



**Raising achievement in primary schools:
Accelerating Learning in Mathematics (ALiM)
and Accelerating Literacy Learning (ALL)**



June 2014

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Overview

The Education Review Office's (ERO) report *Raising achievement in primary schools*¹ found that involvement in *Accelerating Learning in Mathematics (ALiM)* or *Accelerating Literacy Learning (ALL)*² triggered some schools to do something different to accelerate progress for students underachieving. The Ministry of Education (Ministry) asked ERO to explore this finding further.

Of the primary schools reviewed in Terms 2 and 3 2013, 93 had been involved in the Ministry-funded ALiM or ALL between 2010 and early 2013. In this report ERO investigates how well these schools were undertaking deliberate actions to increase the number of students 'at' or 'above' the National Standards for their year group. ERO has not evaluated ALiM or ALL. Instead we have reported school context to inform ALiM and ALL design and implementation.

ERO found that there were four distinct groups of schools:

1. Strategic and successful schools
2. Schools that had strategically trialled a new approach
3. Schools aware of the need to accelerate progress
4. Schools with little sense of urgency.

Just over half of the 93 schools in the sample had used deliberate actions to support students to accelerate progress and sustain achievement equivalent to their year group.³ Teachers and leaders in these schools were implementing and closely evaluating the impact of well-researched strategies to accelerate progress. Some of these effective schools were **strategic and successful** as they had a school-wide focus on underachievement. Others had **strategically trialled a new approach** which was now being embedded across the school. This is a similar finding that reported in *Raising achievement in primary schools* (the 'main report') except in this sample a greater proportion of schools had **strategically trialled a new approach** compared with those in the main report.

In contrast, the other half of schools were less effective as their response to underachievement did not necessarily lead to accelerated progress. Most of these schools (a far greater proportion in this report than the main report) were **aware of the need** to accelerate progress but did not know the long-term impact of any initiative. A small group of schools appeared to have **little sense of urgency** even though most had high underachievement rates.

¹ ERO (2014) *Raising achievement in primary schools*. Wellington: Education Review Office.

² This included helping schools to use their expertise to undertake a short-term inquiry focused on accelerating progress of a group of students who were underachieving.

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. Appendix 2 includes a discussion about the Public Achievement Information for each group.

Schools that made a difference for students

ERO found that ALiM and ALL had influenced the classroom and supplementary support design and implementation by the **strategic and successful** schools. Close monitoring of learning and a quick and short-term response when progress was ‘flat-lining’ were strongly emphasised. Students knew what they needed to learn, how they were progressing, and how they would get there. At the same time, teachers were focused on improving their practices by using structured and collaborative teaching as inquiry to plan for acceleration and review rates of progress.

Leaders in schools that had **strategically trialled a new approach** had systems so the whole school was benefitting from the trial. Some leaders had planned for this from the start, and others planned for school-wide improvement nearer the end of the ALiM and ALL initiative. The ALiM and ALL design features of a school-based inquiry team, external mentoring and formal inquiry into the intensive instruction positively influenced these outcomes.

The greatest difference in response to underachievement was between the schools that had **strategically trialled a new approach** and those that were **aware of the need** to accelerate progress.

The leaders and teachers in the former group of schools had understood that supplementary support complements the curriculum teaching and learning for students. They also understood that the demands of the classroom curriculum determine the supplementary support. They knew that any inquiry into practice required a team approach and a disposition for change. Many teachers talked about the changes they had made in beliefs and practices and the positive impact this had on student outcomes. The practice of leaders and teachers in the latter group of schools did not reflect this understanding.

Schools less effective at sustaining progress for students

The schools that were **aware of the need to accelerate progress** had not taken full advantage of the ALiM and ALL design features. The mentors had not influenced school culture. The leaders and teachers had seen ALiM and ALL as only an intervention for a small group. Teachers lacked curriculum, progression and acceleration knowledge and leaders had limited organisational change knowledge. Leaders and teachers were unsure about how well they were going or what to do next at both the school and classroom levels. Teacher and leader knowledge could be deliberately built through intensive inquiries into progress and acceleration.

The small group of schools with **little sense of urgency** did not take advantage of ALiM and ALL and the mentors had not influenced school culture. Many leaders and teachers were overwhelmed by the high proportion of students underachieving at their school. They needed to design curricula that included descriptions of reading, writing and mathematical demands and descriptions of supplementary supports that complement classroom curriculum. Leaders needed to design systems with teachers for shared expectations and understandings about effective practice and student outcomes.

Information to support the Ministry's decisions about school involvement in ALiM or ALL

The Ministry recognises that these initiatives, ALiM or ALL, may not be the right trigger to support all schools to do something different to accelerate progress for students underachieving. This is especially so for schools with very high rates of underachievement and low capability.

Before beginning an intervention in an individual school the Ministry should explore the information that is available, such as ERO's Education Review reports, to determine whether there is capacity in the school for the initiative to benefit teachers and raise achievement for students.

Next steps

ERO recommends that the Ministry of Education:

- design the ALiM and ALL inquiry's refocus stage to reflect the urgency needed to:
 - change the instruction for students whose achievement had not accelerated even though they were part of the focus group
 - support another group of students to accelerate progress
 - support other teachers to trial successful aspects.
- support ALiM and ALL providers to ensure that at the outset of the focus on acceleration the school improvement plans include how leaders will transfer what they learn so more students benefit.
- review a school's initial response to ALiM or ALL when they apply for a second time to determine whether this initiative is the most appropriate support the Ministry can provide and to differentiate the response.

ERO recommends that ALiM and ALL providers:

- explore how to transfer the learning about accelerating progress to in-depth and long-term PLD so schools with very high underachievement and low capability would be better served.

ERO recommends that school leaders:

- design and implement improvement plans that include both short-term tactical responses and long-term preventative responses to underachievement
- ensure there is a shared understanding that an intensive inquiry into accelerating progress includes an expectation that all teachers will critique the effectiveness of their practice and make changes where necessary
- appoint an inquiry team with the mandate to lead the focus on reviewing progress and acceleration, and improving school practices
- ensure there is a shared understanding among teachers about expected progress and achievement by developing student profiles

- ensure students, and their parents and whānau are invited to participate in the design and evaluation of all supplementary supports.

ERO recommends that boards of trustees:

- seek detailed reports about student progress, acceleration and achievement
- seek frequent and regular information about transfer and sustainability of successful initiatives.

Introduction

The ERO report *Raising achievement in primary schools (June 2014)* presented findings about how well schools were undertaking deliberate actions that increased the number of students achieving at or above the National Standards' expectations for their year group. The findings were based on 193 schools with Years 1 to 8 students reviewed in Term 2 and 3, 2013. ERO was particularly interested in schools' responses to raising achievement for Māori and Pacific students, who are over-represented in the groups 'below' and 'well below' National Standards.

Two components informed ERO's judgement about each school:

- the first was the extent to which the school increased the proportion of students achieving at or above National Standards for their cohort
- the second was the deliberateness of the school's actions.

A key finding from the report was that leaders in the most effective 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 plans were coherent 'living documents' that were adapted in response to outcomes. The plans included:

- a clearly articulated reason for the urgency and need to improve outcomes for particular groups of students
- active and relentless use of student progress and achievement information to monitor individual student's progress, evaluate the impact of decisions and adapt responses
- reporting progress and achievement to parents, boards of trustees, and the Ministry
- short-term remedial responses to student achievement that included using highly effective teachers to provide supplementary support 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 student underachievement by building teacher and leader capability in:
 - using learning progressions and developing an engaging and worthwhile curriculum

- 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 expected levels.

This ERO report needs to be read alongside *Raising achievement in primary schools* (June 2014). It explores the 93 schools that participated in some aspect of ALiM and ALL from 2010 to early 2013 and were part of the original ERO evaluation in Terms 2 and 3, 2013.

The Ministry-funded *Accelerating Learning in Maths* (ALiM), *Mathematics Support Teacher* (MST) and *Accelerating Literacy Learning* (ALL), were intended to help schools use their expertise to undertake a short-term inquiry focused on accelerating progress of a group of students who were underachieving. It was also for schools to develop a long-term school improvement plan.⁴

Methodology

The methodology for this investigation is grounded in the *Raising achievement in Primary schools* methodology as described in this section. ERO's Education Review reports for the schools in the sample were also analysed to investigate the factors that influenced school effectiveness.

ERO evaluated the extent to which schools had undertaken deliberate actions that led to more students achieving at or above National Standards. 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 in the school
- deliberateness and coherence of actions associated with accelerating progress
- depth of knowledge about how to extend the reach so more students were achieving success than before.

Accelerating progress

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

The evaluation considered both short and long-term acceleration. Progress was considered accelerated when a 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.

⁴ Details of the programme are found at <http://nzcurriculum.tki.org.nz/System-of-support-incl.-PLD/School-initiated-supports/Programmes-for-students>

Progress was also considered accelerated when a 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 than classmates progressing at expected rates. These considerations 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 how they have accelerated 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 evaluate impact. It also considered depth of teacher and leader 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 or accelerated rates.

Evaluation questions

ERO evaluated schools' capability to do something different for students achieving below expectation. The initial questions focused on the best practice in each school. This provided a strength-based framework for reporting the findings.

In schools that had taken deliberate actions and improved student outcomes, ERO explored the triggers for the particular group of students the school identified and the deliberate actions they took. Some schools used ALiM or ALL examples. ERO also evaluated how each school sustained the focus on improving outcomes for students achieving below or well below year group expectation. The investigative questions for schools that had an **innovative response to underachievement** were:

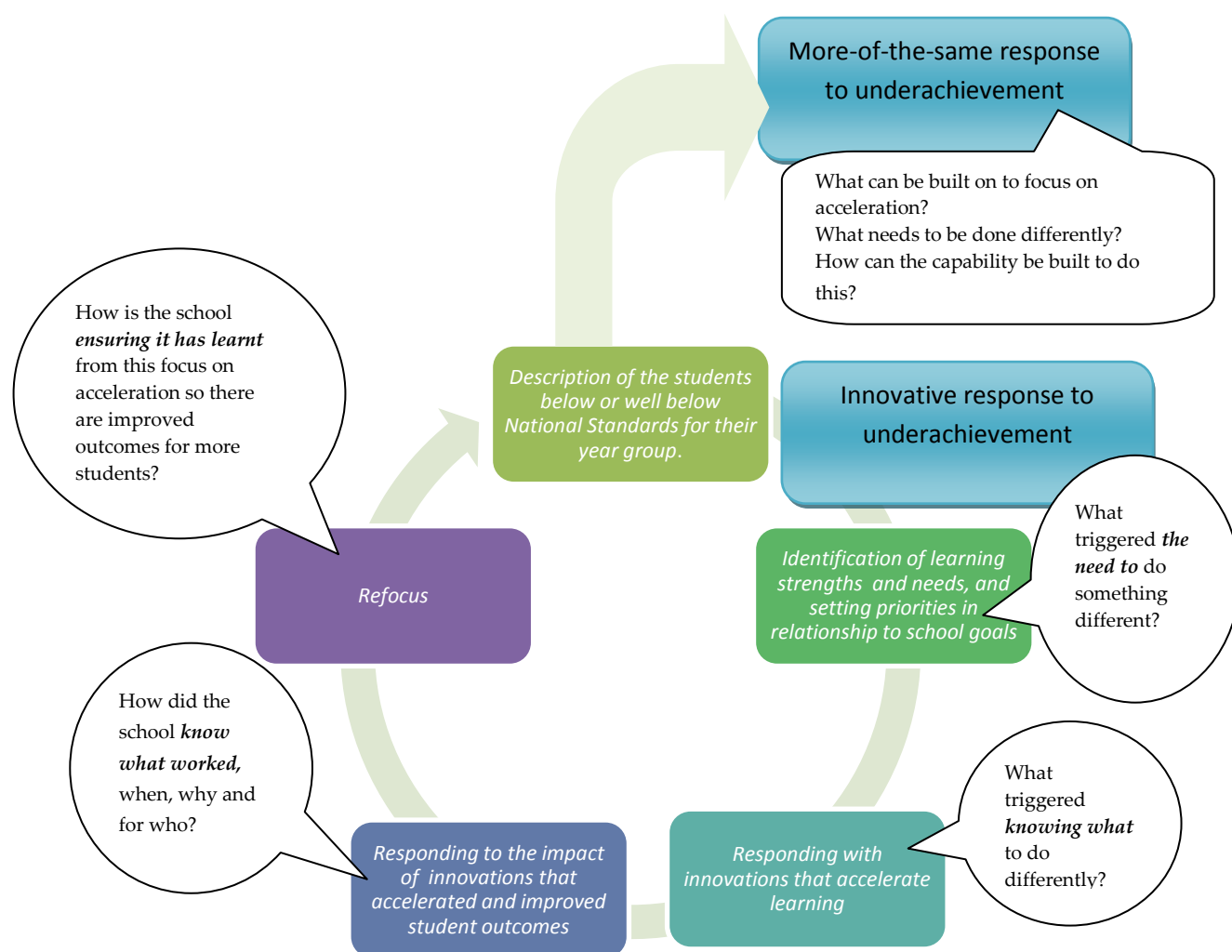
1. What triggered *the need to* do something different?
2. How did the school *know what* to do differently?
3. How did the school *know what worked*, when, why and for who?
4. How is the school *ensuring it has learnt* from this focus on acceleration so outcomes are improved for more students?

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

1. What can be built on to facilitate acceleration?
2. What needs to be done differently?
3. How can the capability to do this be built?

The framework in Figure 1 highlights these questions. The evaluation prompts are in Appendix 1 of the main report. This framework was also used to describe the findings.

Figure 1: Evaluation framework and questions



Schools involvement in ALiM and ALL

Ninety-three schools reviewed in Terms 2 and 3, 2013 had participated in *Accelerating Learning in Mathematics* (ALiM), *Accelerating Literacy Learning* (ALL) or *Mathematics Support Teacher* (MST).⁵

Some schools had been involved in an initiative more than once and some had been involved in more than one initiative. Twenty-one schools had participated in both ALiM and ALL and five of these schools had participated in ALL twice. Most schools were involved in ALiM or ALL in 2012 or 2013. The difference in numbers between these two programmes for these years was the schools that accessed MST support.

The complexity of school involvement is shown in Figures 2 and 3. Over the years the initiatives have been evaluated by the Ministry and there have been considerable changes to the design and implementation. For example, from 2013 schools are expected to undergo two cycles of inquiry.

Figure 2: Number of times schools have participated

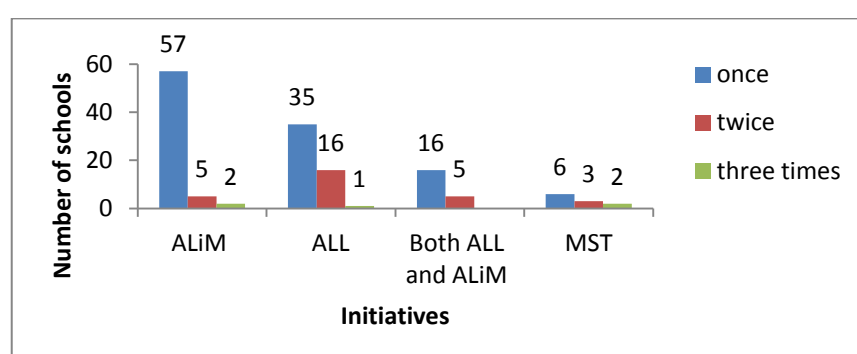
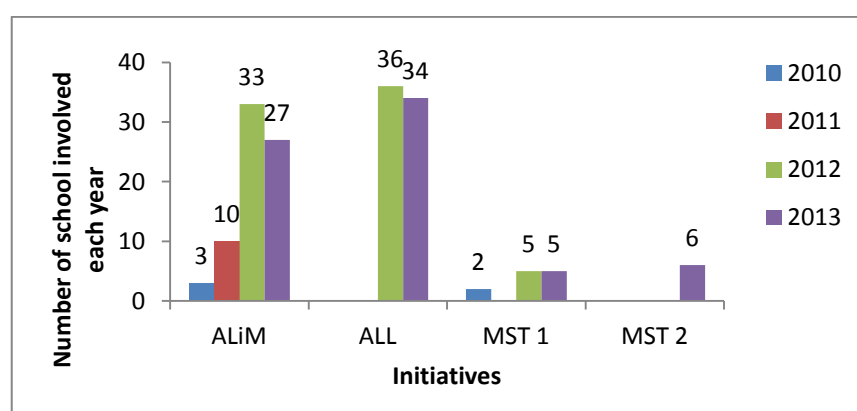


Figure 3: Number of schools participating each year



Information about the types of schools, roll size, school locality (urban or rural), and decile range is in Appendix 1.

⁵ Schools that have participated in ALiM may apply for Ministry funding that contributes to a teacher completing a 2-year post-graduate mathematics education course (MST).

Findings

The evaluation findings are structured under the following headings:

- Overall findings
- Participation in ALiM and ALL
- School context
- Capabilities that made a difference in effectiveness
- How effective schools improved equity of outcomes
- Triggers for schools that were effective in their responses
- Building capability in schools with less effective responses to underachievement.

Overall findings

ERO found that there were four distinct groups of schools of the 93 that had participated in ALiM and ALL.

- | | |
|---|---|
| <ol style="list-style-type: none">1. Twenty-eight percent of schools (n=26) were strategic and successful in their actions to accelerate progress and had a whole school focus on underachievement.2. Twenty-five percent of schools (n=23) had strategically trialled a new approach that had successfully accelerated progress for the students involved. They were now developing systems for the whole school to benefit from the trial. | <p>These two groups were effective as the schools responded innovatively to underachievement.</p> |
| <ol style="list-style-type: none">3. Thirty-four percent of schools (n=32) were aware of the need to accelerate progress and had invested in one-off initiatives. The schools were not systematic in their practices to respond to underachievement.4. Thirteen percent of schools (n=12) had little sense of urgency to accelerate progress and had a minimal increase in students' achievement. | <p>These two groups were less effective as the schools responded with more-of-the-same to underachievement.</p> |

There was a higher proportion of schools in the second and third groups and a lower proportion in the fourth group, when compared with the overall findings of the main report. The group descriptions reflect the ALiM and ALL influence on schools so are slightly different to those in the main report.

Participation in ALiM and ALL

When, how often, or which initiative a school participated in were not significant indicators for effectiveness. The only indicator for inclusion in the effective group of schools was participation in all three initiatives — ALiM, ALL and MST.

Schools that had participated in both ALiM and ALL, or in one initiative more than once, were spread across all four groups. Because of changes in the design and implementation of ALiM and ALL, schools' second involvement may have been because of changes in the school or may have been a second cycle of inquiry. Repeating ALiM or ALL may not be the best use of the Ministry's resource if there has not been an effective focus on acceleration.

The initiatives had more influence on the effective schools than it had on the other schools. Some school leaders and teachers mentioned their ALiM or ALL experience to ERO. Schools in the less effective schools were less likely to highlight the involvement or outcomes to ERO. The number decreased from 80 percent of the **strategic and successful** schools mentioning ALiM and ALL to ERO, to 33 percent of the schools with **little sense of urgency**. Some of the schools were involved in ALiM or ALL for the first time while ERO was visiting.

School context

ERO investigated whether public information about school contexts would be useful for thinking whether the initiatives are suitable for a particular school, and what level of support the school would need to successfully focus on acceleration.

ERO's individual school reports provide guidance about a school's capacity to benefit from the initiatives. ERO's Education Review reports return times indicate any concerns about the education and safety of students. ERO found that schools with a one-to-two-year ERO return time in their 2013 review had a **more-of-the-same** response, indicating that ALiM and ALL may not be the best support for these schools.

Schools with a high proportion of students achieving below or well below National Standards may find that they are overwhelmed by the issues associated with underachievement. Although all four groups had schools with low, medium or high decile ratings, nearly 60 percent of schools with **little sense of urgency** were low decile schools, and more than 80 percent of those in the two effective groups were either medium or high decile schools. Schools with high rates of underachievement require more intensive support than ALiM or ALL.

Capabilities that made a difference in effectiveness

ERO found the following capabilities made a difference to a school's effectiveness in responding to underachievement.

1. **Leadership capability** to design and implement a coherent whole school plan focused on targeted support for students and teachers towards equitable outcomes for students.

2. **Teaching capability** to find and trial responses to individual student strengths, needs and interests that engaged and supported students to accelerate their reading, writing and mathematics progress.
3. **Assessment and evaluative capability** of leaders and teachers to understand and use data, and know what works, when and why for different students.
4. **Capability to develop relationships** with students, parents, whānau, trustees, school leaders and other teaching professionals to support accelerated progress.
5. **Capability to design and implement a school curriculum** that engaged students and was worthwhile learning.

The capability of teachers and leaders to integrate practice, knowledge, skills and beliefs influenced how each school responded to their students' strengths and needs. A description of the capabilities of each group of schools is in the main report.

How effective schools improved equity of outcomes

ERO evaluated how schools raised achievement by exploring the deliberate actions to accelerate progress for a particular group of students chosen by each school. These groups had 10 to 40 students. As discussed earlier, many effective schools, schools that were **strategic and successful** and schools that had **strategically trialled a new approach**, chose their ALiM and ALL experience to show how they had improved achievement for a group of students.

Effective schools had focused on inequity within their student population and improved outcomes for individual Māori and Pacific students, and English language learners. Teachers and leaders used effective teaching and leadership strategies, provided a rich curriculum and built high quality relationships to respond to underachievement. The following section, *What were the triggers for schools that were effective in their responses?*, includes detailed examples of what schools did to accelerate progress for individual Māori and Pacific students. The main report, *Raising achievement in primary schools*, has further examples.

Teachers and leaders knew each individual student's progress. Teachers used a range of norm-referenced assessment tools to find out whether progress had accelerated during and directly after the supplementary support. Ongoing progress was closely monitored and a new response implemented if progress had not accelerated or had plateaued. Often this involved working with other professionals such as Resource Teacher Learning and Behaviour (RTLb), Resource Teacher Literacy (RTLits), and English language learning (ELL) specialists. Overall Teacher Judgements (OTJs) and National Standards were used to determine and report annual achievement.

The effective schools were not just monitoring for progress and achievement. Instead they developed a rich picture of improvement from classroom observations of student behaviour and interactions with other students, student surveys and interviews, and parent interviews.

Teachers and leaders knew that students who had accelerated progress were more interested and motivated to engage in class activities than they were previously. They knew students were confidently using newly learnt strategies and language in group

and independent tasks. Learning was transferred from one area to another as illustrated in the following example.

As well as improvements in writing there were strong links with reading. Students were identifying writing features within reading texts such as similes, and then recording these to use as a resource bank for their writing, descriptive sentences/words, and examples of 'show don't tell' in texts.

(A high decile, medium sized full primary school)

In one school the students were then trained as buddies for new readers in Years 1 to 3. The examples below show that confidence in one area influenced motivation, engagement and success in another.

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

"Now when I do my writing I use my books to help me because I can read new words". (Student)

This confidence was also seen at home.

"Now we don't have enough paper in the house to keep up with him wanting to write." (Parent)

"My son's so confident now, he doesn't give up if the text is a bit tricky ...he's got more tools in his tool box." (Parent)

The students were energised by their success.

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

"It has been an amazing experience. It got me to a place I never thought I'd get to. We've done lots of things and I've learnt about lots of things. Now I have 'cool' things to write about." (Student)

Triggers for schools that were effective in their responses

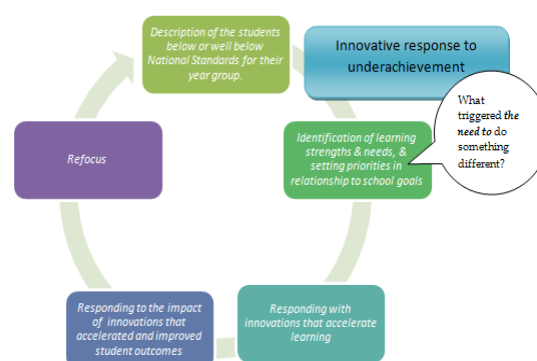
The effective schools deliberately responded **innovatively to underachievement**. Teachers and leaders knew what improved outcomes for students and what did not. The key difference between the two groups of schools was **strategic and successful** schools had school-wide systems, whereas schools that had **strategically trialled a new approach** were spreading the innovation but did not yet know the wider impact.

This difference was especially apparent in schools' improvement plans and systems to sustain gains. The **strategic and successful** schools' focus on acceleration had been through a number of iterative inquiries, whereas schools that had **strategically trialled a new approach** were undertaking their first in-depth inquiry into acceleration.

The next sections of this report compare and contrast the actions of the two effective groups of schools. This does not mean that schools need to go through the stage of **strategically trialling a new approach** before they can be **strategic and successful**. Instead, leaders could plan their preparation and responses to ALiM and ALL to ensure the learning is extended to more students and more teachers from the outset.

What triggered *the need to do something different*?

Leaders in effective schools had improvement plans with **short-term tactical responses to student underachievement, and longer-term strategic responses to build teacher and leadership capability** that linked to school goals and targets. Leaders in the **strategic and successful** schools had a whole school focus, whereas the leaders of schools that **strategically trialled a new approach** focused on a small group of students and teachers.



Many leaders saw ALiM and ALL as an opportunity to focus on underachievement and acceleration and build capability.

Senior leaders and the board made a commitment to involve the school in ALiM. This commitment was consistent with the school's drive to change the delivery of the curriculum to one that is focused on catering for students' 'stages, not ages'.

(A mid decile, large full primary school)

The school leaders applied for ALL (and ALiM) as a logical progression in the school's development, as they recognised the need to help individual students accelerate their progress in order to make significant gains to achieve at and above the National Standards.

(A low decile, medium sized intermediate school)

These leaders strategically appointed a leadership team, called a school inquiry team, to lead the trial. This team included a capable teacher who worked with the students and was well resourced, especially with time, to undertake the trial. The team influenced the principal, other leaders and the board.

The initial plans of most schools that had **strategically trialled a new approach** did not include extending the reach of the trial to more teachers and more students. The **strategic and successful schools** had expected the whole school to benefit from the focus and already had in place systems with tools and resources, such as teaching as inquiry embedded in appraisal.

The focus by less effective schools on short-term remedial responses to underachievement meant they had missed an opportunity to build capability.

Leaders and teachers clearly **explained a reason for the urgency** to improve outcomes for students below or well below National Standards, and were tactical in their resourcing to support these students. Reasons for this urgency varied. For example, some schools focused on:

- students for whom other supplementary supports had not worked

- students in their last year at the school — as they only had 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, or Māori or Pacific students — as they were under-represented in year groups at or above national standard expectations
- reading, writing or mathematics — as more students were underachieving in that area or the school had built capability in the area and were now focusing on acceleration.

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

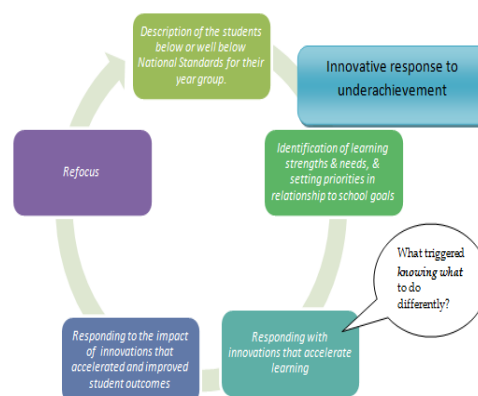
Leaders and teachers analysed student data in ways that matched the intended purpose. For annual plan targets and resourcing decisions, such as involvement in ALiM and ALL, school-wide National Standards achievement information was used to describe groups of students that needed to accelerate progress and the reasons for urgency. Assessment tool information, student interviews and surveys, and teacher discussions were used to identify students' strengths and needs and the design of curricula for classroom and supplementary support. Moment by moment next steps for both student and teacher came from close observation of reading, writing or mathematics behaviours and conferencing with students.

At all levels, the student information and school/teacher actions were formally recorded as part of the collaborative inquiry process.

The less effective schools had targets but because there was no rationale for each target there were competing demands for resources and the decisions often appeared ad hoc. Classroom teachers had not focused on the students being targeted so there was no close monitoring of progress. Leaders did not know whether students were achieving or not.

What triggered *knowing what to do differently*?

In the effective schools, the **classroom curriculum demands guided the supplementary support**. Teachers and students knew the supplementary support was to complement the classroom teaching and learning. In schools that had **strategically trialled a new approach** this was a new concept or at least was newly explained by the inquiry team. In comparison, the **strategic and successful** schools had applied this concept to many levels of the school.



The actual supplementary support varied, but supporting students to self assess, have a say in the learning activities, and develop academic language were common themes in the sample schools.

Students were encouraged to describe how they applied the learning strategies learnt in supplementary support to their classroom activities. In some schools the supplementary support occurred in the classroom and in others the students were withdrawn from class. In some schools the classroom teacher provided the supplementary support, and in other schools another teacher with expertise did. The key was the connection to the classroom curriculum.

Although the less effective schools were designing local curricula they did not have a strong understanding of the curricula's literacy and mathematical demands. These schools were not designing supplementary support that would help students accelerate progress and successfully engage with the curriculum demands expected of their peers.

Teachers' and leaders' **actions were guided by their moment-by-moment monitoring of student progress**. ALiM and ALL provided teachers with a planning template that guided their thinking about the impact of their teaching actions on individual student progress and the student's next step, and the teacher's next action. The following examples show some of the precise inquiry questions that teachers found particularly thought provoking and useful.

What can I do to strengthen conceptual understanding of mathematics within the context that is relevant to the student? How can I involve and empower parents so that they can continue the good work with their children?

(A high decile, large contributing school)

What is the 'different' that I am going to do? What new contexts can students practice and explore with their reading strategies and vocabulary? What teaching strategy will support particular student's learning?

(A mid decile, very large intermediate school)

How do I help students have conversations about maths?

(A high decile, medium sized, full primary school)

Students were active partners in designing their learning plans. Teachers talked with them about their progress and provided immediate and specific feedback. Many schools had developed student-centred reading, writing or 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. The teachers also sought feedback from students about what teacher actions worked for them. The outcomes of conversations were recorded as part of the collaborative inquiry.

Parents and whānau were well informed about their child's need to accelerate progress in reading, writing or mathematics. Schools explained what they were doing

to support student success and **formally invited parents and whānau to be part of the process**. This involvement often included workshops to develop home activities and frequent, regular three-way conferencing in which teachers emphasised progress and success. Many student groups used blogs, websites and newsletters to show their parents and whānau what they were doing.

ERO found that the teachers involved **knew that they were expected to critique the effectiveness of their practice and to make changes**. These teachers had a willingness to seek negative evidence (evidence of students not doing well), see the impact on all students, improve teaching, and be open to new practices that make a difference.

They were well supported by the school inquiry teams and external mentor/critical friends, and their learning mirrored students' learning. In the **strategic and successful** schools the inquiry team played a strong mentoring role. Conversely, the external mentor role was more influential in schools that had **strategically trialled a new approach**. This may have been because only one teacher with one group of students was involved in the latter group. The mentor/critical friend:

- provided professional readings
- discussed readings and implications to teacher's practice
- provided specific feedback about teacher's practice based on observations
- discussed the interpretation of assessment information.

Through the collaborative inquiry process teacher actions became more deliberate. Teachers learnt to:

- base decisions about what and how to teach on the detailed analysis of student information from classroom assessments, observations and discussions with students
- involve students in design, implementation and evaluation of learning activities
- involve parents and whānau in ways that promoted partnership and accelerated progress
- inquire more deeply into their teaching and continuously improve.

The following examples from effective schools illustrate changes in teacher practices and the way some of these changes now benefit more students and more teachers.

The teacher involved used a teaching as inquiry process to explore the impact of his actions and now teaches differently. He is even more focussed on deliberate acts of teaching which he now uses with his whole class.

(A high decile, large contributing school)

The intervention has enabled the teacher to critically reflect on her progress and affirm what works well and discontinue other activities. Now all teaching teams regularly invite students to discuss the impact of teachers' actions on their learning as part of teaching as inquiry.

(A high decile, large full primary school)

Benefits for teachers include a greater awareness of a range of effective practices, realising the importance of analysing assessment data in more depth, and a more focused approach becoming the norm for reading instruction.

(A mid decile, large full primary school)

Leaders are excited about the positive impact their involvement in ALL had for them and the teachers in the school. It has focused teachers on the use of assessment information to enable them to plan specifically and teach deliberately to lift achievement and accelerate rates of progress.

(A low decile, medium sized full primary school)

After working with this group of students, and through feedback on practice and the close monitoring of changes in student progress, teachers understood more about the strategies that made a difference to progress. They then used these teaching strategies in their classrooms.

(A mid decile, medium sized contributing school)

Many teachers significantly changed how they taught, as shown in the two examples below.

The class teacher read up on latest research and had access to a mathematics adviser for guidance. The teacher changed her approach to teaching place value (the area where most students had the gaps) by following the research. The teacher realised that she had not been teaching place value effectively. Students were now using place value to problem solve.

(A high decile, medium sized full primary school)

The senior leader used teaching as inquiry to revisit some long-held views about what successful mathematics teaching looks like. Some strategies were not as successful as others. This was a challenging process, but one she wants to share with her colleagues as a way of opening up discussions about developing responsive teaching and learning practices.

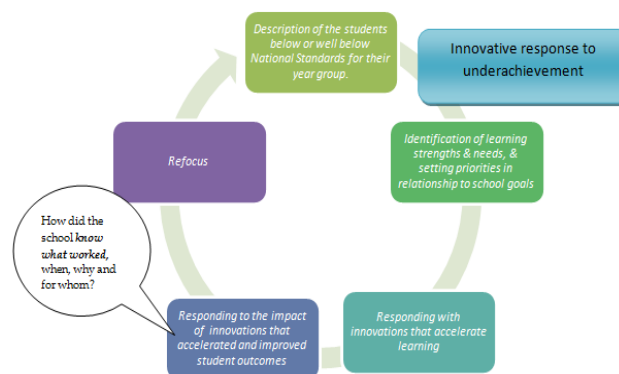
(A mid decile, large full primary school)

The difference between the two groups of schools was the breadth of this work and the impact on the number of teachers and students.

Schools that responded with more-of-the same did not have an improvement culture. They relied on supplementary practices to make a difference for students, and specialist teachers to know what to do. Leaders and teachers did not see that the supplementary support for students was an opportunity for teacher learning.

How did the school know what worked, when, why and for who?

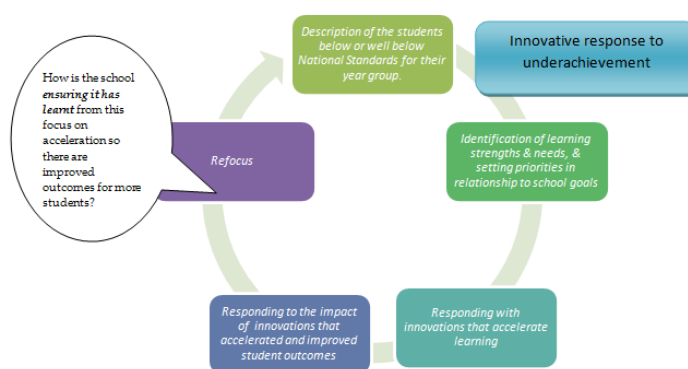
The **formal collaborative inquiry process** associated with the ALiM and ALL supported leaders and teachers to closely monitor progress and evaluate the impact of teacher actions. They understood what worked, when, why and for who. Teachers had continuously observed, talked with, assessed and surveyed students and their parents and whānau to understand both progress and the impact of their actions. At the same time the school inquiry team and external mentor observed, talked with, and videoed the teachers to build a picture of their practices. The inquiry teams identified issues, discussed possible reasons for any problem and created solutions.



How is the school ensuring they have learnt from this focus on acceleration so there are improved outcomes for more students?

After the intensive supplementary support, effective schools:

- changed the instruction for students whose achievement had not accelerated even though they were part of the focus group
- supported another group of students to accelerate progress
- supported other teachers in the school to trial successful aspects.



Ongoing monitoring of progress and achievement and formal collaborative inquiry underpinned the success of the refocus actions. These schools knew the importance of trying something else if acceleration did not occur.

Leaders of the effective schools had **embedded comprehensive systems with tools and resources** to sustain the gains and ensure understandings, expectations and practices were shared across the school. The focus reflected the depth and breadth of understanding about acceleration in each school.

Leaders and teachers of schools that had **strategically trialled an approach** were particularly focused on:

- teaching as inquiry
- teacher appraisal systems linked to student outcomes
- learning progressions rubrics (including rubrics associated with assessment tools)

- school-wide moderation
- registers to monitor progress of all students who had been or were underachieving
- high quality relationships with students, their parents and whānau.

Leaders of **strategic and successful** schools, while also focused on improving teaching as inquiry, were more focused on tools and resources for all teachers to:

- use improved teaching practices in other curriculum areas
- tailor all withdrawal programmes to suit particular students
- undertake close monitoring of student progress in the classroom over a short-term period. For example, every five weeks the teachers at one school monitored students who are, or who had been, underachieving and the leaders responded to the information every term.

Many leaders of schools that had **strategically trialled an approach** were too reliant on an invitational approach for teachers to learn from the trial. In comparison, leaders of **strategic and successful** schools expected all teachers to participate.

Success was shared with other teachers in a variety of ways, such as group discussions, modelling teacher strategies in classrooms, teacher observation and feedback. Key aspects shared included interpreting analysed achievement information, teaching strategies, learning activities, involving students in teaching decisions, and involving parents and whānau to support their child's learning.

Not all students accelerated progress and of those who did, not all were achieving at or above the expected National Standards. School leaders and Special Education Needs Coordinators (SENCOs) led the monitoring and designing of supplementary support in all the effective schools. In the **strategic and successful** schools, classroom teachers were also responsible for close monitoring and short-term teaching responses to student progress.

A few schools had requested funding from their boards to extend the initiative so they could support more students to succeed. In some cases this included funding for a specialist teacher.

Building capability in schools with less effective responses to underachievement

Schools aware of the need to focus on acceleration

This group of schools had a range of contexts with all deciles, sizes, and types of school represented. There were many medium decile, full primary and contributing, small or medium sized schools.

In nearly half of the schools Māori students made up more than 30 percent of the roll, and a third of the schools had rolls where more than 20 percent were Asian students.

What can be built on to facilitate acceleration?

Teachers and leaders in these schools were thinking about improving systems, practices and student outcomes. However, leaders had used the ALiM or ALL opportunity to only focus on a small group of students. Most had invested in educationally sound but one-off initiatives to accelerate student progress. Leaders and teachers did not know the long-term impact of these initiatives and could not build from any success. For more students and more teachers to benefit from such an initiative, teachers and leaders in these schools need support to:

- monitor student progress closely and respond quickly when required
- link short-term remedial responses to classroom practices in ways that improved students' long-term outcomes and teachers' capability
- evaluate and respond to any initiative in such a way that meant more students and teachers could benefit.

ERO found that leaders had not determined which aspects of ALiM or ALL could be transferred so more students could experience success. The use of self review did not include evaluating the impact of the initiatives, teaching programmes and school operations to accelerate progress. Some schools did not know whether the support had worked or why it had worked, as achievement information had not been interpreted and teaching practices had not been evaluated. Information needs to be **used for improvement**. In many schools the board was not provided with enough information to ensure that resources were effectively allocated to improve outcomes for students.

ERO reports contain information that could be used to determine Ministry support for individual schools. ERO's Education Review reports for the schools **aware of the need** had many recommendations for improvement. They often stated that schools should continue to undertake particular actions, but with a focus on accelerating progress for groups of students. The recommendations included actions to:

expand ways to ensure that all students benefit from effective teaching, and ensure that school-wide expectations for high-quality teaching are well understood.

(A high decile, large Years 7-15 secondary school)

identify the strategies that will have the greatest impact on lifting student achievement and that these strategies are consolidated across the school.

(A low decile, small full primary school)

develop their use of student achievement information by:

- *identifying more useful, improvement focused achievement targets in the annual charter that focus on specific cohorts who are underachieving*
- *tracking students' progress over their time at the school to show how their progress is being sustained*
- *identifying and transferring successful teaching strategies used in withdrawal programmes to become part of teaching and learning in the classroom.*

(A mid decile, small full primary school)

carefully evaluate and monitor teaching practice to improve the achievement of groups of students who are not making expected progress. These are particularly those students well below the expected National Standards.

(A mid decile, large full primary school)

The Ministry could use ERO's findings to differentiate the support provided to schools and to build on what is already working in each school.

What support is needed?

Developing a culture of inquiry and improvement to respond in a problem-solving way was critical to leaders and teachers knowing what worked to accelerate progress and to adjust practice accordingly.

Many leaders did not know how to improve teaching across the school. They had no long-term plans that included either preventative actions or improved teacher capability. Instead many short-term actions were taking place. Leaders need support to think strategically and design for both short- and long-term outcomes.

Leaders and teachers did not use achievement data well and, in particular, did not use it to identify the learning strengths and needs of students. Leaders had used achievement information to set school targets and identify which students would benefit from supplementary support. They had not supported teachers to use the information for teaching decisions.

Teachers were responding with more of the same when things did not work. Teachers could help students better if they undertook in-depth analyses of student achievement information. They need support to build knowledge about particular assessment tools and moderation processes.

Teachers in these particular schools had limited understanding of effective teaching practices and expected student progress. Many schools had not developed a shared understanding about either. They found it difficult to know what action to take in response to underachievement or evaluate the effectiveness of the actions. The two classroom-based examples below illustrate the importance of building shared understandings.

The school gathers some useful information about student performance. It is less focused on monitoring and reporting the progress students make or defining what a suitable rate of progress is for students who are underachieving.

The teachers do not know where students need to be in their achievement at certain points in the year so that these can be worked towards and steps taken early to provide extra help or change the teaching actions.

Class profiles include student needs but not how teachers will address these. This makes it difficult for teachers to evaluate their own effectiveness.

(A mid decile, medium sized contributing school)

Teacher inquiry is not sufficiently developed to provide effective evaluation about what makes the difference for students. Consequently teachers are not successfully identifying their own strategies that work and do not work, and so decisions are not

made to change or modify their teaching in response to the needs of priority learners. Identified students get more of the same as everyone else.

(A mid decile, medium sized contributing school)

The third example, from a school's ALiM or ALL initiative, shows the importance of an understanding of effective practice.

Limitations of the initiative emerged as teachers found it difficult to review or reflect on their practices. The feedback from observed practice asked teachers to consider the impact of teaching on learning, however it was difficult to gauge through ongoing planning how teachers had modified or reviewed their practice as a result.

Whether student progress had accelerated or not was different in each class. Teachers and senior leaders lacked the capability to evaluate the impact of what made the difference. This lack of ability to recognise what the contributors were to accelerating progress meant the leaders could not transfer what had worked across the school or use the contributors to inform curriculum change.

A shared understanding of best practice strategies and deliberate acts of teaching as a foundation for agreed teaching and learning would have made a difference to the success of the initiative. Observation could then align to the effective use of these strategies and provide a better basis for review.

(A mid decile, medium sized contributing school)

Teacher and leaders in the schools **aware of the need** to accelerate progress would benefit from professional learning and development (PLD) focused on building assessment capability, teacher practice, and an understanding of progress and acceleration.

Schools with little sense of urgency

While there was no one way to describe the context of the schools with **little sense of urgency**, the group was over-represented by one or more of the following characteristics:

- less than 100 Years 1 to 8 students
- some Years 9 to 13 students
- low proportion of Pacific students
- more than 30 percent Māori students
- low decile ratings
- major changes over the last three years. For example, three schools had new principals, one had new teachers and two had new students (because of local school closures).

What can be built on to facilitate acceleration?

ERO found that these schools were in the stage of 'beginning to' and this reflected their lack of urgency. For example, the principal was beginning to report achievement information to the board, leaders were beginning to support teachers' use of teaching as inquiry, teachers were beginning to use assessment information to guide teaching decision, and teachers were beginning to engage students in decisions about what and how they learn, and how they are progressing.

Leaders and teachers lacked the capability to:

- design and implement short-term remedial responses, based on evidence of what works, why and when, that strongly linked to students' classroom experiences
- evaluate and respond to any intervention in ways that more students and more teachers could benefit from.

In at least four of the schools principals recognised that teacher capability was low and achievement data and National Standards Overall Teacher Judgements (OTJs) were unreliable. Half the schools had pockets of expertise, such as the principal or SENCO, who could be supported to lead school-wide improvement.

What support is needed?

These schools were overwhelmed by underachievement. They needed to experience success. They would benefit from support to design specific school targets with clear rationale and responses that were:

- differentiated to reflect the continuum of support for particular groups of students and teachers
- evaluated to know what works, when and why and for which groups.

The lack of urgency was concerning. Some schools made excuses for high underachievement. For example, new school/leaders/teachers, or insufficient funding for teacher aides or particular programmes. School targets and response actions were very general as shown in the example from a school charter.

Targets: Year 7 learners achieving well below and below the National Standard will need to make at least a minimum of two years' progress in order to get them closer to reaching the National Standard.

Pasifika and Māori learners across both gender groups achieving well below and below the National Standard will need to make at least a minimum of two years' progress in order to get them closer to reaching the National Standard.

Staff annual aim: The staff, continues to build pedagogical content knowledge and 'best practice' teaching methods across the core curriculum areas. We continue to embrace and further develop culturally responsive theory and practices across the school to cater for all learners.

(A low decile, medium sized intermediate school)

These schools, although small in number, had many issues that needed to be addressed to improve outcomes for students. ERO identified a broad range of improvements as next steps, with a focus on developing school curriculum and school-wide expectations for effective teaching and learning. The ERO Education Review reports could be used to determine whether ALiM or ALL is the most appropriate Ministry initiative.

There was little coherence between leader expectations and teacher practices. Leaders had developed school targets, but teachers often did not know which students in their class were within the target group.

Leaders expected teachers to behave in particular ways but they did not make this clear to teachers. For example, leaders expected teachers to use assessment information with other student information to design tasks and differentiate practices that engaged students in learning. However, leaders had not linked these expectations to feedback systems such as classroom observations, teaching as inquiry or appraisal. Achievement information was used to group students at class or school level rather than to describe student strengths and needs or evaluate the effectiveness of responses. Teachers and leaders would benefit from support to develop systems with tools and resources that connected leaders' expectations with teachers' practices.

There was not a shared responsibility for improving outcomes for students. In these schools only individual people, such as SENCOs, Resource Teachers of Literacy, deputy principals and principals knew which students needed support and they decided what supplementary support to put in place. Leaders would benefit from understanding that a team approach for the analysis and interpretation of achievement data, and decisions about which students should have supplementary support helps connect expectations and actions.

Some schools had a locally designed curriculum (for example, an iwi-based one) but had not identified the reading, writing or mathematics knowledge and skills students needed to engage successfully with it. Help with developing an understanding of the schools curriculum's reading, writing and mathematics demands is crucial for the teachers and leaders. This would support the design and implementation of both the classroom programmes and the supplementary support.

Supplementary support did not complement classroom practices. For example, the teaching language used was not consistent and students were not expected to practise or use the strategies learnt in one context in the other. At the same time, teaching responses were not differentiated, as teachers had not linked the curriculum with an assessment of students' strengths and needs.

Most schools had implemented shallow one-dimensional supplementary support that focused on a very small aspect of reading, writing or mathematics. For example, a phonics programme was used to lift writing or a basic facts programme to lift mathematics. Leaders did not know whether particular programmes had supported students' engagement with the curriculum. The example below shows how an improvement in basic facts may not have led to improvement in mathematics.

School leaders had data showing accelerated progress for some students in basic facts. This was based on using one narrow assessment tool at two points in time. Students had learnt their basic facts by rote. School leaders did not monitor how students used their knowledge of basic facts in other aspects of their mathematics learning or other areas of the curriculum.

(A low decile, medium sized contributing school)

Two schools mentioned ALiM and ALL to ERO but were over-burdened and not able to sustain any gains or extend the learning for either students or teachers.

One teacher worked with nine students over a 10-week period. The school reported that the students' mathematical achievement moved from below to at, or from well

below to below National Standards. The school has not extended this trial. Many new foci have been introduced into the school in the past two years including teaching as inquiry, e-learning and National Standards reporting. Teachers have become overloaded and many good practices that were developing have fallen by the wayside in order to introduce the new.

(A mid decile, small full primary school)

The Years 4 to 8 classroom teacher was involved in the ALiM project during 2012. While she and the principal vouched for the benefits of the programme for accelerating student progress, achievement information has not been retained to verify this positive view and the school is not monitoring the ongoing progress of these students.

(A low decile, very small full primary school)

Conclusion

ERO's findings indicate that more than half the schools that had participated in ALiM and ALL between 2010 and early 2013, and had ERO reviews in Terms 2 and 3, 2013 were making a difference for students underachieving. Many of these schools had low underachievement. In particular, Māori and Pacific students, and English language learners who were underachieving were targeted for support and experienced success.

This investigation's findings were similar to those in ERO's report *Raising achievement in primary schools (June 2014)*, about the key features of a school's improvement plan and the role of leaders to design and implement a plan that enabled more students to achieve with less inequity across the school population. The plans need to build leadership, teaching, evaluative, relationship and curriculum capabilities as well as focus on short-term supplementary supports to accelerate progress for students. Both reports found that the foundation needed was:

- teacher knowledge of curriculum, expected progressions and acceleration
- leader knowledge of organisation change.

ERO found that the effective schools that had participated in ALiM and/or ALL had involved teachers in formal collaborative inquiry. These teachers expected to critique the effectiveness of their practice and make changes. Many were very humble about what they realised they had not known. The teachers and leaders of these schools understood that the reading, writing and mathematics demands of the classroom curriculum needed to guide the design and implementation of the supplementary support. Teachers were using information gained from closely monitoring students' learning to design and implement classroom and supplementary support instruction. One complemented the other.

The ALiM and ALL design features of a school-based inquiry team, external mentoring, and formal collaborative inquiry into short-term intensive supplementary support influenced the outcomes in effective schools. A key challenge for these schools is the transfer of learning so best practice from the trials is transferred to expected practice of all teachers.

ERO's findings highlight the challenge for leaders in less effective schools to develop an improvement culture that is deliberate and relentless in finding effective ways to respond to underachievement. Leaders need explicit support to understand that the ALiM and ALL initiatives are about changes to the school's short-term and long-term responses to underachievement, and that a formal collaborative inquiry into the trial would support these changes. They will also need support to design and implement improvement plans that build teacher and leader capability and help students accelerate progress, and systems that link leadership expectations with teacher practices.

Some schools were overwhelmed by their underachievement. Many of these schools were low decile. The initiative, ALiM or ALL, may not be the best Ministry response for these schools. Instead they could benefit from in-depth and long-term PLD that includes key features of ALiM and ALL that support intensive inquiries into progress and acceleration and the development of a long-term school improvement plan.

All schools can benefit from working with appropriate outside expertise. However, the expertise should respond to school strengths and needs. ERO recognises that ALiM and ALL providers are also the providers of Ministry PLD. A key challenge for these providers is the transfer of learning about accelerated progress from ALiM and ALL to all PLD. Appendix 3 describes the improvement shifts for each group of schools so more students and teachers can benefit from a focus on acceleration of progress. Any Ministry provided support needs to be aware of these needs.

Next steps

ERO recommends that the Ministry of Education:

- design the ALiM and ALL inquiry's refocus stage to reflect the urgency needed to:
 - change the instruction for students whose achievement had not accelerated even though they were part of the focus group
 - support another group of students to accelerate progress
 - support other teachers to trial successful aspects.
- support ALiM and ALL providers to ensure that at the outset of the focus on acceleration the school improvement plans include how leaders will transfer what they learn so more students benefit.
- review a school's initial response to ALiM or ALL when they apply for a second time to determine whether this initiative is the most appropriate support the Ministry can provide and to differentiate the response.

ERO recommends that ALiM and ALL providers:

- explore how to transfer the learning about accelerating progress to in-depth and long-term PLD so schools with very high underachievement and low capability would be better served.

ERO recommends that school leaders:

- design and implement improvement plans that include both short-term tactical responses and long-term preventative responses to underachievement
- ensure there is a shared understanding that an intensive inquiry into accelerating progress includes an expectation that all teachers will critique the effectiveness of their practice and make changes where necessary
- appoint an inquiry team with the mandate to lead the focus on reviewing progress and acceleration, and improving school practices
- ensure there is a shared understanding among teachers about expected progress and achievement by developing student profiles
- ensure students, and their parents and whānau are invited to participate in the design and evaluation of all supplementary supports.

ERO recommends that boards of trustees:

- seek detailed reports about student progress, acceleration and achievement
- seek frequent and regular information about transfer and sustainability of successful initiatives.

Appendix 1: Sample of schools

The type, location, rolls and decile range of the 93 schools involved in this evaluation are shown in Tables 1 to 4 below.

Table 1: School type

School type	Number of schools in sample	Percentage of schools in sample	National percentage of schools ⁶
Full primary (Years 1-8)	44	47	48
Contributing (Years 1-6)	35	38	34
Intermediate and middle schools (Years 7-10)	6	7	6
Composite (Years 1-10 and Years 1-15)	5	5	7
Secondary (Years 7-15)	3	3	5
Total	93	100	100

Table 2: Location of schools⁷

School location	Number of schools in sample	Percentage of schools in sample	National percentage of schools
Main urban (>30,000)	50	54	52
Secondary urban (10,000-30,000)	9	10	6
Minor urban (<10,000)	6	6	11
Rural	28	30	31
Total	93	100	100

⁶ 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.

⁷ Based on location categories used by the Ministry of Education and Statistics New Zealand.

Table 3: Roll size⁸

Roll size	Number of schools in sample	Percentage of schools in sample	National percentage of schools
Very small	4	4	9
Small	20	21	20
Medium	38	41	46
Large	21	23	17
Very large	10	11	8
Total	93	100	100

Table 4: School decile⁹

School decile	Number of schools in sample	Percentage of schools in sample	National percentage of schools
Low decile (1-3)	21	23	30
Mid decile (4-7)	43	46	38
High decile (8-10)	29	31	31
Total	93	100	100¹⁰

⁸ 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+).

⁹ 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.

¹⁰ Because of rounding this does not add up to 100.

Appendix 2: ALiM and ALL Student achievement information – analysis of the Public Achievement Information (PAI)

ERO analysed each group's 2012 achievement and improvement from 2011 to 2012 as reported by schools to the Ministry.¹¹ This information was sourced from the Ministry's and Fairfax's websites.¹² The percentage of Māori, Pacific and all students achieving at or above National Standards which each school reported was used for this analysis as it was the only data available for 2011.¹³

A number of caveats apply to this analysis. ERO was interested in how each school responded to the needs of individual students achieving below or well below National Standards so it investigated the effect of teacher and school actions on individual students. The Public Achievement Information (PAI) data was about a school picture, and not about individual student progress, therefore:

- an improved shift in a large school affects more students than one in a small school. For example, two percent in a school of 400 was eight students but in a school of 50 it was one student
- major changes in a school population, such as student transience or a year level at an intermediate, were not accounted for when comparing one year to the next.
- the shift in the percentage of students at or above National Standards in relation to the whole population meant shifts in some schools were more meaningful than in others. For example, a shift from 80 to 85 percent of students achieving National Standards was a 25 percent improvement, whereas a shift from 45 to 50 percent was a nine percent improvement in the proportion of students underachieving.

Due to how the achievement information was reported, schools with a high proportion of a particular ethnicity may have had other ethnicities' achievement data masked by either the school or the Ministry. For example, some schools reported all students' achievement was very similar to Māori or Pacific students' achievement. This made it seem outcomes are equitable, but in reality the small number of Pakēha and other students' achievement was masked. In other schools with small numbers of Māori or Pacific students, the achievement may have been masked so it was not known how well these students are achieving.

¹¹ 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 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. ERO was particularly interested in how each school responded to the needs of individual students achieving below or well below National Standards.

¹² The 2011 data was retrieved from <http://schoolreport.stuff.co.nz/2013/index.php>
The 2012 data was retrieved from www.educationcounts.govt.nz/find-school

¹³ Each school reported their 2011 data in different formats which was available as a PDF on the Ministry site. The Fairfax site had provided this data school by school as percentages.

There are also caveats around this data's reliability, as reported in Ward, J., & Thomas, G. (2013) *National Standards: School Sampling Monitoring and Evaluation Project, 2010-2012*. Wellington: Ministry of Education.

The proportion of schools that reported Māori or Pacific students' progress in 2012 decreased from the first group to the fourth. For example, 92 percent of schools in the first group, those that were **strategic and successful** in their actions, reported achievement for Māori students, whereas only 72 percent in the fourth group, schools with **little sense of urgency**, did so. Thirty-five percent of schools in the first group and 18 percent in the fourth group reported Pacific student achievement. This may not mean there are less Māori or Pacific students in the fourth group as each school may have a high proportion or number of Māori or Pacific students.

School-reported National Standards data was useful to explore as part of understanding each group's context, but no clear patterns of achievement and improvement were evident across the groups.

Overall the **strategic and successful** schools reported the highest achievement of the four groups, with the proportion of Māori students achieving at or above National Standards greater than the national picture for all students. Māori student achievement in mathematics and writing was very close to the national picture for all students. The proportion of Pacific students achieving at or above National Standards was lower than that in the groups of schools that had **strategically trialled a new approach** and were **aware of the need**. The six schools with 2011 and 2012 achievement information reported a 7.6 percent increase in the proportion of Pacific students achieving in mathematics.

The groups of schools that had **strategically trialled a new approach** and were **aware of the need** had very similar information for 2012 achievement and 2011 to 2012 improvement. Schools that had **strategically trialled a new approach** reported a greater proportion of all students, Māori and Pacific achieving at or above National Standards in mathematics and writing. They also reported the biggest improvement from 2011 to 2012 in mathematics achievement for all, Māori and Pacific students, and in writing for all and Māori students.

The schools **aware of the need** to accelerate progress reported a greater proportion of students achieving at or above National Standards in reading for all students and Pacific students, and in writing for Pacific students. They also reported the biggest improvement from 2011 to 2012 in reading for all students, Māori and Pacific students, and in writing for Pacific students.

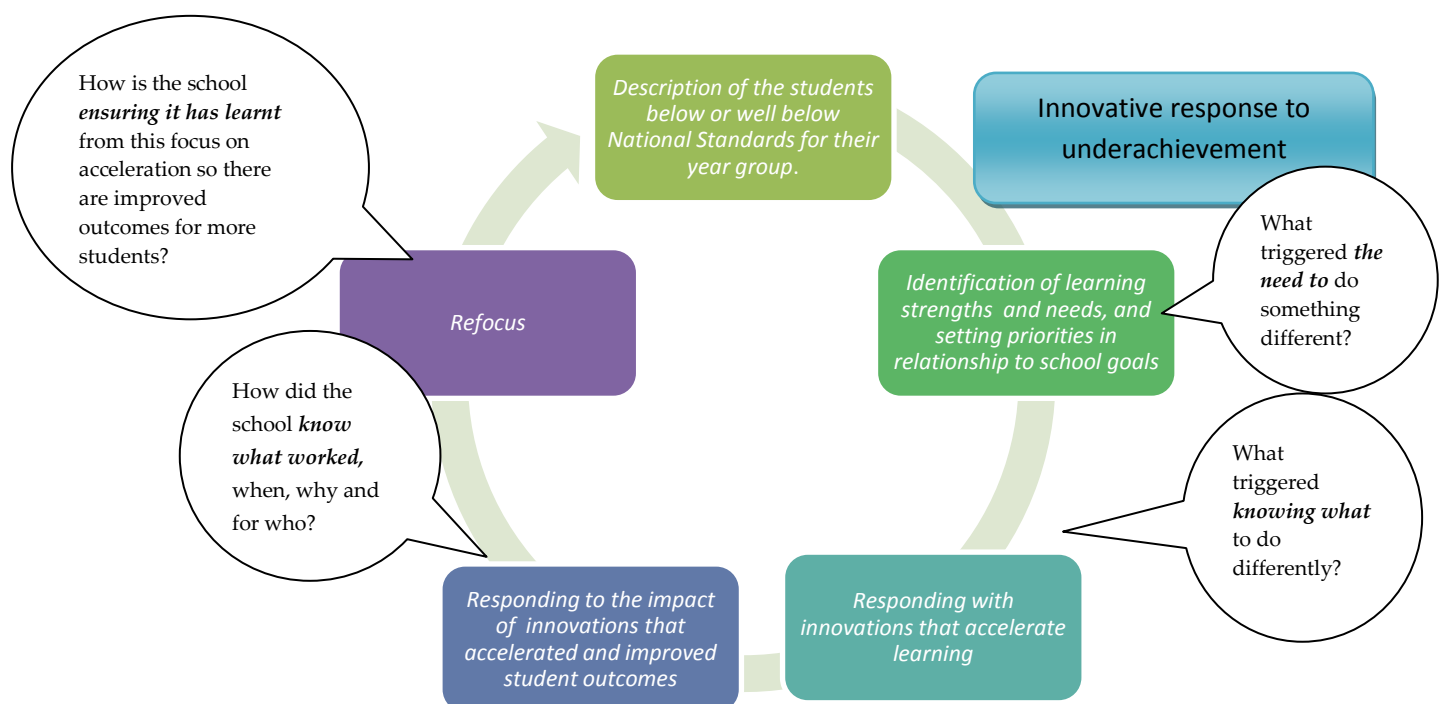
The schools with **little sense of urgency** had the most equitable results, as the percentage of Māori and Pacific students achieving at or above National Standards was the same as for all students. The percentage of students achieving at or above was the lowest of all four groups. There was some improvement from 2011 to 2012 in reading and mathematics for all students for the six schools with PAI for both years.

Appendix 3: Improvements that focus on acceleration

The evaluation framework in Figure 4 reflected schools' capability to respond to underachievement and accelerate progress.

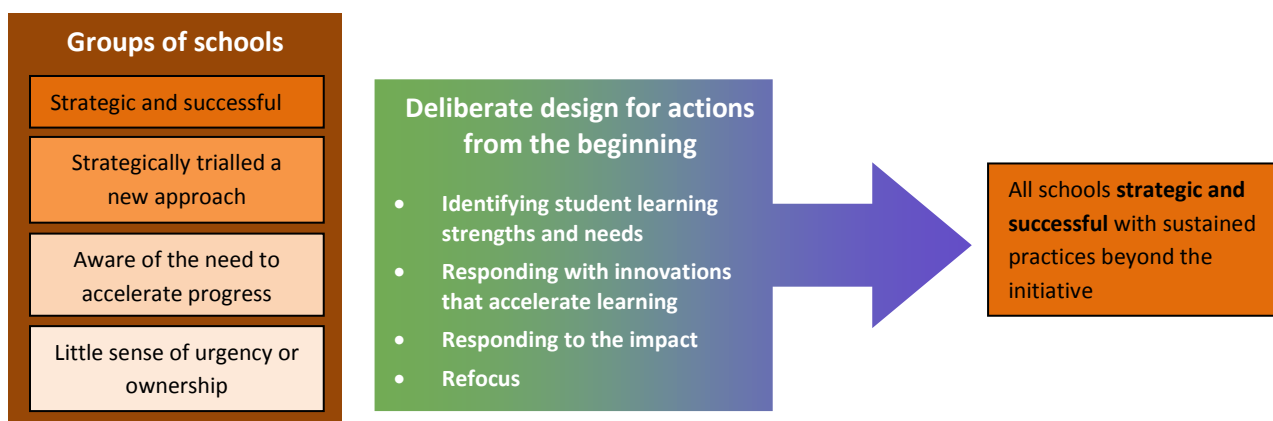
- The **strategic and successful schools** had the capability, plans and systems in place to know which students needed supplementary support, how to accelerate progress for them, whether the actions were effective or not, and how to learn from the experience. Leaders and teachers were trialling and evaluating a range of actions at classroom and school levels.
- The leaders of schools that had **strategically trialled a new approach** knew which students needed supplementary support, how to accelerate progress for particular individual students, and whether the actions were effective or not. They were now implementing systems to ensure all teachers and leaders learnt from the acceleration focus.
- Schools that were **aware of the need to raise achievement** knew what might support some students, but did not know what worked or plan to use any successes to improve school capability.
- The schools with **little urgency** did not have a trigger to do something different.

Figure 4: A framework for an innovative response to underachievement



This is a slow walk to system improvement. All schools need to be **strategic and successful**, and **strategic and successful** schools need to continue evaluating and innovating beyond the ALiM or ALL initiative, i.e. doing something different when actions do not have the desired impact. Schools do not need to approach the framework for an innovative response to underachievement step by step. Instead they need to be supported to design improvement plans that deliberately design for all actions and build all four capabilities (as described in the main report) from the outset (as shown in Figure 5).

Figure 5: An urgency in improvement plans



Six key effective practices were identified in the main report:

- Clearly explained reasons for the urgency to improve outcomes of targeted groups of students.
- Deep understanding of expected progression, acceleration and curriculum used to develop responses.
- Improvement plans developed with short-term tactical response to student achievement along with longer-term strategic responses to build teacher and leader capability.
- Students and their parents and whānau involved in designing and implementing the plan to accelerate progress.
- Student achievement information used actively and relentlessly in decisions.
- Comprehensive systems with tools and resources embedded to sustain the gains made and ensure more teachers and leaders benefit from the focus.

A further three are from this evaluation of ALiM and ALL schools:

- Classroom curriculum demands guide the supplementary support.
- Formal collaborative inquiry.
- Teachers understand the expectation to critique the effectiveness of their practices and to make changes.

Table 2 describes the improvements needed for each group of schools based on the analysis of their response to underachievement.

Table 2: Improvements that focus on acceleration

	Identifying needs	Responding to strengths and needs	Responding to the impact	Refocus
Strategic and successful schools	Clearly explain reasons for the urgency to improve outcomes for targeted groups of students.	<p>Deepen understanding of expected progression, acceleration and curriculum used to develop the responses.</p> <p>Develop improvement plans with short-term tactical responses to student achievement along with longer-term strategic responses to build teacher and leader capability.</p> <p>Involve students and their parents and whānau involved in designing and implementing the plan to accelerate progress.</p> <p>Use classroom curriculum demands to guide the supplementary support.</p>	<p>Undertake formal collaborative inquiry.</p> <p>Use student achievement information actively and relentlessly in decisions.</p> <p>Extend teachers understanding of the expectation to critique the effectiveness of their practices and to make changes.</p>	<p>Embed comprehensive systems with tools and resources to:</p> <ul style="list-style-type: none"> sustain the gains made ensure more students and teachers benefit from the focus on acceleration.
Schools that strategically trialled a new approach	<p>Clearly explain reasons for the urgency to improve outcomes for targeted groups of students (rather than just one group).</p> <p>This means:</p> <ul style="list-style-type: none"> boards have specific information about why particular groups of students need support more students, their parents and whānau know that the teachers and leaders are supporting students to succeed. 	<p>Extend the reach to more students and teachers.</p> <p>In particular, this means teachers and leaders build education teams that include all students, their parents and whānau, and boards.</p>	<p>Monitor the impact.</p> <p>This means:</p> <ul style="list-style-type: none"> close-monitoring and short-term responses in the classroom by all teachers a focus on the students who have had support and the unintended consequences on them or on other students. 	<p>Differentiate support to teachers.</p> <p>This means leaders:</p> <ul style="list-style-type: none"> understand individual teacher's capability to accelerate progress develop teams that build on individual strengths to develop a shared understanding of effective practices i.e. build social capability work with teams to trial a range of tools and resources to build capability.

	Identifying needs	Responding to strengths and needs	Responding to the impact	Refocus
Schools aware of the need to raise achievement	<p>Clearly explain links between short-term tactical responses and longer-term strategic responses. This means leaders:</p> <ul style="list-style-type: none"> • think strategically • appoint strategically • confidently analyse and interpret a range of information • understand acceleration • guide teachers towards agreed best practice • champion urgency. 	<p>Identify what works and extend the reach to more students and more teachers. This means teachers and leaders work as teams to understand and apply:</p> <ul style="list-style-type: none"> • expected reading, writing and mathematics progressions • agreed ways to build reading, writing and mathematical capabilities through rich curriculum experiences in both the classroom and supplementary programmes • effective partnerships with students, their parents and whānau. 	<p>Monitor and respond to progress. This means leaders:</p> <ul style="list-style-type: none"> • monitor closely and develop nimble short-term responses to underachievement • understand long-term patterns and trends • look for unintended consequences. 	<p>Evaluate for improvement. This means teachers and leaders:</p> <ul style="list-style-type: none"> • focus on students needing to accelerate progress • apply the principles of assessment for learning and evaluation for improvement to their practices • plan for doing something different if the outcomes are not as good as they need to be • design and refine teaching as inquiry tools that support and formalise the focus on improvement.
Schools with little urgency	<p>Undertake a trial that involves explaining - the urgency to improve outcomes for a group of students; the actions to accelerate progress; the ways everyone will help; and sharing process and outcomes. This means leaders and teachers:</p> <ul style="list-style-type: none"> • identify and describe the learning needs of a group of students that urgently need support • agree on actions (including the appointment of a capable teacher who is well resourced to lead the trial) • agree on formal monitoring and reporting processes • learn quickly from any failure and apply any success elsewhere in the school. 	<p>Design and implement high quality supplementary support either within or outside the classroom that is closely linked to a high quality classroom programme This means teachers and leaders work as teams to understand and apply:</p> <ul style="list-style-type: none"> • expected reading, writing and mathematics progressions • agreed ways to build reading, writing and mathematical capabilities through rich curriculum experiences • strategies to accelerate progress for students who need to 'catch up' to peers • assessment for learning. 	<p>Develop urgency in actions to improve outcomes for more students This means leaders develop:</p> <ul style="list-style-type: none"> • a culture with shared ownership and urgency for improving student achievement • a long-term plan with a tight focus on improvement • professional networks within the school • educational partnerships with students, parents and board. 	<p>Provide coherence between school-wide and individual classroom practices. This means teachers and leaders:</p> <ul style="list-style-type: none"> • understand and apply principles of assessment for learning and evaluation for improvement at both class and school levels • design and refine teaching as inquiry tools that support and formalise the focus on improvement • design and refine school self-review processes that link the strategic plan to teacher actions.