meeting where a teacher shared the results from a recent assessment. The task focused on children's confidence answering inference questions and was selected from the Assessment Resource Banks (ARBs). The teacher acknowledged she should still continue the focus with many of the children she was working with who needed to accelerate their progress.

Children and teachers knowing and reflecting on achievement and progress

Leaders and teachers identified that, to have agency, students must understand the learning progressions, recognise what they have mastered, and know what to do next. So they broke the curriculum into bite-sized portions and progressions and then introduced 'learning pathways' for use in reading, writing and mathematics.

Using the pathways, the children identified and then highlighted in yellow what they had already accomplished, proof of capability in purple, and next steps in green. Teachers and leaders also examined their own assessment beliefs and practices to make sure they supported learner agency. They identified the following key principles:

- assessment, both formal and informal, helps teachers and students identify trends in achievement and progress
- teachers and children gather, analyse, and use information to adjust their teaching or learning
- assessment is a collaboration between teacher and student, to determine student achievement and next steps
- when children are involved in decisions about assessment, they will value and use the results to inform their next learning steps.

Following the introduction of this more collaborative approach to assessment, the children became familiar with and understood the learning progressions, and they used them with some confidence to develop goals. Children also reviewed their progress, and set goals, against Key Competencies. They spoke knowledgably about 'testing to see where we are'.

Sharing assessment information with parents

The school's leaders had a strong belief parents have a right to access important information about their children's learning, achievement and progress. When a new family came to the school, leaders and teachers shared everything. For example, teachers displayed the junior reading levels as a colour wheel, and fully explained the numeracy stages so "parents didn't have to operate in a fog". Leaders showed every space in the school to show everything was shared and nothing was hidden.

At all other parent conferences, teachers shared all assessments and the children's responses with their parents. Teachers and parents would:

- discuss what an assessment revealed
- jointly decide the child's next steps as specific learning goals
- determine how the parents could support the child's learning at home and how the teacher would support the learning at school.

Teachers also gave parents appropriate resources to focus on the agreed learning goals at home.

Children maintained portfolios with evidence of their learning in reading, writing, mathematics and inquiry topics and regularly shared them. To increase their understanding of their own learning, the expectation was that as children moved through the school, they would increasingly be involved in assessing their own work. In Year 1, work samples in their portfolios would be accompanied by teacher comments. In Year 2, the teacher would write, with the child, why they had chosen to share this piece of work and how it related to the success criteria. From Year 3 onwards, students were responsible for explaining and recording why they had chosen to share each different piece of evidence. In portfolios for children from Year 6 and above, we saw that children were also confidently writing their next steps for each of their work samples. This process, used with the portfolios, helped children understand what they had achieved. It also simplified the assessment and tracking process for teachers and highlighted the child's progress to parents.

Students with Special Needs and Abilities

Students with special needs

ERO's national reports from recent years highlight considerable improvements in the ways schools manage their processes to support special needs students. By 2015, almost all of the schools reviewed had systems, guidelines and key practices to support students with special education needs. They had relevant strategies in place, had a Special Education Needs Co-ordinator (SENCO) or head of learning support to coordinate and oversee provisions, had effective transition processes, and had built relevant staff capability. Special education needs registers were well used to identify resources and teaching strategies, and to ensure appropriate planning for students as they moved from one teacher to the next. Registers were updated regularly as students progressed and their needs changed.

Most schools effectively supported special needs students as they transitioned to the school. Their processes involved staff, parents, specialist teachers and specialists with knowledge or understanding of the student's needs. SENCOs often visited the early learning service or previous school to talk to staff and observe the child in their familiar setting. Some developed a detailed transition plan and information for the child's next teacher to help them understand the particular special education needs and how they could best support the child's learning and wellbeing.

Most schools had robust systems for identifying these students' specific needs. SENCOs used a range of assessment and diagnostic tools, and developed appropriate programmes and strategies to meet these needs. Many schools had developed IEPs that met at least some of the Ministry's guidelines for quality. Features of good IEPs included:

- goals based on data and focused on what the student could do, and their strengths and interests
- well-developed objectives for students' learning, social, communication, physical, sensory, behaviour and life skills
- SMART (Specific, Measurable, Achievable, Relevant, Time-bound) goals [3], to enable the school to show learning, progress and next steps
- teaching strategies and clear responsibilities for staff
- regular review of goals with parents, staff, specialist teachers, specialists, and sometimes students.

Leaders and teachers in many schools were not as confident about collecting and using information about the outcomes of their programmes. Most collected information about the types of activities the children were involved in. However, some schools provided more than anecdotal evidence of outcomes for students with special education needs. Their focus on progress and achievement resulted in useful improvement such as:

- improving tracking of student outcomes so that progress within Level 1 of the curriculum was more evident
- providing PLD for staff on effective teaching strategies
- ongoing modification of programmes
- providing more release time for SENCOs to carry out their roles
- improving IEPs and strengthening goal setting.

Schools could more usefully collate and provide information about the number of IEP goals set for their students with special education needs, how many were achieved and resources needed for the remaining or next learning goals.

Although boards often allocate significant funding for children with special needs, many were not well informed about the impact of their resourcing on the progress and achievement of these students with special education needs. Reports to boards mostly focused on what is provided for the students rather than outcomes for students or the effectiveness of the school's practices. Leaders and SENCOs were not confident with systems to share information about students and their progress. Some leaders believed they were breaching a child's privacy if they shared the outcomes and progress of a small number of students where the individual child could be recognised. During reviews in individual schools ERO has reminded many leaders of how to use board in-committee procedures to enable such reporting and discussion.

Gifted and talented students

The ERO report Schools Provision for Gifted and Talented Students (ERO, 2008) showed that assessment processes to identify gifted and talented students were not strong in many schools. Most schools did not use, or only used partially, a variety of assessment information to show gifted and talented students' achievement and progress. Some schools drew on both formal and informal methods of identification, made decisions based on multiple sources, rather than just one or two methods, and included both potential and actual or demonstrated performance in a gift or talent. However, most schools did not use either formal or informal methods, failed to triangulate findings, and did not consider both potential and demonstrated performance when making a decision about giftedness and talents.

Most schools were not identifying gifted and talented students early enough in their time at the school, nor were they doing so on an ongoing basis. The main challenges were having processes to identify gifted and talented students early on in their time at the school.

The use of both summative and formative assessment to encourage and demonstrate students' achievement and progress, was important for promoting positive outcomes for gifted and talented students. Teachers' use of good assessment practices and achievement information across the variety of gifts and talents, as well as the teacher's own professional judgement, helped identify students' next steps for learning. However, only some schools were able to demonstrate gifted and talented students' achievement and progress from a range of assessment information. Many students were not given feedback that allowed them to develop their gifts or talents.

In some schools, gifted and talented students go to one- or two-day programmes away from the school, provided by an external agency. Boards usually provide funds for all or some of the students attending these out-of-school programmes. However, boards rarely receive any information about outcomes for these students.

Occasionally the SENCO may report some of the activities students were involved in. Boards should expect to receive more comprehensive reports about students' achievement, progress and next steps to help them with decisions about continued provision of funds for out-of-school programmes.

Supporting children at risk of underachieving

Many of the processes already discussed in this report have improved support for students at risk of not achieving. Leaders and teachers working in genuine learning partnership with parents of these children have seen significant improvements for these students. Improved target setting has seen an increased focus on these students, with about half the schools trialling new approaches to respond to identified needs.

In the remaining schools teachers continued to apply the same practices used before, or there was no clear understanding of different stakeholders' responsibilities to improve outcomes for individual or groups of students. More work is needed to introduce universal assessment and teaching practices in Year 1 and beyond that reduce reliance on out-of-class interventions for so many students, and to ensure interventions are providing long-term benefits for the students participating in them. More must also be done to improve early outcomes for Māori students.

ERO has found that some Year 1 teachers undertake assessments that identify students in their class who are not achieving, without subsequently taking responsive action to target teaching and learning. In such cases, the teachers rely on interventions such as *Reading Recovery* (*RR*) rather than taking immediate responsibility for having all students succeed in their classroom. There remains an assumption that all students that have not progressed initially when learning to read will participate in *RR* and will succeed.

ERO has found many teachers lack confidence to support students experiencing early reading difficulties. Although some know about additional assessments to more specifically identify the specific strengths and needs of students at risk of not achieving, they are not known or used by all teachers. In other cases while teachers use assessments that identify a student's learning needs, the teacher may have limited knowledge of the strategies they should use to help the student make progress.

Somewhere between 60 and 65 percent of primary schools implement the *RR* programme. However teachers should not assume that such an intervention programme, or other teachers, will take over their responsibility for student achievement and progress. Teachers in Year 1 need to increase their professional knowledge and ability to better assess and profile student's strengths and weaknesses, including all aspects of language and comprehension. This will ensure that effective teaching strategies can be universally employed within the classroom at an early stage.

Improved assessment and earlier focused teaching would also help make sure the targeting of children for *RR* is more precise. Considerable evidence shows *RR* is more effective for some students than others. For example, *RR* is shown to be more successful for students in higher decile schools than in low decile schools. New Zealand data indicates that Māori and Pacific students, and those from low decile schools were less likely to have been successfully discontinued from *RR*, and more likely to be referred on for further specialist help.

Recent data also suggests that the gains seen during the *RR* programme may not be sustained. New Zealand research that examined results of the Progress in International Reading Literacy Study (PIRLS) found that, three years after participating in *RR*, students had a much lower score (493.10) than those that had not participated (568.05). Another recent evaluation examined the impact of *RR* on students' outcomes in NSW government schools. The evaluation found some evidence that *RR* has a modest short-term effect on reading skills among the lowest performing students. However, researchers found that *RR* does not appear to be an effective intervention for students that begin Year 1 with more proficient literacy skills. In the longer-term, there was no evidence of any positive effects of *RR* on students' reading performance in Year 3. Given the education sector's current investment in *RR*, these issues need further investigation in the New Zealand context.

New research is providing teachers with useful teaching strategies, and ERO has seen considerable gains for students in some schools who work with targeted students within the classroom. In these schools, leaders have chosen to support teachers to take responsibility for the success of every student in their classroom, teaching team and/or across the school, rather than rely on out of class interventions. Teachers engage with many different, targeted PLD programmes to improve their teaching practice, in particular focusing on their understanding of the technical aspects of teaching reading, and how children learn. Results for Year 1 students improve considerably when teachers determine whether the student needs more focus on decoding, fluency, or comprehension and provides targeted teaching to match the student's needs.

In schools successfully raising the reading achievement levels of many young readers, teachers have undertaken individual or group inquiries to research and implement the necessary assessments and teaching strategies to lift performance. Teachers undertake inquiries into what worked for their students and then share that knowledge and practice across the school. Teachers work together to analyse assessment data and propose new strategies for colleagues.

Supporting students to transition to school

ERO's Report *Evaluation at a Glance: Transitions from Primary to Secondary School* (ERO, 2012d) points out that young people who do not experience school support during the transition from primary to secondary school are at greater risk of disengaging from learning. Transitions between primary schools can also contribute to negative outcomes for students. The report highlights that transitions are not just a defined period of time in which specific orientation activities are put in place to support students to know about school systems, their teachers and their peers. Transitions take time, and students respond differently as they adjust to a changed environment, with different systems, teachers and peers. ERO found that transitions are most successful for students where there is a school-wide culture to progressively support them through ongoing educational and social changes.

Some primary schools with high levels of transience effectively support these students by quickly carrying out key assessments at entry. The teacher and child could immediately build on what they already knew and what they needed to focus on next. If assessments showed the student had similar learning needs to other students identified for support as part of the school's charter, they were added to the group.

The board allocated additional resources to support the larger group as necessary. In some instances, an additional target group or target was established to cater for new learning needs identified from the assessment of the transient students.

ERO has identified that although students with special needs are often well supported when they transition to school, other students at risk of not achieving may not be as well catered for. In many schools transient students, their parents and whānau are treated the same as all other students. ERO has argued that more should be done to identify these students learning needs before they start school, so their strengths, interests and needs are used to help them settle and learn quickly (ERO, 2017a).

Sharing of information between schools to support transient students is limited. When students move to a new school, few arrive with assessment information their teacher can access immediately. Although schools and the Ministry have put considerable effort into compatible software systems, little electronic information is quickly shared between schools. Some students take portfolios and work samples to their new school. When others arrive with no information, teachers undertake some formal assessments as soon as possible. The ease of transition for students would improve considerably if all schools were able to share all the student's assessment information electronically, either before or immediately after they start at the new school. Tools such as using a student *Facebook* page can be used to ensure that rich assessment information and work examples are not lost, particularly for those learners who may be highly transient, and allow the student to maintain a high level of agency and control over who has access to their information.

The inconsistent quality of support for transient students in primary schools also indicates leaders in some schools were considerably more focused on progress towards equity and excellence than others. Some primary schools have high numbers of transient students. During reviews of individual schools, ERO has seen highly variable practice in the ways leaders and teachers use assessment to support these students, some of whom may move schools many times. Some principals reported it was particularly difficult to prepare useful and meaningful information on school-wide trends when a considerable proportion of the roll was made up of students who moved schools frequently.

In a few schools, leaders prepared achievement reports that separated results for students who had attended the school since they were five and those who had moved to the school at some other age. In the worst instances they prepared comments and recommendations related only to the data set for non-transient students, ignoring the other data set. Many children who move schools during their primary school years are achieving and progressing well. However, leaders should encourage an additional focus on our most vulnerable children who frequently transition to different schools. More should also be done so leaders and teachers can access assessment data from one school as soon as a student moves to the next school.

Assessment Across the Curriculum

A feature of *The New Zealand Curriculum* is the expectation that schools will review and design their own local school curriculum in light of what they know about their learners. From 2010 onwards, the notion of a curriculum that responds to all learners is one that schools were expected to embrace, as they worked to design and implement their school's curriculum.

Leaders and teachers require a good understanding of all aspects of the NZC before they are able to design, teach, assess and review their local curriculum. ERO's findings indicate that some leaders and teachers' poor understanding of parts of the NZC limits their ability to either teach or assess skills and concepts from it.

Understanding and implementing The New Zealand Curriculum in primary schools

The last review of the NZC was completed in 2007. From 2008, schools were expected to give full effect to the NZC, using support materials and resources to guide their progress as they transitioned.

In the 2010 report, *Preparing to Give Effect to the New Zealand Curriculum* (ERO, 2010), ERO found that about 76 percent of schools in the sample were managing curriculum change well. Sixty-three percent of the 245 primary and secondary schools sampled were making good progress, and a further 13 percent were already giving full effect to changes. Of the remaining 24 percent, only three percent had not yet begun to give effect to the NZC. In some of these schools, individual teachers had implemented some of the new processes, such as integrating new technologies, being guided by the curriculum principles, and integrating key competencies. The table below shows the percentage of leaders' progress with implementing *The New Zealand Curriculum* in both primary and secondary schools.

Progress with processes	Well under way	Developing or beginning to develop	Not Evident
Reviewing school learning statements	42	52	6
Choosing appropriate achievement objectives	36	54	10
Considering links between learning areas	35	57	8
Integrating key competencies	46	50	4
Aligning assessment processes	29	62	9
Considering progressive learning stages	29	61	10
Integrating new technologies	37	57	6
Being guided by the curriculum principles	42	49	9
Aligning school-wide systems	32	56	12

The table indicates many schools still had actions to complete before they could fully implement the curriculum.

In 2010, when primary schools were expected to implement the new curriculum, the literacy and mathematics National Standards were also introduced. Some of the schools that were well advanced with planning to implement the NZC were able to also focus on National Standards. However, ERO found that some leaders still had considerable work to do to use the NZC and to improve assessment practice, particularly the collection and use of student achievement

information as part of self-review. Some leaders' limited capacity to introduce two major changes into their school at the same time reduced their understanding of all parts of the NZC.

Interpreting the objectives

Many of the curriculum objectives are broad and deliberately able to be interpreted in different ways as shown here for Level 3 Social Studies objectives. Leaders and teachers in some of the schools where curriculum areas, such as science and social studies, are taught well have spent considerable time interpreting curriculum objectives.


Social studies

Understand how groups make and implement rules and laws.

Understand how cultural practices vary but reflect similar purposes.

Understand how people view and use places differently.

Understand how people make decisions about access to and use of resources.

Understand how people remember and record the past in different ways.

Understand how early Polynesian and British migrations to New Zealand have continuing significance for tangata whenua and communities.

Understand how the movement of people affects cultural diversity and interaction in New Zealand.

Where teachers have worked together to interpret the objectives in the learning areas, leaders report their teachers have a greater understanding of the teaching points they should consider. However, some schools haven't completed this type of work. Teachers' workload would be considerably reduced if curriculum leaders from across New Zealand worked together to explain the objectives in greater detail for both teachers and students in all schools. Without such understanding, the quality of any assessment in many of the curriculum areas is likely to be of little value.

Focusing on literacy and mathematics

Over recent years, leaders and teachers have focused on developing teachers' confidence with using reading, writing and mathematics assessments, because students cannot fully engage with the curriculum without being literate and numerate. Literacy and mathematics should continue to be given priority in primary schools' curriculum.

The revised curriculum and the National Administration Guidelines (NAGs) guide schools to gather and evaluate the achievement and progress of students while giving priority to:

- literacy and numeracy in Years 1 to 8
- the breadth and depth of learning related to the needs abilities and interests of students
- the nature of the school's curriculum and the scope of *The New Zealand Curriculum*.

Schools are also expected to use assessment to identify and address the needs of students who are not achieving, at risk of not achieving, or have special needs; and to identify aspects of the curriculum that require attention.

The part of NAG 1 that mandates schools to give priority to the breadth and depth of learning related to the needs, abilities and interests of students, the nature of the school's curriculum and the scope of *The New Zealand Curriculum*, allows leaders to decide what their teachers teach and assess, and what they choose to teach in areas other than literacy and numeracy. Previously, teachers recorded assessments across the curriculum using checklists for every Achievement Objective from across *The New Zealand Curriculum*.

Lessons learnt from previous practices for assessing across the curriculum
Many of the assessment practices and approaches used previously when teachers assessed across the wider curriculum, were neither useful nor manageable. The pages of checklists teachers had to complete for each student often took time away from teaching and had limited use for planning the next teaching programmes. The worst example was seen in physical education where teachers were expected to judge how well children were performing multiple skills in the swimming pool or with gymnastic equipment, while also teaching the whole class and keeping them safe from physical injury. Some teachers also created end-of-unit-tests to check what the child could recall at the end of social studies, science and health lessons that were not useful for decisions about future teaching.

Possibilities for extending assessment
Many of the types of assessment teachers used at the beginning of this century are no longer relevant as we have moved the emphasis from knowledge gained to using knowledge to carry out meaningful tasks. Assessment should focus more on students' ability to adapt their skills and responses to a variety of different situations and settings. The science and technology curriculum areas have some objectives at each curriculum level that increase opportunities for students to apply their skills and knowledge in different settings that teachers could be supported to assess.

Beginning any assessment changes by prioritising the assessment of some objectives in these two curriculum areas would also encourage schools to promote teaching and learning of STEM (science technology, engineering and mathematics) skills that encourage innovation, and are already in demand in tertiary education and the workforce. For example, the Nature of Science strand outlines developing competencies in: investigating in science, communicating in science, and participating and contributing, where students are expected to apply their skills and knowledge across all the science strands.

Many teachers need considerable support to successfully teach and then assess outcomes in science. ERO has found that science is not yet well taught in many schools. ERO's 2012 report *Science in The New Zealand Curriculum Year 5 to 8* (ERO, 2012e) identified that effective practice in science teaching and learning was evident in less than a third of the 100 schools sampled. In effective primary schools' science programmes, teachers successfully integrated science teaching with literacy and mathematics teaching, providing students with the specialist language and mathematics skills that supported their science learning. These teachers were able to successfully use an inquiry learning approach that maintained the integrity of the science.

In many schools students experienced knowledge-based programmes rather than interactive, investigative approaches, and did not have opportunities to learn concepts from the Nature of Science strand. Although many science resources were available to teachers, most were not accessing or using them. Teachers had not participated in PLD to develop their science teaching.

The technology achievement objectives outline opportunities for students to innovatively apply their knowledge and skills in different situations and settings. Most Years 7 and 8 children already participate in technology programmes taken by specialist teachers in intermediate or secondary schools, and are already likely to have assessments completed for some technology objectives.

Teachers in Years 1 to 6 are likely to need additional PLD and resources to help them with teaching and assessment of the parts of the technology curriculum that are relevant for their students.

Focusing on the Key Competencies
The key competencies in the NZC are recognised capabilities for living and lifelong learning. Students are expected to be challenged and supported to develop them in contexts increasingly wide ranging and complex. Teachers are expected to provide authentic opportunities for students to develop the competencies and recognise when, how and why they have used them. The five key competencies are:

- thinking
- using language symbols and texts
- managing self
- relating to others
- participating and contributing.

Traditional methods of testing or observing students are not appropriate for assessing the key competencies. Competencies, like dispositions, are intended to be part of teaching and learning but were never intended to be assessed in a pass/fail manner. If students are to develop the competencies and recognise when they have used them for living and lifelong learning, they have to be fully included in thinking about and determining their own success with those competencies. This means involving them in identifying the knowledge and skills they would need to successfully demonstrate a particular competency in a specific setting. Students are supported to do this when their teachers model the use of the relevant knowledge and skills.

Hipkins states *"Assessment needs to help them [students] build coherent narratives about their identities as people who can practise, persist, and overcome obstacles to immediate learning success. Students need opportunities to apply what they know and can do in more complex and demanding contexts. The assessment focus is on strengthening key competencies (which everyone already has in some measure), not on measuring comparative "abilities" as if these are fixed qualities of individual learners.*

Many primary schools correctly focus on opportunities for students to develop the key competencies outlined in *The New Zealand Curriculum.* In some instances, teachers have included links to the competencies by highlighting how a key competency was demonstrated in students' work samples, learning logs, portfolios or rich learning tasks.

However, in some other schools, teachers have developed checklists showing how confident a child is with each of the competencies. Such checklists and corresponding reports to parents about whether a child is above or below expectation with the competencies are often inappropriate, as teachers are unlikely to have been able to reliably judge how students manage them in a variety of settings. There are also no agreed expectations of students' developing competencies at each year level. Schools using such checklists that teachers fill in limit students' opportunities to develop their identity as a person who can persist with something to succeed in their learning.

The NZC provides many opportunities for children to develop the competencies and recognise when, how and why they have used them in a wide variety of settings. For example, students can consider and apply a vast array of knowledge and skills to successfully relate to others when:

- learning about their own wellbeing in health and the physical education programme
- taking action as an informed and responsible citizen in social sciences activities
- working with peers to solve mathematics, science and technology problems.

As students may demonstrate differing levels of success with the competencies when learning about different learning areas, or when working independently or in a group, they should have opportunities to discuss and sometimes record how they demonstrated any of the competencies through authentic activities in different settings.

The challenge for schools is to find a way to report or share a student's developing competencies. Schools that use some type of digital or hard copy learning logs where children share their learning and outline what the learning demonstrates are already able, or should need few changes, to effectively report to parents about their child's development of each of the key competencies. Further direction is required for schools using narrower assessment approaches.

Section Four: The importance of leadership in influencing student outcomes

ERO has found direct leadership from the principal or senior leaders can strongly influence staff expectations, pedagogical practices and professional culture. Leaders influence decisions about the assessments teachers collect, how often, and how they use them. They are also responsible for reporting on students' achievement and progress, and play a key role in setting and responding to the school's charter targets. Leaders have a fundamental role in overall system improvement for New Zealand's children.

Over the past decade, many of ERO's national reports have identified how leaders either positively or negatively influence curriculum and assessment decisions. Some of ERO's national reports highlight the gap between leaders that implement effective assessment and curriculum approaches, and those with a limited understanding of assessment and curriculum design. Leaders in successful schools are keenly aware of the need to achieve both equity and excellence. Effective educational leaders pursue equitable outcomes. Effective school leaders establish and develop specific and measurable goals, so that progress towards equity and excellence can be shown, monitored and further developed. Goal setting results from acknowledging the discrepancy between current and future states. Goals focus attention, and lead to persistent and unrelenting effort. These leaders were successful in developing relationships, setting clear guidance, and accessing relevant PLD to ensure a common understanding of progress and how to raise achievement.

Extracts from ERO National Reports

Reading and Writing in Years 1 and 2 (ERO, 2009)
In the best schools, leaders understood how to use achievement data for self review. They used their data to inquire into teaching practices, whether these should be modified, and where resources were needed to help children who were not succeeding. Leaders were highly involved in managing their own PLD, hiring capable literacy teachers, and using development and monitoring strategies to support all teachers in the school enhance their literacy content knowledge and skills.

Boards make many significant investment decisions about resourcing personnel and materials for interventions to support the literacy learning needs of Years 1 and 2 children. They need to know how well their investments are working. Where school review processes were not robust, trustees lacked the necessary information to make or approve these decisions. In effective schools, trustees received valuable information to inform their decisions from well-planned evaluation of interventions so they knew what worked best and whether they needed to look at other options.

Accelerating the Progress of Priority Learners in Primary Schools (ERO, 2013b)
The role of the principal was vital in schools that were successfully accelerating learning. Leaders in these schools communicated a clear vision that all students were able to succeed, and shared with trustees and staff a good understanding of what constitutes accelerated progress. They promoted an inquiry-based teaching and learning approach. Leaders accessed and facilitated relevant PLD, designed to focus on teaching practices for students not succeeding.

These principals coordinated a cohesive approach where boards, leaders and teachers worked together for the benefit of these students.

Leaders in the less successful schools had not developed a coherent team approach to students who were not achieving well. The lack of clear expectations and commitment to priority learners resulted in inconsistency and variability of practice across their schools. School charter targets lacked specific details, and were not directly related to priority learners. Analysed achievement data was rarely used to discern what worked for these students and what should be changed.

Raising Achievement in Primary Schools (ERO, 2014)
In the most effective schools, leaders promoted teamwork and high quality relationships with students, their parents and whānau, and other professionals to support acceleration of progress. Teachers and leaders were able to explain how others could help them, while also being very clear that they were responsible for student achievement. They understood the rationale for targeting resources to accelerate progress for particular groups of students.

Leaders in less effective schools had not developed a coherent plan to improve achievement that included both long-term preventative and short-term remedial responses. Instead they often focused on short-term actions that were not well resourced or evaluated for impact. Often individual teachers, or teacher aides, were expected to be responsible for accelerating progress. Student gains were often not maintained, as supplementary instruction did not complement classroom experiences. In many cases there was no ongoing monitoring of progress.

Raising Student Achievement Trough Targeted Actions (ERO, 2015d)
School leaders played a significant role in creating coherence and alignment in successful schools. Their ability to influence teaching practice, the school culture and its central values lifted outcomes for students. Leaders effectively managed cyclic school processes and action-planning, ensuring everyone from the board to the parents, whānau and students knew their role in raising achievement.

Educationally Powerful Connections with Parents and Whānau (ERO, 2015b)
The central theme of this evaluation was the vital role of the leader. ERO found the influence of leadership at multiple levels in successful schools. Trustees, school and middle leaders defined a shared achievement challenge for acceleration of target students. Trustees and school leaders strategically resourced key actions required to make a difference. In larger schools, middle leaders led teams of teachers who put the plans into action. Leaders at all levels monitored and evaluated progress, and made adjustments to increase students' chances of success.

Continuity of Learning Transitions from Early Childhood Services to Schools (ERO, 2015c)
Leaders in schools where children experienced smooth transitions laid the foundation for success by ensuring critical elements were in place. Strong two-way partnerships between the school and parents supported children in their transitions and their learning.

Extracts about leaders from ERO national reports about influence in curriculum
Mathematics in Years 4 to 8: Developing a Responsive Curriculum (ERO, 2013a)
School leaders play a critical role in supporting teachers, trustees, students and their parents to use achievement information to improve learning. Leaders establish school-wide guidelines for how assessment information will be collected and used.

In the schools ERO identified as using achievement information well, leaders created systems and clear expectations so that data was used optimally by teachers, trustees and students. In many of the other schools, teachers collected data but it was not used to its full potential. For example, data was used to identify learners' achievement, but not to review and develop the school's mathematics curriculum or to identify the most successful teaching practices. Teachers often invested considerable time and energy into assessment activities. School leaders need to ensure that the information gained from such activities is used to the fullest extent to benefit learners.

Science in The New Zealand Curriculum: Years 5 to 8 (ERO, 2012e)
The quality of leadership was a significant contributor to the quality of science teaching and learning. In schools with effective science teaching and learning, principals actively promoted this learning area. Lead teachers had a strong interest in science and worked proactively, in partnership with the principal, to foster staff knowledge and confidence.

Summary
The extracts above highlight how leaders with a high level of understanding of assessment and curriculum positively influence trustees, teachers and students to improve achievement. In some schools with poor quality leadership, trustees, teachers and students often work hard but have poor quality information to influence their decisions. Effective leaders carefully selected assessment likely to provide useful information for students, teachers, trustees and parents. The gap between the most improvement-focused leaders and those with little capacity to make change appears wider in 2017 than in 2007.

Schools' Charter Targets

Setting and responding to charter achievement targets is considered a key improvement activity for board trustees, leaders and teachers.

In the most successful schools, ERO found leaders used advanced leadership and relational skills to successfully include all stakeholders that could contribute to setting and achieving targets and goals. These leaders identified students for targeted action and involved their parents, teachers, leaders and trustees in their improvement.

ERO identified that in primary schools where most of the targeted children accelerated their progress, leaders designed, resourced and implemented targeted actions with a focus on improving both student outcomes and the school's capacity for equity. They did this through a series of cyclical school processes, and inter-related learning conversations between key parties. Four key levels of leadership in action were:

- the stewardship level: trustees embedding a deep commitment to equity and excellence into the school's actions and culture
- the pedagogical leadership level: leaders influencing the quality of the curriculum, teaching and learning across the school
- the middle leadership level: leaders influencing curriculum design across classes, teaching as inquiry in professional learning communities; and promoting responsiveness to learner needs in every classroom
- the individual teacher level: teachers influencing broader teacher capability, and growth in the confidence and connectedness of learners.

In many successful primary schools, leaders played a key role in linking trustees' target-setting with the teamwork of teachers. Actions instigated by school leaders used the expertise of the entire teaching staff to accelerate learning. Teachers fostered school-wide success by sharing ideas with each other, and involving students and their parents in all key actions. These schools had a vision for the whole year's progress.

In highly successful schools teachers, leaders and the board centred their inquiries on students identified as at risk of underachieving. Inquiry questions were explored with other teachers and leaders. Systems were sometimes modified to help gather evidence about what was working and what needed to be modified. Boards' inquiries into teaching effectiveness resulted in well-targeted resourcing decisions. Trustees asked the critical question: what difference does this intervention make to the child's learning and wellbeing? - before they agreed to fund it for a second year.

In some schools, leaders had limited capacity to make improvements or include all stakeholders in contributing to change. In these schools, more constraints than conditions for success were evident. The main constraints were:

- lack of depth in data gathering and evaluative reasoning
- inadequate focus on underachievement
- limited responsiveness in actions for school improvement
- lack of follow through on planned actions
- a lack of knowledge of the strategies that would make a difference.

Many leaders at the less successful schools were constrained by limitations in either their data gathering and analysis, or their ability to use evaluative reasoning. In some schools, data analysis did not give a clear understanding of achievement or underachievement. In other schools, leaders and trustees were unsure what the data told them about students' achievement, so they had little basis on which to plan what to do next to build educational improvement.

This limited leadership reduced opportunities for trustees and other parents to contribute to improvement. Boards at the less successful schools were constrained by the quality of the reports they received and their ability to rigorously scrutinise these reports. They lacked critical information about specific needs when analysing data and setting targets. This reduced their capacity to plan for and resource an appropriate response. Often parents were not aware their child was identified for targeted support, and were therefore not able to contribute to the outcomes.

Classroom teachers in less successful schools were also often not responsive enough to the strengths, needs and interests of students at risk of underachieving. In some instances, teachers did not know whether the students in their class were part of the 85 percent already achieving at the desired levels, or part of the 15 percent yet to achieve. In other schools, actions were taken in classrooms where some data about progress was gathered by teachers. However, leaders and trustees were unaware whether that resulted in acceleration for targeted students. When teachers were not aware of, or involved in, setting or responding to the targets, they were also unable to fully involve students in taking some responsibility for their learning and improvements.

Conclusion

The assessment of student achievement - examining and using information about students' know and can do - is fundamental to both effective teaching and successful learning. In New Zealand, there is a wide range of tools and approaches available to leaders and teachers. When properly administered and analysed, these tools can produce robust and reliable information that trustees, teachers, leaders, and students can use to make improvements. Many provide both formative assessments to determine what children have learnt and their next learning steps, and summative assessments to benchmark how students compare with the rest of the student population.

This report highlights that, although considerable improvements have occurred in the collection and use of assessment in primary schools over the past decade, some schools continued to face challenges in improving the quality of their assessment practices. In the schools where leaders and teachers understood and valued the place of assessment, they introduced useful and manageable systems that benefited teaching and learning. At the other extreme, teachers collected assessments that were not well administered, analysed, moderated or used for improvement. This variability reduces opportunities for system-wide improvements in New Zealand schools.

Where schools were using assessment well, they were clear about the intent of each assessment and used it for multiple purposes. Teachers moderated their judgements across the school, and increasingly used the Progress and Consistency Tool to moderate and inform teaching decisions. Teachers used their assessment information to determine teaching steps for each student, to improve their own practice and to recognise what was working well and should continue. Teachers fully involved students in assessment processes by:

- sharing all results with them
- helping them set related goals
- teaching them concepts related to their goals
- involving them in deciding when they had met their goals.

They often used additional assessment with students at risk of not achieving to find out more about their challenges and strengths, and shared the assessments with parents and whānau. Leaders collated the assessment results and identified needs, to determine improvement targets and recommendations for boards to consider. Trustees asked challenging questions about the data, used the information to make resourcing decisions and received regular progress reports towards clearly defined goals.

Leaders play a significant role in improving outcomes for students by:

- establishing clear and robust goals and expectations
- resourcing strategically
- designing, evaluating and coordinating the curriculum and teaching
- leading professional learning
- ensuring the environment is orderly and supportive.

To achieve this, leaders need high quality data-literacy skills to make defensible decisions. Without such skills, collection and use of assessment can reduce teaching time, negatively impact on students' wellbeing and inhibit boards of trustees' decision making. Some leaders need further support to improve their data literacy, so they can recognise and correct poor practices and develop more useful and manageable ones. Training to improve leaders' data literacy is a priority.

Some leaders and teachers placed limited emphasis on reliable assessment tools. Some lack understanding of how to use the results for both formative and summative purposes. Confusions also exist about how and when to administer the tools. Both moment-by-moment and more informal assessments are vital, but should be used with other more formal tools that would allow trustees, teachers, leaders, students, parent and whānau to understand how well students are achieving and progressing. *The Literacy Learning Progressions* (Ministry of Education, 2010) and numeracy assessments provide teachers in the junior school with expectations they should confidently use, in combination with other formative and summative assessments. Teachers of Years 4 to 8 should also use either PAT or asTTle for reading, writing and mathematics, in combination with other informal assessments, to collect and use formative and summative information. However, ERO discourages the use of the tools above for summative purposes only.

Assessment in primary schools has recently focused on reading, writing and mathematics, to help children develop the literacy and numeracy skills needed to fully engage with the whole curriculum. Some schools are also usefully identifying samples of work that demonstrate students' confidence with Key Competencies from *The New Zealand Curriculum*. It is now timely to consider extending assessment practices, to determine how well students are applying their skills to meaningful tasks from other curriculum areas, such as social studies, science and technology. Additional support is needed to make sure all teachers can undertake useful assessment in these areas, and respond to the assessment information with timely and appropriate practices.

Overall, we acknowledge the considerable improvements many primary schools have made in their use of assessment over the past decade. Further work is required to make sure all schools collect and use assessment data effectively to benefit all students.

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Appendix 2: Glossary of terms

Assessment Resource Banks (ARBs)	ARBs are a large collection of online assessment resources on the TKI website. Teachers can select tasks designed to assess learning objectives from Level 2 to Level 5 of *The New Zealand Curriculum* in science, mathematics and English. Detailed marking is provided for each task.
asTTle	asTTle (Assessment Tools for Teaching and Learning) measure Year 4 to Year 12 students' achievement and progress in reading, writing and mathematics. Teachers devise each test by selecting the items they wish to assess. asTTle is also designed for students learning in Māori-medium including Kura Kaupapa Māori. asTTle tests enable teachers to collect and use both summative and formative achievement results.
Formative assessment	These assessments are intended to inform changes to teaching and learning activities to improve student achievement. They typically involve qualitative feedback (rather than scores) for both student and teacher, and focus on the details of content and performance. They are commonly contrasted with summative assessment that occurs at the end of a learning exercise.
Nature of Science Strand	The structure of the science learning area in *The New Zealand Curriculum*. Through this strand, students learn what science is and how scientists work – they learn to think and behave like scientists. The other strands provide contexts for students to develop their understanding about the nature of science.[1]
Progressive Achievement Test (PAT)	The listening comprehension PAT is for Years 3 to 10 students. Reading comprehension and reading vocabulary PATs are for Years 4 to 10. The main functions of the multi-choice tests include: grouping students, selecting resources to match ability, identifying students requiring support and extension, and identifying students not reaching expectation or who are working erratically.
Running Records	*Using Running Records* (Ministry of Education, 2000) points out that reading running records are most useful for students who are not fluent readers. Students read aloud to the teacher who marks the words read correctly and records any errors or self-corrections. Teachers analyse error and self-corrections determine the student reading level and mastery of reading strategies.
Summative assessment	Summative assessment measures educational outcomes at the end of an activity or course. It is often used as part of external accountability and contributes to the data used by teachers, school leaders and boards of trustees to determine the effectiveness of programmes of learning. By contrast, formative assessment is ongoing and used to tailor the curriculum as students are learning.
Teaching as Inquiry	A process for educators to investigate the impact of their decisions and practice on students. In *The New Zealand Curriculum*, this course of action is described as a cyclical process in which questions are posed, evidence is gathered and decisions are made.

[1] Te Kete Ipurangi (TKI). Retrieved from: http://scienceonline.tki.org.nz/Nature-of-science