

Raising Achievement in Primary Schools

June 2014





Ko te Tamaiti te Pūtake o te Kaupapa The Child – the Heart of the Matter



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The Education Review Office (ERO) is an independent government department that reviews the performance of New Zealand's schools and early childhood services, and reports publicly on what it finds.

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Foreword

In New Zealand we are fortunate to have a top performing education system that gives most of our children the opportunity to reach their potential. But it is not all of our children that the system serves well.

There is still a disparity between the achievement levels of different groups of students. Despite many and varied initiatives over the years, our education system continues to fail certain groups of students including many Māori and Pacific students, students with special education needs and students from low income backgrounds.

This report gives us an insight into what some primary schools are doing to address this disparity. It shows that, by taking deliberate and well focused action to raise the achievement of their students, schools can make a difference. The report includes evidence of considerable improvement in the capability of teachers and leaders to use assessment data to target and respond to students achieving below expectations. Māori and Pacific students, and English language learners that needed support to accelerate their progress were targeted, and experienced success.

Such action is a vital contribution to the Government's target of 85 percent of 18 year olds achieving National Certificate of Educational Achievement (NCEA) Level 2 or equivalent by 2017. Primary schools need to ensure that their children are leaving at a level that enables them to succeed at secondary school.

At the same time, half of the sampled schools could be doing better. There needs to be a deliberate move away from a 'more-of-the-same' approach, where strategies that are not working continue to be applied. All schools need to be encouraged and supported to try something different. This report shows us that change is possible; that with confidence and capability schools can try different approaches that will result in improved achievement.

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June 2014

RAISING ACHIEVEMENT IN PRIMARY SCHOOLS

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Overview

In this evaluation the Education Review Office (ERO) explored how well 193 schools¹ with Years 1 to 8 students were undertaking deliberate actions that led to an increase in the number of students achieving 'at' or 'above¹² the National Standards for their year group. ERO was particularly interested in schools' responses to raising achievement for Māori and Pacific students who are over-represented in the 'below' and 'well below' National Standards groups.

When compared to earlier ERO evaluations, this evaluation provides evidence of considerable improvement in teachers and leaders capability to use assessment data to respond to students achieving below expectations. ERO found an increasing number of schools with Years 1 to 8 students adapting their responses for students achieving below National Standards.

Half the schools investigated had used deliberate actions to support students to accelerate progress and sustain achievement equivalent to their year group.³ In particular, Māori and Pacific students, and English language learners that needed support to accelerate their progress were targeted, and experienced success.

Many of these schools had focused their efforts on students at all year levels, and across mathematics, reading and writing. They were strategic and successful in their actions to accelerate progress. Other effective schools had strategically trialled a new approach in one area and were spreading the trial by increasing the number of students and teachers involved in the new approach. Teachers and leaders in these two groups of schools were innovatively responding to underachievement. This meant they were trialling well-researched strategies rather than continuing with what was obviously not making a difference.

In contrast, the other half of schools responded to underachievement with more-of-the-same, but for some students it was not working. The schools were using time, effort and resources to provide additional support for students but did not have specific implementation plans or evaluation processes. With no overall improvement plan the responses to teacher professional development and student learning needs were either too general or fragmented. Most of these schools were aware of the need to support students to catch-up while some of the less effective schools had little sense of urgency.

In the most effective schools leadership promoted teamwork and high quality relationships with students, their parents and whānau, and other professionals to support acceleration of progress. Teachers and leaders in effective schools were able

- See Appendix 1 for a breakdown of the characteristics of the schools visited.
- 2 The way in which these generic definitions are translated into practice within different subject areas may vary. One approach is to identify the year standard (linked to curriculum progression) which is the 'best fit' with the student's current level of achievement in the subject. If the balance of evidence shows that student performance:
 - maps more closely to a standard above that year's standard, the student's achievement is likely to be described as above the National Standard
 - is predominantly meeting the expectations at a year level, the student's achievement will be described as at the National Standard
 - maps more closely to the preceding year's standard, the student's achievement will be described as **below** the National Standard
 - maps more closely to a standard more than one year below, the student's achievement is likely to be described as well below the National Standard.' Ministry of Education Definitions of achievement for National Standards retrieved from assessment.tki.org.nz/
- 3 Identifying which schools were making a difference for more students was not based on school reported National Standards data alone. ERO also used schools' records of students' progress such as ongoing classroom observations and assessment information to identify which schools had improved outcomes for students. Where there was evidence of accelerated progress ERO explored the deliberate actions and capability. Schools were evaluated to determine to what extent they could sustain and extend improvements.

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. Any gains by students were often not maintained as the supplementary⁴ instruction did not complement the classroom experiences. In many cases there was no ongoing monitoring of progress.

Most boards allocated resources for programmes for students to catch-up. In the effective schools trustees demanded achievement-based reports about the impact of their resourcing decisions. In the less effective schools there appeared to be a disconnect between school targets and resourcing decisions at the board level. Trustees should expect reports from school leaders about how the resources are working for the students that need to accelerate their progress.

In the effective schools students experienced a high-quality rich curriculum. This meant high-quality classroom and supplementary teaching for students who had been achieving below National Standards. These students knew what and how they learnt, and they knew their teachers were supporting them to succeed. Success energised these students.

I've gone from writing boring sentences to using lots more interesting words. I smack right into it!

(A student from a low decile, large urban, contributing primary school)

I thought I couldn't do maths so I didn't really try. Now I know I'm as good as my friends.

(A student from a low decile, mid-sized rural, full primary school)

It made me understand and think about words. It's helped me read instructions when I do mathematics.

(A student from a low decile, medium-sized urban, contributing primary school)

4 In this report 'supplementary' refers to any additional instruction in the classroom or outside. It may be short- or long-term. Teachers, teacher aides or specialists may provide the instruction. It may include resources for parents and whānau.

NEXT STEPS

ERO recommends that the Ministry of Education:

- responds with a differentiated approach to support schools to urgently progress achievement by designing, implementing and monitoring improvement plans
- considers how to identify and support leaders to meet achievement challenges
- considers how to strengthen the support to schools where there have been many leadership changes or there is a first-time principal.

ERO recommends that all school trustees when setting and reviewing school targets seek:

- specific information about why particular groups of students need support and why particular responses are expected to make a difference
- frequent and regular information about the impact of resources on accelerating progress for these groups of students.

ERO recommends that school leaders foster a culture of improvement and acceleration by:

- developing a shared understanding for the urgency to improve outcomes for particular groups of students
- incorporating both short-term tactical responses to underachievement and long-term strategic responses to building capability and relationships in a school improvement plan
- encouraging teachers to share their trials and evaluations of evidence-based practices on accelerating progress.

Introduction

A range of international⁵ and national⁶ reports demonstrate that while the New Zealand education system has provided excellent outcomes for some students, overall improvement has been inconsistent, with significant groups missing out. In particular, the system has not altered the inequitable educational outcomes for a large number of Māori and Pacific students, students who have special education needs, or students from low income backgrounds.

TARGETING FOR EQUITABLE OUTCOMES

The challenge for New Zealand's education system is to bring more students to a higher achievement level, with a broader skill range and more equity of outcomes than ever before. In response to this challenge, the Government's education targets include 85 percent of 18 year olds achieving National Certificate of Educational Achievement (NCEA) Level 2 or equivalent by 2017. To support this target, the Ministry of Education (the Ministry) is also focusing on accelerating the progress of Years 1 to 8 students who are achieving 'below' or' well below' National Standards in mathematics, reading or writing for their year group. The National Standards signal the reading, writing and mathematics curriculum expectations that will enable students to engage with all learning areas, and are reference points for the overall goal of confident, connected, actively involved, lifelong learners.

Māori and Pacific students are over-represented in the 'below' and 'well below' standards groups. For example, in 2012 the total number of students achieving 'at' or 'above' reading National Standards was 76.2 percent, but only 68.2 percent of Māori and 62.8 percent of Pacific students were achieving 'at' or 'above' the standards.

EVALUATING FOR EQUITABLE OUTCOMES

ERO has undertaken several national evaluations⁷ to determine how schools are using *The New Zealand Curriculum* and the National Standards to improve all students' educational outcomes. ERO has also investigated how schools have provided targeted support and whether they are doing something that works for the students underachieving.

ERO's 2013 evaluation on mathematics in Years 4 to 88 found teachers in most schools could identify students who were not achieving but continued to apply the same strategies, programmes and initiatives even though they had not worked. Few had evidence that these approaches actually accelerated progress. ERO concluded that:

Given the significant investment schools are making to raise achievement for priority learners, there needs to be more robust self-evaluation of the effectiveness of resourcing decisions. Bringing about such a change could lead to considerable system-wide improvement in New Zealand schools. (Page 23)

- 5 For example, Programme for International Student Assessment (PISA), Progress in International Reading Literacy Study (PIRLS), and Trends in International Mathematics and Science Study (TIMSS) achievement and followup reports.
- 6 For example, National Education Monitoring Project (NEMP), NCEA, and National Standards achievement reports, and student participation and attendance reports.
- 7 Found on www.ero.govt.nz/ National-Reports
- 8 ERO. (2013) Mathematics in Years 4 to 8: Developing a Responsive Curriculum. (February 2013). Wellington: Education Review Office.

Another 2013 ERO evaluation found highly effective teachers of Years 1 to 8 students:

- used assessment data well
- used a range of appropriate teaching strategies and made deliberate teaching choices so students developed the required specific reading, writing and mathematics skills or knowledge
- used external support judiciously
- focused strongly on ensuring their students understood how to apply their learning in different contexts across the curriculum
- developed partnerships with parents and whānau to support students' learning
- proactively identified teaching skills they needed to develop.

The evaluation also found highly effective principals:

- used achievement data effectively to identify priority groups, monitor their progress and evaluate the impact of programmes and systems over time
- supported staff with clear assessment guidelines and fostered an inquiry-based approach to teaching, learning, and subsequent responsive planning
- were often well supported by Special Educational Needs Coordinators (SENCOs), capable literacy and mathematics leaders, curriculum leaders and learning support teachers.

These evaluations highlight that educators need to know how to use assessment information to trigger a teaching and learning response. Many teachers and school leaders need to change what they are doing if it is not working for some students.

This report builds on these earlier evaluations and focuses on how well schools are responding to achievement information. In particular, it explores the quality of schools' teaching and learning responses to meet the needs of students who are underachieving.

RESEARCH ON PRACTICES THAT LEAD TO EQUITABLE OUTCOMES

The Best Evidence Synthesis (BES) provides a coherent set of dimensions across leadership, professional learning and development (PLD), and teaching with strong evidence for improving outcomes for diverse (all) students. The BES system improvement and capability building agenda (Alton-Lee, 2012) provides a model for school improvement that will lead to this vision. The model has four levers which, together, can drive change: 12

effective pedagogy for valued outcomes for diverse (all) learners activation of educationally powerful connections leadership of conditions for continuous improvement productive inquiry and knowledge-building for professional and policy learning.

- 9 ERO. (2013) Accelerating the Process of Priority Learners (May 2013). Wellington: Education Review Office.
- 10 Overview of Best Evidence Synthesis (BES) findings/He Tirohanga ki ngā kitenga o He Kete Raukura. Retrieved from www.educationcounts. govt.nz/topics/BES
- 11 Alton-Lee, A. (2012) The use of evidence to improve education and serve the public good.

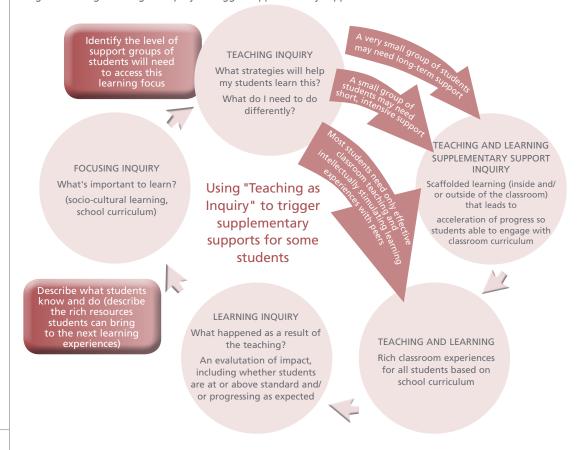
 Paper prepared for the Ministry of Education and presented at the annual meeting of the American Educational Research Association, Vancouver, Canada, April 2012.
- 12 Ibid. page 12

Many schools provide some sort of additional instruction to accelerate students' progress so they can catch-up to their peers and access the school curriculum. Research has shown that these additional practices:

.....can neither substitute nor compensate for poor-quality classroom instruction. Supplementary [additional] instruction is a secondary response to learning difficulties. Although supplementary [additional] instruction has demonstrated merit, its impact is insufficient unless it is planned and delivered in ways that makes clear connections to the child's daily experiences and needs during instruction in the classroom. (Snow et al., 1998, pp. 326–327)¹³

School curriculum and effective teaching need to link classroom learning and the supplementary learning to ensure students' additional experiences do not run parallel (or behind) the classroom experiences. This relationship is shown in the following diagram. ¹⁴ Often the most appropriate supplementary support is within the classroom.

Figure 1: Using teaching as inquiry to trigger supplementary support for students



- 13 Snow, C.E., Griffin, P., and Burns, M.D., eds. (1998) Preventing Reading Difficulties in Young Children. Washington DC: National Academies Press.
- 14 Adapted from a Ministry of Education diagram found at nzcurriculum.tki.org.nz/ System-of-support-incl.-PLD/ Background

Methodology

ERO evaluated the extent to which schools had undertaken deliberate actions that led to an increase in the number of students achieving at or above National Standards. The evaluation involved 193 schools undergoing an education review in Terms 2 and 3, 2013. These schools were using *The New Zealand Curriculum* and the National Standards. The types of schools, roll size, school locality (urban or rural), and decile range are shown in Appendix 1.

ERO's judgement was based on the:

- proportion of students who had accelerated progress in relation to the number of students underachieving and the total number of students in the school
- deliberateness and coherence of actions associated with accelerating progress
- depth of knowledge about how to extend reach so more students were achieving success than before.

ACCELERATING PROGRESS

ERO focused on the accelerated progress of individual students, rather than the overall increase in the proportion of students achieving at a school. Improvement in the progress of an individual's achievement contributes to the overall goal of all students achieving.

The investigation considered both short and long-term acceleration of progress. Progress was considered to be accelerated when the student's achievement moved from well below to below, at or above a national standard, or from below to at or above. This meant the student made more than one year's progress over a year.

Progress was also considered to be accelerated when the student's progress was noticeably faster than might otherwise have been expected from their own past learning when using norm-referenced tools that assessed the breadth of reading, writing or mathematics. It needed to be faster progress than classmates progressing at expected rates. This acknowledged the need for equitable outcomes, and took into account acceleration over less than one year.

DELIBERATENESS AND DEPTH

If leaders and teachers do not know what they have done to accelerate some students' progress they will not be able to apply this knowledge to scale up, spread and extend their reach to more students. The investigation considered deliberateness in teacher and leader actions to improve outcomes and to evaluate impact. It also considered teacher and leader depth of knowledge about particular students' learning, interests and needs, and about curriculum progression to know what and how to teach so students' learning progressed at expected rates.

EVALUATION QUESTIONS

ERO evaluated schools' capability to do something different for students achieving below expectation. In schools that had taken deliberate actions and improved student outcomes, ERO explored the triggers for the particular group of students the school identified. ERO also evaluated how the school sustained the focus on improving outcomes for students achieving below or well below year group expectation.

The investigative questions for the schools that had an innovative response to underachievement were:

- What triggered the need to do something different?
- How did the school *know what* to do differently?
- How did the school know what worked, when, why and for who?
- How is the school *ensuring it has learnt* from this focus on acceleration so outcomes are improved for more students?

In schools that had a more-of-the-same response to underachievement, ERO explored the following:

- What can be built on to focus on acceleration?
- What needs to be done differently?
- How can the capability be built to do this?

What needs to be done differently? What triggered the need to How can the capability be built do something different? What can be built on to focus on acceleration? What triggered *knowing* what to do differently? to do this? More-of-the-same response to underachievement to underachievement Innovative response setting priorities in relatior dentification of learning strengths and needs, and Responding with innovations that accelerate learning. to school goals. below or well below National Description of the students innovations that accelerated and improved student outcomes. Responding to the impact of questions. The evaluation prompts are in Figure 2: Evaluation framework and questions The framework below highlights these it has learnt from this focus How is the school ensuring are improved outcomes for when why and for who? on acceleration so there know what worked, How did the school Refocus Appendix 2. more students

Findings

ERO found that schools could be divided into four distinct groups based on the extent each school had undertaken deliberate actions that led to an increase in the number of students achieving at or above the National Standards.

- 1. Twenty-nine percent of schools in the sample were strategic and successful in their deliberate actions to accelerate progress.
- 2. Twenty percent of schools had **strategically trialled a new approach** and successfully accelerated progress for the students involved.

These two groups were effective as the schools responded innovatively to underachievement

- 3. Thirty-two percent of schools were **aware of the need** to accelerate progress and increase the number of students achieving at or above National Standards but were not systematic in the practices used to respond to underachievement.
- 4. Nineteen percent of schools had little sense of urgency to accelerate progress and had a minimal increase in the number of students achieving at or above National Standards.

These two groups were less effective as the schools responded with more-of-the-same to underachievement

The evaluation findings are structured under the following headings:

- Characteristics of each group of schools
- Capabilities that made a difference in school's effectiveness to respond to underachievement
- How innovative schools improved equity of outcomes
- What were the triggers for schools that were innovative in their responses?
- What were the challenges for schools with a less effective response to underachievement?

CHARACTERISTICS OF EACH GROUP OF SCHOOLS

Strategic and successful schools had both a long-term commitment to acceleration and a planned approach to improvement that provided wrap-around support for students and teachers. Teachers, leaders and boards of trustees demonstrated a relentless commitment

and a team approach to all students' success. Students' progress was tracked within and over years. These schools knew what worked, when and why.

The focus on supporting students to accelerate progress and on maintaining achievement gains was evident at all year levels in these schools. Overall, the strategic and successful schools reported the highest percentage of all students, and Māori and Pacific students achieving at or above National Standards in 2012.¹⁵

Leaders in schools that had strategically trialled a new approach were extending the practices that accelerated learning by involving more students and teachers. The schools had involved 10 to 30 students in the initial trials. These innovations:

- were led by teachers who understood curriculum, progress and acceleration
- were doing something different with the students
- were often out of the classroom but linked closely to classroom practices
- involved students in planning and monitoring their learning
- often involved parents.

All of these factors contributed to improved achievement for the students involved in the trial. Overall, the schools that had strategically trialled a new approach reported the second highest percentage of all students, and Māori and Pacific students achieving at or above National Standards in 2012.

These two groups were effective as they responded innovatively to underachievement with deliberate actions. They knew what improved outcomes for students and what did not. The key difference was strategic and successful schools had school-wide systems whereas the schools that had trialled a new approach were spreading the innovation but did not know the wider impact yet.

The next two groups of schools were less effective as they responded with more-of-the-same to underachievement. The key difference between the two groups was that the schools aware of the need to do something had improved outcomes for some students. However, they were unable to explain what had led to the improvements, how to maintain any gains or how to repeat them for other students. The schools that had little sense of urgency were not improving outcomes for students.

Schools that were **aware of the need** to do something different did not have a strong commitment or the capability to either change their practice or sustain practices that worked. Many were just starting to think about acceleration. Even though, as a group, these schools reported the biggest shift in the percentage of students achieving at or

15 The analysis of schools' 2011 and 2012 Public Achievement Information (PAI) was undertaken to determine the proportion of students achieving National Standards and the improvements in this proportion from 2011 to 2012. The percentage of students reported by each school achieving at or above National Standards was used in the analysis. This information added to the description of the four groups. There are caveats around the reliability of this data as reported in Ward. J., & Thomas, G. (2013) National Standards: School Sampling Monitoring and Evaluation Project, 2010-2012. Wellington: Ministry of Education. ERO was more interested in how each school responded to the needs of individual students achieving below or well below National Standards.

above the National Standards from their 2011 to 2012 achievement data, the leaders did not have evidence about what practices worked, when they worked and why they worked. Priorities for students and teachers were often not clear because of insufficient data analysis, interpretation or moderation. This meant:

- there were no well-developed long-term plans
- responses to student needs were not connected to the classroom and were often ad hoc
- professional learning and development (PLD) responses to teacher needs were too general
- any real shifts were unlikely to be sustained
- achievement improvements reported by these schools were unlikely to be reliable.

Many of these schools were not effectively dealing with major issues, such as responding to newly arrived English language learners or transient students.

Schools with little sense of urgency or ownership to improve outcomes for all students had not linked teacher action to student outcome. They did not have systems, such as self-review processes, to help teachers evaluate practice and make this link. There appeared to be an acceptance of failure for some students. These schools were relying on single teachers, single actions, or a one-size-fits-all response to student needs with little focus on building teacher capability to raise achievement for the hardest to reach students. Achievement data was either not reliable or available in many of these schools. The group reported the lowest percentage of students achieving at or above National Standards in 2012.

Many schools in this group had numerous changes of principals and teachers. In each case, transition time for the new principal or teacher to know the students and how to support them to accelerate progress appeared to be too long. Other schools had very long-serving principals and teachers who were unaware of the impact of their practices on students underachieving.

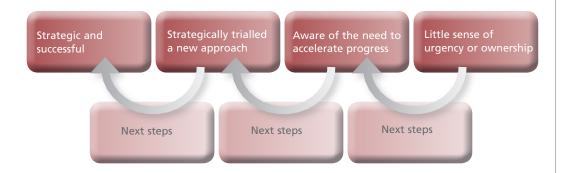
CAPABILITIES THAT MADE A DIFFERENCE IN SCHOOL'S EFFECTIVENESS

ERO found the following capabilities made a difference in a school's effectiveness to respond to underachievement:

- The leadership capability to design and implement a coherent whole-school plan focused on targeted support for students and teachers for equitable outcomes
- The **teaching capability** to find and trial responses to individual student strengths and needs that engaged and supported students to accelerate their progress in reading, writing and mathematics

- The assessment and evaluative capability of leaders and teachers to understand and use data, and know what works, when and why for different students
- The **capability to develop relationships** with students, parents, whānau, trustees, school leaders and other teaching professionals to support acceleration of progress
- The capability to design and implement a school curriculum that engaged students.

Teachers' and leaders' capability to integrate practice, knowledge, skills and beliefs influenced how each school responded to their students' strengths and needs. The following section describes the capabilities and characteristics of the four groups. The next steps were derived from what made one group different to the next group as illustrated below.



Capabilities of strategic and successful schools in accelerating progress

Leadership capability

- Leaders demonstrated high capability to design, implement and evaluate a long-term plan focused on building both teacher and student capabilities.
 These leaders:
 - worked as a team
 - knew what was needed to build teacher capability and provided specific professional learning and development (PLD)
 - devised systems that supported knowledge building, improvement and inquiry. For example, appraisal and planning templates asked teachers to think about the affect of what they were doing and what they will do differently for particular groups of students
 - allocated experienced teachers to work with at-risk students.

Teaching capability

- Evidence-based effective practices were consistently used across the school.
- Teachers had a strong understanding of acceleration, *The New Zealand Curriculum* (NZC), literacy and mathematical progressions, and National Standards' expectations.
- School targets were translated by teachers as individual student strengths and needs and used to design a teaching and learning programme to accelerate progress.
- All teachers were committed to trying new things when student progress was unsatisfactory.

Assessment and evaluative capability

- Cohesive planning and reporting was evident at three levels: school wide, syndicate
 and classroom. This ensured tactical resourcing and ongoing monitoring progress and
 affect of actions.
- Teachers were confident in their Overall Teacher Judgements (OTJs).
- OTJs and achievement data were used at school and classroom levels.
- At school level, the data was aggregated to identify groups of students that the school needed to target support for accelerating progress. For example, support for particular year groups, gender, and ethnicity or support in particular learning areas.
- School targets focused on students achieving below and well below National Standards.
- School targets were discussed by teachers, leaders and board members.
- At classroom level, the data was disaggregated for each individual student and combined with teacher observations, other achievement data, and discussions with students. Teachers had rich descriptions of individual student's learning needs.
- Teachers understood and implemented teaching as inquiry to design learning programmes and evaluate the affect of teaching decisions. They knew what worked for which students and had a Plan B for students whose progress was not accelerated.
- Students who had underachieved were closely monitored over a number of years.

Quality of relationships

- Students knew:
 - why they needed to catch-up
 - that the teachers believed they could succeed
 - what their goals were
 - what worked for them
 - how they were going.

- Teachers worked with other professionals to develop a programme to accelerate progress. For example, other teachers, the Special Educational Needs Coordinator (SENCO), Resource Teacher Literacy (RTLit), and teacher aides.
- Parents were supported to develop ways to help their children learn at home.
- Board trustees recognised leaders' and teachers' professional capability and expected achievement-based impact reports about the resourcing they had provided.

Curriculum

 Depth of both classroom and supplementary curricula reflected literacy and mathematics use in the context of the school curriculum. The school curriculum reflected community aspirations and students' interests.

Next steps

• Leaders needed to sustain improvements by continuously supporting innovation and rigorously evaluating the impact on all students' progress and achievement.

Capabilities of schools that had strategically trialled a new approach to accelerate progress

Leadership capability

- The innovation was supported by appointing a teacher who had the capability to succeed and was resourced for success.
- Leaders were often involved in PLD to support the innovation.

Teaching capability

- The individual teacher involved:
 - understood acceleration
 - understood progression and expectations curriculum and National Standards
 - knew and built on individual student strengths
 - used evidence-based practices.

Assessment and evaluative capability

- Clear systems were used to identify students achieving below and well below National Standards and to decide which students the school would prioritise resources for.
- Ongoing monitoring of progress of all students in the innovation.
- Teachers involved in the innovation understood and implemented teaching as inquiry
 to design learning programmes and evaluate the affect of teaching decisions. They
 knew what worked for which students and had a Plan B for those whose progress was
 not accelerated.

Quality of relationships

- Students involved in the innovation knew:
 - why they needed to catch-up
 - that the teachers believed they could succeed
 - what their goals were
 - what worked for them
 - how they were going.
- Teachers involved in the innovation worked with other professionals to develop a programme to accelerate progress. For example, other teachers, the Special Educational Needs Coordinator (SENCO), Resource Teacher Literacy (RTLit), and teacher aides.
- Parents were aware of the innovation and were supported to develop ways to help their children learn at home.

Curriculum

• Close links were evident between supplementary and classroom literacy and mathematics.

Next steps

• Leaders needed to develop a plan that included capability building of other teachers so they too can implement aspects of success from the innovation.

The plan needed to ensure all teachers across the school:

- owned the responsibility to accelerate learning
- rigorously used teaching as inquiry to monitor the impact of their practice
- monitored and tracked student progress and achievement over more than one year.

Capabilities of schools aware of the need to accelerate progress

Leadership capability

- Changes in culture, knowledge and practices were initiated across the school.
- PLD was available for leaders, teachers and teacher aides.
- Some teachers had in-school coaching.

Teaching capability

- Inconsistent teaching practice was evident across the school.
- Teachers used a range of assessment information but often limited formative use of data. Little interpretation of data meant teachers were unable to identify next steps for students.

- Small groups of students were given extra time for reading, writing or mathematics.
- An over reliance on particular programmes was found without a parallel focus on improving teacher practice. The affect of these programmes on student outcomes was often not reviewed.
- If there was particular supplementary instruction, it was often not deliberately linked to students' classroom experiences.

Assessment and evaluative capability

- Often targets were not strategic and were described as something to aim at rather than something to shift. For example, aimed for 85 percent of students achieving at or above National Standards rather than shift 15 percent of students from achieving below and well below to at or above the standards.
- Leaders used achievement data to identify a broad group of students achieving below or well below the standards but did not necessarily know or take into account the targeted students' specific interests, strengths and needs.
- Leaders and teachers focused on summative use of data to show shifts in student achievement.
- Limited formative use of data to evaluate effectiveness and improve teachers' or leaders' practices.

Quality of relationships

- Boards were aware of targets but did not have indepth knowledge of their role in contributing to improving outcomes for these students (school leaders were not reporting).
- Partnerships with students or parents were not apparent.
- A range of expertise was available but often an over-reliance on specialist teachers was found (no professional partnership to accelerate achievement).

Curriculum

• Classroom curriculum was often based on student interests, but was not linked to the supplementary programme the students were withdrawn from class for.

Next steps

- Leaders needed to:
 - be aware of groups of students underachieving and champion teacher urgency and responsibility to support students to accelerate progress
 - develop a school-wide cohesive approach to accelerating progress that included ways to link supplementary instruction with classroom practices

- develop a professional team approach and partnerships with students, parents and board
- provide focused PLD to build capability to accelerate progress
- develop a shared understanding and ownership of the rationale for the urgency to improve outcomes for particular groups of students
- promote the comprehensive and cohesive use of data at classroom and schoolwide level to evaluate the affect of teaching on student achievement (e.g. in both teaching as inquiry and planning and reporting processes) so teachers know which students need to accelerate progress and know what works, when and why
- ensure there was ongoing monitoring of at-risk students' progress and achievement.
- Teachers and leaders needed to:
 - understand acceleration, curriculum, expectations and effective teaching practices
 - use all assessment information to know individual student's strengths and needs and to respond appropriately
 - review the curriculum to ensure it is based on what works and what is worth learning.

Schools with little sense of urgency to accelerate progress

Leadership

- Long-term improvement plans were not in place.
- PLD was focused on what teachers think they need rather than supporting teaching practices to accelerate progress for students not achieving well.

Teaching

- Many practices in response to the achievement data were business-as-usual, too general, or too disconnected from the classroom.
- Teachers were not confidently interpreting assessment data or responding to individual student's strengths and needs. They had little understanding of:
 - acceleration
 - expectations as described in *The New Zealand Curriculum* and National Standards.

Assessment and evaluation

- There was either no data or the data was not valid.
- Data was not well used by teachers and leaders. For example there was often:
 - no data used to inform teaching
 - no monitoring of progress
 - no evaluation of actions
 - no identification of acceleration.

Quality of relationships

• Genuine learning partnerships with parents and board were not apparent.

Curriculum

• Literacy and numeracy learning was not well connected to other aspects of the school's curriculum.

Next steps

- Leaders needed to:
 - develop a culture where there was shared ownership and urgency for improving student achievement
 - develop a long-term plan that focused on improvement
 - understand and develop professional networks within the school
 - develop educational partnerships with students, parents and board
- Teachers and leaders needed to develop knowledge and practice in:
 - data analysis and evaluation
 - National Standards expectations (and moderation processes for shared understanding of characteristics and judgements)
 - what works and leads to acceleration of progress
 - assessment for learning.
- Systems were needed for:
 - evaluating the affect of classroom practices and school innovations
 - planning and reporting the link between annual targets and class targets
 - reviewing the school's curriculum to ensure it linked to student interests, identities and cultures, and was based on the key competencies and principles of *The New Zealand Curriculum* and on the learning areas.

HOW INNOVATIVE SCHOOLS IMPROVED EQUITY OF OUTCOMES

Innovative schools had focused on inequity within their student population and had improved outcomes for individual Māori and Pacific students. Teachers and leaders in these schools used effective teaching and leadership strategies, provided a rich curriculum and built high quality relationships in their response to underachievement. This section includes examples of two schools' responses. It includes more detailed examples of what schools did to accelerate progress for individual Māori and Pacific students.

Māori enjoying educational success as Māori

ERO investigated deliberate actions by exploring the acceleration and achievement of a group of students each school chose. Eighty-four percent of strategic and successful schools and 79 percent of schools that had strategically trialled a new approach had Māori students in their chosen group. The groups ranged from 10 to 40 students, with Māori being at least one-quarter of the group. Overall, Māori student achievement for these two groups of schools was six to eleven percent higher than the national picture.

Leader and teacher actions led to success for these Māori students. These actions align with the Māori education strategy, *Ka Hikitia-Accelerating Success* 2013-2017, and the factors identified as improving primary and secondary Māori students' literacy, numeracy and language skills.¹⁶

Improvements in achievement results when schools and kura:

- integrate elements of students' identity, language and culture into the curriculum teaching and learning
- use their student achievement data to target resources for optimal effect
- provide early intensive support for those students at risk of falling behind
- create productive partnerships with parents, whānau, hapu, iwi, communities and business that are focused on educational success
- retain high expectations of students to succeed in education as Māori.

The following example illustrates the *Ka Hikitia* actions.

16 MoE. (2013) Ka Hikitia-Accelerating Success 2013-2017. The Māori Education Strategy. pp 35-36. Wellington: Ministry of Education.

Achievement data used to target effect.

Senior leaders and the board used the student achievement information as the basis for all resourcing decisions. The resources for optimal information was broken down to year groups, ethnicity, gender, English language learners, and students at risk of underachieving.

> The senior leaders collated data in year groups and tracked ethnicity and target students. This information was shared with teachers in each syndicate to discuss overall progress.

> At the end of each term, student achievement data from each class was shared in syndicate meetings and the progress of each student was discussed along with the effectiveness of particular teaching actions.

A mid-year and end-of-year report went to the board that discussed the targeted students' progress and the affect of the board allocated resources.

Intensive support provided early for those students at risk of falling behind.

At a senior syndicate meeting on Teachers Only Day 2012, all teachers got together and looked at their class data for the year. The class teacher (ERO focused on) identified that there were 7 students in her class who needed to progress more than the others in writing. They became the writing target students. Five students were Māori. The teacher looked at the previous year's writing samples and developed a learning intention for each student in the class to start the year.

The teacher provided the target students with supplementary writing support within the classroom. This was possible by having a teacher aide work with other students. The teacher planned very specific programmes for the teacher aide based on the needs of the group of students they were working with that day. The teacher aide was involved in the modelling of writing sessions to ensure that they were giving similar prompts to those given by the teacher.

Students' identity, language and culture integrated into the curriculum teaching and learning.

Through discussions with students, their parents and whānau, the teacher had a deep knowledge of student interests and family events. This knowledge was used to engage students in the writing process. Students based their writing topics on personal experiences and selected their own topics at least once a week. They were supported to express their voice in their writing. The teacher was enthusiastic about writing and shared this with the students. This had a positive effect on students' writing.

Productive partnerships created with parents and whānau that are focused on educational success.

The teacher ensured there were regular informal conversations with the parents of all target students before and after school as well as the more formal regular three-way conversations to discuss goals, progress and literacy activities at home.

The students often had their writing published in the school newsletter and on the class webpage to share with parents and whānau.

High expectations of students to succeed in education as Māori.

Students talked to ERO confidently about their learning – they knew their achievement level, what progress they had made and what their next learning steps were. They knew their teacher expected them to write in ways that expressed their ideas well and engaged readers.

(A low decile, large urban contributing school with 48 percent Māori students)

Effective schools focused on building relationships with students, their parents and whānau. A small number of schools extended this partnership to hapu and iwi.

The principal had appointed an external specialist funded by the local wananga to help teachers strengthen their te reo and understanding of local tikanga Māori, so they could use these confidently in the classroom. The board and teachers have strengthened the network with local hapu and iwi. The school's English literacy programme was supported by a sequential resource in te reo Māori and a focus on students' understanding of Te Ao Māori.

(A medium decile, mid-sized rural contributing primary school with 19 percent Māori students)

Pacific students enjoying education success as Pacific

Teacher and leader actions also led to more Pacific students achieving at or above the National Standards. Forty-two percent of strategic and successful schools and forty-seven percent of those schools that had strategically trialled a new approach had groups with Pacific students. The groups ranged from 10 to 40 students. Half the schools' groups had less than five Pacific students. Three schools with very high numbers of Pacific students had an innovation to improve all Pacific students' learning at a particular year group (not just those underachieving). Overall, Pacific student achievement for these two groups of schools was five to eight percent higher than the national picture.

The Pasifika Education Plan 2013-2017(PEP)¹⁷ describes the expectations for schools to personalise learning and create successful pathways for Pacific students. For schools with Years 1-8 students the focus is on increasing and accelerating reading, writing and mathematics achievement. The innovative schools' actions aligned with the PEP's actions for schools. They include:

- implementing focused programmes and activities
- providing alternative learning opportunities and pathways
- strengthening accountability processes, including goals and targets for Pacific students and reviewing schools' performance
- engaging with parents, whānau and communities.

The example below illustrates the PEP actions.

Strong accountability processes including goals and targets for Pacific students. The school analysed the 2012 National Standards data by year, gender and ethnicity and found that the group most at risk of underachieving were Pacific girls in Years 6 to 8 in mathematics. Overall, 24 percent of all students and 28 percent of Pacific students were underachieving. In Year 6, 15 percent of Pacific girls were at risk of underachievement whereas by Year 8, 82 percent were at risk. Hence the urgent focus was on Years 7 to 8 Pacific girls. The long term focus was on improving the teaching at Years 4 to 5. In 2013, the board funded the release of a teacher to act as a full-time mathematics specialist.

Families engaged. Initially this teacher used school data and discussion with students, parents and classroom teachers to identify individual student's interests, strengths and needs.

17 MoE. (2013) Pasifika Education Plan (2013-2017). Wellington: Ministry of Education.

Alternative provided.

Six groups of 4 to 5 students, identified as achieving two or more learning pathways stages below expectations for addition and subtraction strategies, were established.

Focused programmes implemented. The specialist mathematics teacher took each group for a half hour intensive teaching and learning session every day for 6 weeks. At the same time she spent time in their classrooms, observing, monitoring and modelling teaching strategies and team teaching with the classroom teachers.

Strong accountability processes including a review of school performance.

At the end of the six weeks, the specialist teacher retested the students and shared the results with the students, their families and their classroom teachers. Since the intervention finished, monitoring of student progress has continued. All students had accelerated progress, and have maintained the acceleration, with half the group working at the expected standards of their peers and the other half now achieving only just below.

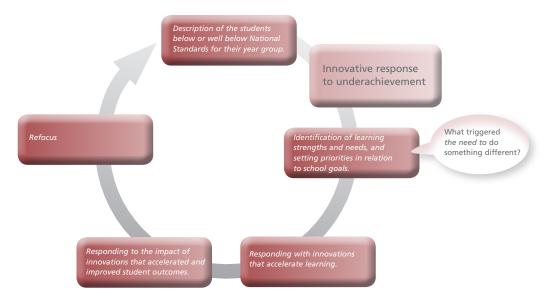
After evaluating the affect of the programme the school has now set up other groups from other years and developed a PLD programme for teachers in the use of the mathematics assessment tools. (A low decile, large urban full primary school with 52 percent Pacific students)

WHAT WERE THE TRIGGERS FOR SCHOOLS THAT HAD INNOVATIVE RESPONSES?

Most schools were using Overall Teacher Judgements (OTJs) to identify students' performance in relation to National Standards for their year group. What happened next varied across the four groups. Some schools responded to underachievement with more-of-the-same. The following sections describe the triggers for the effective schools that had deliberately taken actions, and were successful in improving outcomes for underachieving students. The actions that teachers and leaders took in these schools improved outcomes for Māori and Pacific students. The triggers to know what to do, or notice what had been done, to raise achievement occurred at all stages of the framework used for the investigation. The examples used show the deliberate responses that led to accelerated progress and sustained achievement for a particular group of targeted students.

What triggered the need to do something different?

Schools with leaders and teachers who clearly explained a reason for the urgency to get better results for groups achieving below or well below the National Standards were tactical in their resourcing to support these students. The reasons for urgency varied.



For example some schools focused on:

- students for who other supplementary supports had not worked
- students in their last year at the school, as they had only the year to catch up
- students in Years 1 to 3, as they did not want these students to develop a sense of underachievement
- boys, English language learners, Māori or Pacific students as the group was under-represented in year groups at or above standard expectations
- a particular curriculum area as more students were underachieving in that area.

It did not seem to matter what the targeted group or particular reason for urgency was. What mattered was that all teachers understood and owned the rationale, and all resourcing decisions backed it.

The less effective schools had targets but because there was no rationale for each target there were competing demands for resources and decisions often appeared ad hoc.

Many schools that were **strategic and successful** in their actions had focused on accelerating progress over a number of years. These schools had a culture of improvement, where both short-term tactical responses to underachievement and long-term strategic responses to capability building had undergone many evaluative cycles. These practices were integrated in their way of working. Other schools were at the earlier stages of focusing on acceleration but had a strong inquiry and improvement culture.

The acceleration focus was triggered by one or more of the following:

- involvement in the Ministry-funded *Accelerating Learning in Maths* (ALiM) and *Accelerating Literacy Learning* (ALL). This involvement helped schools use their expertise to undertake a short-term inquiry focused on accelerating progress of a group of students' underachieving and developing a long-term school curriculum and achievement plan¹⁸
- involvement in Ministry or school-funded in-depth literacy, mathematics or leadership and assessment PLD
- appointment of a new person with leadership expertise. For example a new principal, senior leader, literacy or mathematics leader or SENCO.

This early focus on acceleration, even though urgent, takes time and care. As shown in the example below, during this early stage leaders:

- noticed that outcomes were not equitable
- reviewed school practices

Designed

• collaboratively designed an improvement plan with teachers and students.

Noticed In 2010, the SENCO noticed that many students who had been withdrawn from regular classes for supplementary support were unable to maintain their achievement when they returned to the class programme.

Reviewed The SENCO then reviewed the way teachers perceived withdrawal classes. She was concerned to find a culture of teachers identifying students for withdrawal interventions rather than considering how they could support these students in class.

The senior leaders wanted to promote teacher ownership of target students' progress. In 2011, the leaders, with teachers, designed a three-tiered approach to the school's underachievement. The first tier was the classroom with teachers accountable for target student progress.

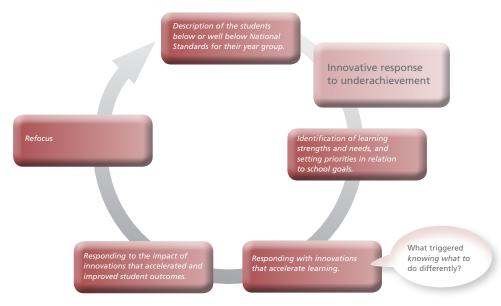
¹⁸ Details of the programmes are found at http://nzcurriculum.tki. org.nz/System-of-support-incl.-PLD/School-initiated-supports/ Accelerated-Learning-in-Literacy-Mathematics

Templates were developed to use teaching as inquiry as the accountability process for appraisal and coaching forums. The second tier was supplementary support in the classroom and the third tier was supplementary support outside of the classroom.

(a high decile, large urban contributing primary school)

What triggered knowing what to do differently?

Teachers and leaders with a deep understanding of progression, acceleration and curriculum used this teaching knowledge to design learning plans with and for individual students. Teachers had high expectations of themselves, as they knew how to support each student to accelerate progress.



To ensure a shared understanding of progression and acceleration, teachers at some schools had devised tools, such as rubrics, to:

- exemplify expected progression through the school curriculum
- make explicit the reading, writing and mathematics demands within the school curriculum
- describe actions for teachers to support students to accelerate progress where necessary.

Teachers were fully aware of the complexity of learning. For example, a response to a student's mathematical underachievement often included building student's confidence as a mathematician and in using English language.

One group of 11 students in Years 5 to 6 had been stuck on mathematics Stage 4 for two to three years. These students needed to develop specific strategies for adding and subtracting numbers of different place values. Because of their lack of previous success in mathematics the students lacked confidence in their ability and therefore were unwilling to problem solve in mathematics. The Pacific students were also English language learners. The students were involved in an intensive supplementary programme designed by the mathematics leader and English for speakers of other languages (ESOL) teacher. By the end of 2012 all but one student shifted from one standard level to the next. The other student continued working with the ESOL teacher in 2013.

(A medium decile, mid-sized urban contributing primary school)

Less effective schools did not have a shared understanding of progress and acceleration. These schools could not design a curriculum response that would support students to accelerate progress and successfully engage with the curriculum demands expected of their peers.

Schools with holistic improvement plans had short-term tactical responses to student underachievement along with longer-term strategic responses to build teacher and leadership capability that linked to school goals and targets. The short-term responses were remedial whereas the long-term responses were future-proofing by focusing on preventing underachievement. Long-term responses included building teaching capability; evaluative capability, in particular use of data with a teaching as inquiry approach; and high quality relationships with the community. These schools could link the learning from the short-term supplementary practices, such as withdrawal of small groups, to the classroom in ways that benefitted both students and teachers. The example below shows how a school made this link.

A school leader with expertise in mathematics observed the way teachers and students worked in the classroom before providing supplementary instruction for a small group of students. The teachers and leader designed the supplementary class foci to link to the classroom mathematics programme.

The leader then trialled a range of teaching strategies in the supplementary class and coached the teachers in the strategies that worked so they could use them with the same students in the classroom.

(A high decile, mid-sized rural, full primary school)

Schools that responded with more-of-the-same relied too much on supplementary practices but had no rationale about how these practices were expected to improve the long-term outcomes for students and teachers.

Schools where the students were active partners in designing the plan to accelerate progress were more likely to improve student outcomes to a great extent. In the example below the students understood why acceleration of progress in reading, writing and mathematics was important to their overall learning.

The teacher built on students' ownership of their writing progress and achievement by being clear about the learning intention and helping them understand the purpose of the standards. For example, that reaching the standards each year will give them more choices at secondary school. The teacher gave every student in the class a chart that showed the standards as the foundation for Level 5 and 6 of the curriculum.

(A low decile, large urban, contributing primary school)

Students were committed to the success of the plan they had helped design. Plans included learning contexts based on student interests, collaborative group tasks, a lot of oral work, self and peer assessment, and student feedback to teachers about what worked and what did not.

Teachers understood the importance of knowing each student's interests, confidence in learning and preferences for learning. The following three examples show what this looked like.

The results of a small survey with students who were underachieving showed teachers that many students thought writing was something teachers did to them. Teachers told them what to write about, how to write it, what to fix and how to fix it. This triggered the need to develop writing programmes that were student initiated and inquiry based within the wider school curriculum.

(A high decile, large urban, full primary school)

Most of the students underachieving had already had significant extra help with their reading and this had not made a difference. The teachers realised they did not know the students' strengths, interests and gaps well enough. They talked with each student and their parents about their views on reading, for example, what they liked and what they found hard. They also discussed the reasons behind particular responses students made to assessment questions. This provided teachers with new understanding about why these students struggled with their reading and gave them rich information for selecting engaging texts. It helped the students realise that the teachers were there to support their progress and work with them.

(A medium decile, mid-sized urban, full primary school)

The teacher gave students clear, specific feedback and expected them to act on it. For example, 'This idea needs more detail' and the teacher expected the student to rework the story adding more detail. The teacher had a system where the student signed the feedback after reading it, and then signed again when it was completed. She was helping them to use self assessment and own their progress and learning.

(A low decile, large urban, contributing primary school)

Many schools had developed student-centred literacy and mathematics progressions that enabled students to monitor their own progress while describing what they had learnt, what they needed to learn and how they learnt. Students then used these progressions with examples of their work to explain their progress and achievement to parents and teachers.

Students had their sample writing glued into the front of their writing book to remind them about where they were at the start of the year and provide a basis for comparison. The sample was accompanied by the starting learning intention (next steps). Each teacher discussed this and following learning intentions with students throughout the year. Learning intentions changed according to need and these were published in students' books. Learning intentions had success criteria underneath and a space for student self assessment and teacher's feedback.

(A low decile, large urban, contributing primary school)

These schools were very clear about the importance of developing a learning-focused environment in which students felt safe exploring new ideas, practising in front of others, and asking for help.

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 that the school teachers and leaders knew they were responsible for student achievement, but needed help from the parents and whānau to do so. Teachers invited parents and whānau to discuss their child's interests to find contexts that would motivate and engage them. The example below describes the ongoing discussions teachers and leaders had with Pacific students and their parents.

In 2011, a fono was held with parents of students in special learning support programmes.¹⁹ This led to more deliberate interactions and closer relationships with Pacific families. An outcome was the initiation of a Reading Together programme which involved parents learning with their children. Also in 2011 senior leaders surveyed a small group of Pacific students, and used the information to plan reading.

In 2012, parents of 22 Year 6 Pacific students, who had not achieved National Standards in mathematics at the end of Year 5, were invited to workshops to explore strategies and resources to help their children at home. By the end of 2012, 19 students' achievement had shifted up one national standard level (from well below to below or from below to at).

During the year, all Pacific students were surveyed about their learning of mathematics and the impact particular teaching had on this learning. The parent fono also focused on learning and building positive relationships. Senior leaders and teachers used the feedback from students and parents to inform PLD and teaching decisions. Many teachers had improved communication with families. At the same time a Samoan community worker has worked with school leaders and teachers to develop more specific strategies for Pacific students' success.

(A medium decile, large urban, contributing primary school)

Parents and whānau were often invited to work in partnership and support their child's school learning with home activities and were provided with the appropriate resources. Student progress reports were regularly and frequently sent home to parents and whānau, who commented on what they saw their child doing at home. In some schools, as shown in the example, the focus was on creating productive partnerships with Māori students and their whānau.

Whānau were invited to workshops where they were provided with mathematic packs to use with their children at home. The maths packs

19 This is a Ministry funded initiative for decile 1-3 schools that focuses on complementing a classroom reading programme with home reading. Details can be found on nzcurriculum.tki. org.nz/System-of-support-incl.-PLD/School-initiated-supports/Reading-Together

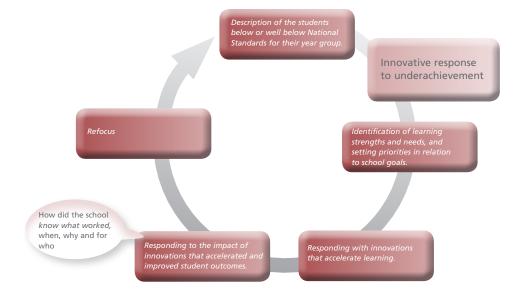
reinforced classroom learning. The complexity increased as the students' knowledge progressed. Workshops were for all whānau, not only those whose children were part of the initiative. Eighty-nine parents attended. Students discussed with their parents how the packs helped with their learning, and how they could use them at home. A survey showed whānau appreciated the maths packs and were more involved in helping their children with maths. Maths packs are now sent home daily with reading books in the junior school.

(A low decile, mid-sized rural, full primary school)

These schools developed powerful, high trust relationships with students, their parents and whānau that focused on education success.

Less effective schools knew it was important to develop such relationships, 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 a relationship appeared superficial.

How did the school *know what worked*, when, why and for who? Leaders and teachers who actively and relentlessly used student achievement information for their decisions knew what was happening for students, when and why. They paid attention to the reasons why individual students were not succeeding. A range of information on student identity, language and culture, use of key competencies, and engagement with school curriculum was used to interpret the achievement data. Teachers



identified the issues, discussed possible reasons for any problems and created solutions. They were continuously evaluating the affect of their actions and were nimble in their response (including abandoning things that did not work). Their practices were adaptive to context but the goals did not change.

A key feature was the team approach. Information was interpreted at all levels to inform long-term, short-term and day-by-day decisions. The purpose of all decisions was to improve outcomes for more students. Examples of student achievement information use included:

- at the end of a school year, school leaders and teachers used a range of student achievement information to reflect on system decisions to decide who should teach what class, the make-up of syndicates, leadership responsibilities, and PLD requirements
- at the beginning of each year syndicates used this information to discuss individual students and how effective the previous year's teaching was before beginning to develop new curricula
- classroom teachers used observations about evidence of learning to review moment-by-moment teaching decisions to decide what to do next
- students discussed and described what worked for them and applied this to new learning situations.

These schools, as the example shows, focused on what support was needed and not just on who needed the support.

The students underachieving were identified from end-of-year analysed achievement data. Draft school targets were discussed at a teacher only day at the beginning of the year. This-year and last-year teachers discussed the strengths, interests and next steps of each student and developed individual plans for making a greater difference for the students underachieving. They discussed their use of assessment for learning practices and looked at current best practice research. The draft targets were fine-tuned to reflect two areas of concern; the students achieving below national expectations after one year at school and at the end of Year 5.

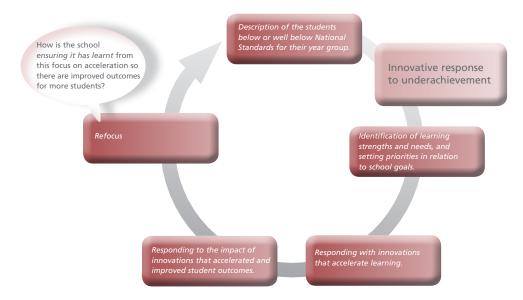
(A high decile, large urban, contributing primary school)

The less effective schools used student achievement information passively to watch student progress (or not). For example, while student progress and achievement was monitored, there was no formal evaluation of the effectiveness of teaching strategies or the affect of the supplementary support as a whole. Teachers regularly discussed what happened to these students (often good evidence in syndicate minutes) but there was little evidence of them trialling or discussing new strategies.

These schools did not appear to understand the value or process of formative evaluation.

How are schools ensuring they have *learnt from this focus* on acceleration so there are improved outcomes for more students?

Teachers and leaders in schools that had successfully supported students to accelerate progress were energised and motivated by the experience. They had high expectations for all students to succeed. These schools were embedding comprehensive systems with tools and resources to sustain the gains and ensure more students and teachers benefitted. All resource decisions linked to school targets, all actions were coherent, and all evaluation included the impact on individual students.



The initial response was to provide lead teachers with the resources to support the building of other teachers' capability. This included time for workshops, classroom observations and syndicate meetings. External targeted PLD was often sought.

Other successful systems included using a register to monitor progress of all students who were underachieving or had underachieved. These registers included information from particular assessment tools. Progress and the effectiveness of interventions were discussed at regular staff meetings to ensure all teachers could learn from successful strategies. The person responsible for monitoring the register, the SENCO or senior leader in charge of literacy or mathematics, organised and monitored the effect of any supplementary support for particular students. All teachers were responsible for maintaining and monitoring achievement of these students in the classroom.

Teachers were also supported to improve their evaluative capability. Schools expected all teachers to have class targets and to monitor progress and the affect of teaching closely through a teaching as inquiry process. Planning and appraisal templates reminded teachers to monitor the impact of their actions in a range of ways. For example, recording achievement data, observation of student learning behaviour, and discussions with students.

A strong ethic of care underpinned the responsibility and accountability of teachers and leaders in these schools. Teachers were careful not to label students when talking about their achievement and progress. Many were developing evaluative probes to ensure none of their decisions had any unintended consequences.

The leaders were concerned that removing the best teacher from the classroom to provide supplementary support for a group of students from a number of classes had a negative effect on students in the teacher's classroom. When the teacher was working with the withdrawal group the deputy principal observed the classroom interactions and talked with the students. Students said they would rather work in groups than complete individual tasks. The teacher adapted tasks in such a way that the students were able to work in groups and seek help from each other.

(A medium decile, mid-sized urban, contributing primary school)

The principal was concerned about the effect on students' self efficacy when withdrawn from classrooms. The principal interviewed the students, all boys, and their parents and found this was the case. The boys' response had been it was 'not cool to study' and didn't engage in the supplementary learning provided, but rather to 'just coast along'. The boys were no longer to be removed from class. Instead the principal, parents and boys developed a plan for in-class and home support that was then agreed to by the teachers.

(A high decile, large urban, middle school)

Students' moment-by-moment experiences were carefully considered. For example, students' views were sought as part of the curriculum review in many schools. Greater emphasis was placed on effective teaching across the curriculum and developing learning experiences within real life contexts. The science, health or social science topics' literacy demands were identified in many schools and teachers designed literacy tasks within the topics. For example, one school had used building the school garden as the context to design the classroom mathematics and literacy learning activities. In another school teachers had focused on the students' interest in team sports to engage them in mathematical concepts that were explored in both the classroom and supplementary mathematics programmes.

The person in charge of supporting students to accelerate progress kept boards of trustees up to date with student progress and teacher actions.

The less effective schools had not had this success. They were expecting actions by particular teachers to make the difference. If shifts were not made students were often blamed.

WHAT WERE THE CHALLENGES FOR SCHOOLS WITH A LESS EFFECTIVE RESPONSE TO UNDERACHIEVEMENT?

The key challenges for schools with a less effective response to underachievement were to quickly build capability and improve the quality of relationships so leaders and teachers knew how to respond innovatively.

The leaders and teachers in these schools needed to develop a deep understanding of curriculum, progression and acceleration. With this knowledge, they could interpret achievement information in a more meaningful way beyond labelling and grouping students, and would know how to respond to specific issues of underachievement and what to do to engage students in accelerating progress.

Leaders in these schools needed to develop a deep understanding of organisational change that improves outcomes for students and teacher capability. With this knowledge they would know how to work with teachers and the school community to:

- develop a rationale for acceleration of progress for particular groups of students so there is a clear sense of direction for all resource decisions
- plan for both short-term and long-term improvements that focus on building capability and relationships with other professionals, students, their parents and whānau

- evaluate whether resourcing decisions were making a difference to student outcomes and teacher capability
- evaluate whether supplementary practices and classroom learning were working to support each other
- scale up, extend and spread aspects that worked to include more teachers and more students.

The level of internal expertise to successfully work with experienced PLD providers to build this knowledge and capability was evident in schools aware of the need to do something different.

The 19 percent of schools with little sense of urgency or ownership needed something quite different. Although the teachers and leaders wanted to make a difference for all students, they did not have the capability or systems in place to shift from business-as-usual to an innovative response to underachievement. These schools needed the long-term support of an experienced turnaround agent to design and implement a holistic improvement plan for teachers and students.

Because of the transient nature of principals and leaders and the regular turnover of trustees in some of these schools, the turnaround agent would need to be the student advocate. They would need to be responsible for interpreting student achievement information and provide continuity of the urgent and short-term remedial focus on improving particular students' outcomes as a principal leaves and a new one is employed. This would enable the board, with the turnaround agent's support, to develop a long-term improvement plan with the new principal.

Conclusion

This report indicates that half the schools investigated were making a difference for students underachieving. In particular, underachieving Māori and Pacific students, and English language learners were targeted for support and experienced success.

Teachers and leaders in these schools were energised by the experience of success. Teachers clearly knew how to make a difference and expected to do so. They knew how to connect with students. If something did not work they then trialled something else. Students knew what and how they learnt, and they knew their teachers were supporting them to succeed. They too were energised by the experience of success.

Many of the effective schools had focused their efforts on students at all year levels, and across mathematics, reading and writing. The others had trialled a successful innovation in one area and were now spreading the trial by increasing the number of students and teachers involved.

SCHOOL LEADERSHIP

School leadership was vital for improving student outcomes. Leaders in the strategic and successful schools knew how to design and implement an improvement plan that enabled more students to achieve better results with less inequity across the school population. These coherent plans were 'living documents' and were adapted in response to outcomes. They included:

- a clearly articulated reason for the urgency and need to improve outcomes for particular group of students
- active and relentless use of student progress and achievement information to monitor individual student's progress, evaluate impact of decisions and adapt responses
- progress and achievement reported to parents, boards of trustees, and the Ministry
- short-term remedial responses to student achievement that often included using highly effective teachers providing supplementary learning to complement classroom learning
- actively involving students, and their parents and whānau, in designing and implementing learning plans and reviewing progress
- longer-term strategic responses to prevent students underachieving by building teacher and leader capability in:
 - using learning progressions and developing a curriculum that is engaging and worthwhile
 - using assessment and evaluation information to know what works, when and why for different students
 - working as teams, which include students, their parents and whānau, and other professionals, to support all students to achieve at expectation.

designing and implementing the plan to accelerate progress.

Students and their parents

and leader capability.

and whānau involved in

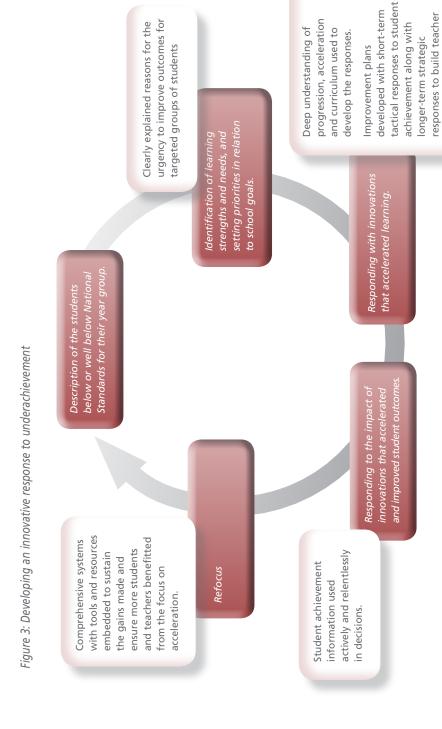


Figure 3 shows the effective schools' innovative responses to the inquiry questions posed in the *Methodology* section. These responses improved more students' outcomes.

WHAT WERE THE LESS EFFECTIVE SCHOOLS DOING?

An ongoing concern is many schools' slow walk to improvement. Too many schools are not serving students who are underachieving and have no sense of urgency to change their practices. The findings highlights that half of the schools' focus on acceleration was fragile and only a few students were likely to be benefitting, as their responses to underachievement were:

- too general
- too often the same and ineffective
- too reliant on a single intervention
- too hopeful as not evaluated.

ERO found that the less effective schools were often only focused on a remedial response for students who were one or two years behind year group expectations. There appeared little understanding of the value of preventative actions. For example, school leaders appeared to be unaware of the critical transitions: to school; from one school year to the next, and from school. These schools did not resource transitions adequately to prevent students' 'slippage' of achievement.

Most of these schools had analysed achievement data but used it only to monitor student progress rather than evaluate the impact of teaching. This ERO review, along with others, ²⁰ found that effective schools robustly evaluated the effectiveness of resourcing and teaching decisions. They responded strategically. The challenge for leaders of less effective schools is to develop an improvement culture that is deliberate and relentless in finding effective ways to respond to underachievement.

The leader and teacher actions at these schools were often far removed from best practice²¹ about what works, when and why to:

- improve student outcomes
- build teacher and leader capability
- improve school systems.

They needed improvement in:

- teacher knowledge of the curriculum, progression and acceleration
- leadership knowledge in organisational change that improves student outcomes and teacher capability by focusing on both short-term remedial gains and long-term preventative actions.

Leaders need to work with boards to understand the rationales for targeting resources for students who need support to accelerate progress and the impact of the resource decisions.

- 20 For example ERO. (2013)

 Mathematics in Years 4 to
 8: Developing a Responsive
 Curriculum (February 2013) and
 ERO.(2013) Accelerating the
 progress of Priority Learners in
 Primary Schools (May 2013) found
 on www.ero.govt.nz/NationalReports/(year)/2013
- 21 MoE's System of Support brings together a range of self-review tools, processes and resources that support best practice nzcurriculum. tki.org.nz/System-of-support-incl.-PLD

Examples of research syntheses are BES (Iterative Best Evidence Synthesis) Programme - What Works Evidence, Hei Kete Raukura in New Zealand, www.educationcounts.govt.nz/publications/series/2515

Hattie, J. (2009) Visible Learning a synthesis of over 800 metaanalysis relating to achievement Routledge, London www.visiblelearning.org/2013/03/visiblelearning-infographic/

Education Endowment Foundation in the United Kingdom, educationendowmentfoundation. org.uk/toolkit/

The What Works Clearinghouse in the United States of America ies. ed.gov/ncee/wwc/

WHAT SUPPORT DO THE DIFFERENT GROUPS OF SCHOOLS NEED?

All schools benefit from working with appropriate outside expertise. For many schools investigated, this work triggered the focus on an innovative response to underachievement. Most schools had the internal capability to work successfully with experienced professional learning and development (PLD) providers to improve their capability to respond to underachievement. Because of their different needs, schools should be discerning and explicit in their goals and expectations of providers. For example, the schools with strategic and successful actions need support to sustain what works and keep innovating where improvements are needed. Other schools need support to understand acceleration.

The schools with little sense of urgency did not appear to have the internal capability to work strategically with outside PLD providers to bring about the culture change needed. The leaders and teachers need a different type of support. Many schools have had numerous changes in principals and teachers, with a long transition time for the new principal or teacher to know the students and how to support them to accelerate progress. The schools need help to shorten this transition time and so minimise any disadvantage to students.

NEXT STEPS

ERO recommends that the Ministry of Education:

- responds with a differentiated approach to support schools to urgently progress achievement by designing, implementing and monitoring improvement plans
- considers how to identify and support leaders to meet achievement challenges
- considers how to strengthen the support to schools where there have been many leadership changes or there is a first-time principal.

ERO recommends that all school trustees when setting and reviewing school targets seek:

- specific information about why particular groups of students need support and why particular responses are expected to make a difference
- frequent and regular information about the impact of resources on accelerating progress for these groups of students.

ERO recommends that school leaders foster a culture of improvement and acceleration by:

- developing a shared understanding for the urgency to improve outcomes for particular groups of students
- incorporating both short-term tactical responses to underachievement and long-term strategic responses to building capability and relationships in a school improvement plan
- encouraging teachers to share their trials and evaluations of evidence-based practices on accelerating progress.

Appendix 1: Sample of schools

The type, location, rolls and decile range of the 193 schools involved in this evaluation are shown in Tables 1 to 4 below. Tables 1 and 2 show that school type and location was representative of national figures.

Table 1: School type

School type	Number of schools in sample		National percentage of schools ²²
Full primary (Years 1-8)	93	48	48
Contributing (Years 1-6)	66	34	34
Intermediate and middle schools (Years7-10)	11	6	6
Composite (Years 1-10 and Years 1-15)	7	4	7
Secondary (Years 7-15)	16	8	5
Total	193	100	100

Table 2: Location of schools²³

School location	Number of schools in sample		National percentage of schools
Main urban (>30,000)	99	51	52
Secondary urban (10,000-30,000)	14	7	6
Minor urban (<10,000)	15	8	11
Rural	65	34	31
Total	193	100	100

- 22 The national percentage of each school type is based on the total population of schools as at August 2012. For this study it includes full and contributing primary schools, intermediate and middle schools, secondary, and composite schools with students in Years 1–8. This applies to roll size, locality and decile in Tables 6, 7 and 8.
- 23 Based on location categories used by the Ministry of Education and Statistics New Zealand.

Table 3: Roll size²⁴

Roll size	Number of schools in sample	Percentage of schools in sample	National percentage of schools
Very small	18	9	9
Small	48	25	20
Medium	69	36	46
Large	37	19	17
Very large	21	11	8
Total	193	100	100

Table 3 shows the roll sizes of the sample schools were, statistically, significantly different²⁵ to the national figures. The medium schools are under-represented and small and very large schools over-represented in this sample.

Table 4: School decile²⁶

School decile	Number of schools in sample	Percentage of schools in sample	National percentage of schools
Low decile (1-3)	39	20	30
Mid decile(4-7)	82	43	38
High decile (8-10)	72	37	31
Total	193	100	100

Table 4 shows the decile ratings of the sample schools were, statistically, significantly different to the national figures. The sample was over-represented by high decile schools and under represented by low decile schools.

- 24 Roll sizes for full and contributing primary schools, and intermediates are: very small (1–30); small (31–100); medium (101–300); large (301–500); and very large (500+). Roll sizes for secondary, composite and restricted schools are: very small (1–100); small (101–400); medium (400–800); large (801–1500); very large (1501+).
- 25 The differences between observed and expected values in Tables 1–4 were tested using a Chi square test. The level of statistical significance was p<0.05.</p>
- 26 A school's decile indicates the extent to which a school draws its students from low socio-economic communities. Decile 1 schools are the 10 percent of schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10 percent of schools with the lowest proportion of these students.

Appendix 2: Evaluation prompts

The evaluation question: To what extent had the school undertaken deliberate actions that led to an increase in the number of students achieving at or above the National Standards' (mathematics, reading and writing) expectation for their year group.

- 1. Great extent: many students accelerating progress, actions strategic and coherent i.e. school wide and classroom innovations, and the school knows how to extend reach.
- 2. Some extent: some students accelerating progress, and some strategic actions.
- 3. Minimal extent: few students, and few actions.

The evaluation framework prompts can be used in two ways. To either look back and make sense of success for some students or to look forward and plan ways to improve outcomes for a particular group of students. The evaluation framework is found in the *Methodology* section.

Identification of learning strengths & needs - What triggered the need to do something different?

How did/does the school identify priorities?

How well do we know whether this priority represents all students achieving below or well below expectation or the whole school population?

How well do we explain the rationale for focusing on the particular group of students?

How well do we describe the students' learning strengths and needs?

Responding with an accelerated teaching innovation/s - What triggered knowing what to do differently?

What teaching actions and other innovations were chosen and why? (using what works)

What strategic supports were provided to ensure success? For example:

- professional learning and development (PLD)
- resources
- time
- leadership/expertise/collaborations
- external support.

How well did we monitor progress and review impact? Did we make any adjustments in response to the monitoring and reviewing?

Were students, their parents and whānau partners with us in this focus on acceleration?

Impact of accelerated teaching innovation - How did the school know that acceleration of learning and achievement progress occurred (and for who)?

How well do we know the effect on the students and the school - on teachers, the particular students and other students?

Refocus - How is the school ensuring it has learnt from this focus on acceleration so there are improved outcomes for more students?

How well do we know what worked and what needs to be done differently for what students, what teachers and what relationships?

How are we transferring/ embedding what worked, so other students can benefit?

How are we ensuring that progress continues to accelerate if student achievement has shifted to below or progress stays at year group expectation if student achievement is now at or above?

What are we doing to support acceleration of progress for students who started in the group but whose achievement did not accelerate?

How are we ensuring the focus stays on acceleration so there is a real shift in achievement?

Prompts for improvement

What is the school already doing that can be built on to focus on acceleration?

What could be done differently so more students benefit?

What culture changes are needed, for example, focus on inquiry and improvement for all students, all teachers being responsible, partnership with parents and whānau?

What knowledge is needed, for example, teaching (strategies and/or curriculum), leadership, evaluative?

What systems are needed to support cohesion and transparency of outcomes and practice, for example, appraisal, classroom planning, or professional meetings?

What relationship building is neded, for example, use of networks of professional expertise, partnerships with parents, whānau, hapu, iwi and communities?

How can we build on our capability to support this focus?

USEFUL REFERENCES

MoE's *System of Support* brings together a range of self-review tools, processes and resources that support best practice nzcurriculum.tki.org.nz/System-of-support-incl.-PLD

Examples of research syntheses from:

New Zealand: BES (Iterative Best Evidence Synthesis) Programme – What Works Evidence, Hei Kete Raukura, www.educationcounts.govt.nz/publications/series/2515 and Hattie, J. (2009) Visible Learning a synthesis of over 800 meta-analysis relating to achievement. London: Routledge. visible-learning.org/2013/02/infographic-john-hattie-visible-learning/

United Kingdom: *Education Endowment Foundation* educationendowmentfoundation. org.uk/toolkit/

United States of America: The What Works Clearinghouse

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