



How our education system is performing for literacy: Progress and achievement of New **Zealand learners in English medium settings**

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Introduction

Literacy has traditionally been thought of as reading and writing. Although these are essential components of literacy, today our understanding of literacy encompasses much more. Literacy refers to the ability to read, write, speak, listen, view, and present in a way that lets us communicate effectively and make sense of the world.

Having strong literacy knowledge, skills and capabilities is key to ensuring our learners have the access to all learning areas in the curriculum and a lifelong development after school years.

This paper has been developed to provide an overview of the latest key findings about achievement, progress, and teaching practices for literacy, across a range of large-scale data sources. These findings give us a broad picture of how our education system is performing for literacy learning, in English-medium early learning and schools. It also brings together information about the common practices New Zealand teachers use in teaching literacy skills.

Data sources

This paper is built upon findings from a range of national studies of student achievement, including:

- Growing Up in New Zealand (GUINZ) longitudinal study at age 4.5
- National Monitoring Study of Student Achievement (NMSSA), conducted with Year 4 and Year 8 students, their teachers, and their schools
- The electronic assessment tool for teaching and learning (e-asTTle), developed primarily for learners in Years 5 to 10
- Data from the National Certificate of Educational Achievement (NCEA), for secondary students
- Reviews conducted by the Education Review Office on literacy and assessment

It also includes the following international studies to give us a view of how our learners perform compared to their peers in other countries:

- The Progress in International Reading Literacy Study (PIRLS), conducted with Year 5 students, their teachers, and their schools
- **Programme for International Student Assessment (PISA)**, conducted with 15-year-old students.

References for the research used can be found at the end of this paper.

Scope and limitations

This is not a full and extensive review of everything we might know about progress and achievement in Aotearoa New Zealand, as it was intended to give a broad picture of literacy learning. There was also limited data and research available for literacy achievement in early learning and about learners with learning support needs. Literacy across the curriculum and learning subject-specific ways of presenting and speaking as well as subject-specific language are also not included in this paper.

Evidence shows that doing well in reading is linked with children's view of themselves as learners, their beliefs and values, and their abilities to regulate their own behaviours. As children progress through schooling, these personal attributes come to be very important. We have touched on this in the paper but haven't gone deeply into the detail of this important area of influence.

While data on differences across population groups has been included, it is important to note that much of the evidence represents associations and does not imply causations. The relationships between classroom, or early learning or family / whānau practices with learning and achievement

are associations (correlations) and not necessarily causal. Further research is currently underway to explore the role of wider social context in students' academic outcomes.

For this paper, we have focused primarily on information about two interconnected aspects of literacy. As defined in the New Zealand Curriculum, these two strands encompass the oral, written, and visual forms of the language. The two aspects are:

- making meaning of ideas or information they receive (Listening, Reading, and Viewing);
 and
- creating meaning for themselves or others (Speaking, Writing, and Presenting)

Further research is needed to develop a better understanding of other aspects of literacy learning, including the development of digital literacy skills.

Recommended reading

This paper looks at the high-level messages in a range of research. For further details, we recommend reading the source material.

In addition to the references in this paper, the *Literacy Landscape in Aotearoa New Zealand* by Prof Stuart McNaughton, Chief Science Advisor to the Ministry of Education, considers evidence of what works to lift progress and achievement for learners in early learning and schooling. It provides supplementary evidence for how best to improve children and young persons' literacy development in Aotearoa New Zealand.

A copy of the full Literacy Landscape report can be found here:

https://cpb-ap-se2.wpmucdn.com/blogs.auckland.ac.nz/dist/f/688/files/2020/01/The-Literacy-Landscape-in-Aotearoa-New-Zealand-Full-report-final.pdf

Summary of findings

Overall

Looking across several data sources, we can see that many New Zealand students are performing well against national and international benchmarks of literacy achievement. Many students are also making good progress at an expected pace throughout year levels.

At the same time, however, we also saw a wide variation in both achievement and progress within year levels, across sub-populations, and across aspects of literacy. This variation in achievement is broader than many other comparable countries. We have also seen some significant decreases in average achievement over recent years. Although many of our learners are progressing at a similar rate on average, it is of concern that learners who start at a lower point often do not catch up, and some learners make very little progress in a year.

Many students liked reading and many were confident in their reading and writing abilities. However, there were a significant portion of readers who were not confident and did not enjoy reading and did not do well in reading. Evidence tells us that not all learners are getting sufficient opportunities to learn and improve their literacy skills. This is particularly the case for many of our Māori and Pacific learners who experience lower expectations than other learners, and therefore their opportunities to learn are often less.

Across the education sector, teachers reflected regularly about their practice, and accessed relevant PLD and resources to support their teaching practice. Most teachers feel confident using a variety of assessment strategies, particularly experienced teachers. However, the methods and strategies used by teachers in lessons varied greatly across New Zealand classrooms.

Achievement and progress

- New Zealand performs relatively well on international measures of reading literacy, but there is a wide range of achievement on aspects of literacy among learners before schooling and in both primary and secondary schooling. Depending on the aspect of literacy learning (writing, reading, listening, or viewing), estimates put the disparities as wide as 4 years of schooling.
- This variation is evident across sub-populations. Proportionately more girls than boys do well in aspects of literacy that is, they perform at or above expectations for their year level. More learners from economically advantaged backgrounds, and more learners attending schools with higher concentrations of those economically advantaged learners do well in aspects of literacy. Proportionately more Asian and Pākehā European learners (proportionately more of whom attend higher socio-economic schools) do well in aspects of literacy.
- Rates of progress appear similar across all subpopulations on average and differences in achievement appear to be due to different starting points. At a system-level therefore, those who start behind for literacy learning, or who fall behind early, often do not catch up.
- The opportunities to learn vary for different learners and research shows that many Māori and Pacific learners experience lower expectations for outcomes than other learners, and therefore their opportunities to learn are often less.
- In recent years we have seen declines in average reading literacy achievement in international studies at both the primary and secondary level. At the same time, we have seen increases in the proportions of learners achieving NCEA qualifications. However, despite the increase in NCEA attainment, many learners still lack the opportunity to learn and this is cause for concern.

• We don't have much data about learners with learning support needs. We could infer from the international studies that there is still unmet need that needs addressing.

Student confidence and interest

- Many children in New Zealand enjoy reading, but they were much less confident about themselves as readers compared with their international counterparts. As they grow older, they become less positive and less confident about reading. Many felt more confident in some tasks than others. Since 2009, fewer 15-year-olds enjoy reading and a large proportion of them do not read for fun.
- More girls felt positive and confident in their reading and writing abilities than boys, but there
 was no consistent pattern when confidence in and liking of reading were examined for each
 ethnic grouping. More students from higher social-economic backgrounds enjoyed reading than
 those from lower social-economic homes. Year 4 and Year 8 students with special education
 needs felt less confident in their writing abilities, than those with no special education needs
- Those who were less positive and less confident also had lower achievement. But achievement appears to be more closely linked to students' confidence than their attitudes.
- Students' confidence in reading increased significantly as the frequency with which they read for fun increased and when they had access to more books at home.

Teaching Practices

The early years

- Home environment plays an important role in a child's literacy development. While PIRLS
 found that most parents in New Zealand frequently engaged in practices that promote
 children's literacy development at home, the kinds of activities and frequency of those practices
 differed by the child's ethnicity and level of socioeconomic deprivation.
- Variation was found in the level of understanding regarding early literacy practice across the
 early childhood sector. ERO found that most early learning centres have at least some focus
 on supporting the development of oral language. However, there is room for improvement
 including review of internal practice and assessment for learning.
- Many services did not cater for the diversity of learners in their literacy programmes in any way and where they did, it was mostly by age and ability rather than gender or ethnicity. Many were not capitalising on the home languages of learners, building strong relationships with parents and whānau or taking deliberate actions to help maintain home languages.

Primary school - Years 1 to 3

- Many schools used inexperienced teachers to teach in junior classrooms. ERO reported that
 just over two-thirds of schools had good or high-quality reading instruction, while just under
 two-thirds of schools had good or high-quality writing instruction. Two-thirds of schools had at
 least some focus on supporting oral language development, but this tended to be stronger in
 Year 1 than in Years 2 and 3.
- Effective instruction requires effective assessment. ERO found that nearly one third of schools
 were using reading assessments ineffectively or not at all and fewer schools were effectively
 using writing assessments to improve teaching and learning.
- Providing books for children to read over summer holidays can reduce reading learning loss.

Primary School - Years 4 to 8

- Many children were found to be lacking a literacy-rich environment at home and one in five Year 8 students say they spend very little time reading in their own time. This was particularly true for boys, ākonga Māori, and students with special education needs.
- New Zealand teachers of Year 5 students were using similar practices teaching reading to teachers in other countries but there were some significant differences:
 - they were more likely to teach reading to children in same ability groups and less likely to use whole class teaching;
 - they were more likely to explicitly teach decoding strategies than they were to teach new vocabulary and those frequently learning decoding skills had lower achievement;
 - they were more likely to ask their students to read silently on their own and much less likely to ask their students to read aloud;
 - they were mostly using short stories and were less likely to use longer fiction books than other English-language countries;
 - they assessed less frequently but gave individualised feedback more frequently than other countries.
- Teaching children to summarise main ideas and how to skim or scan were common activities in New Zealand and other English-speaking countries. Almost all students in English-language countries were asked to practice their text-based comprehension skills at least weekly.
- Where teachers had a higher emphasis on academic success, students tended to do better at reading comprehension. However, spending more time in reading instruction didn't necessarily equate to higher reading achievement. Students were given more reading activities than writing activities. Teachers also reported feeling more confident about teaching reading than writing or viewing.
- Teachers were positive about using digital technologies and used them often. But digital technology was used a lot for searching for information and frequent use of digital devices did not equate to higher achievement.

Secondary school, particularly Years 9 to 11

- As children become young people, they report less engagement and are absent from school more. Fewer 15-year-olds enjoy reading or read for enjoyment than used to. Many were not aware of effective strategies for understanding, remembering and summarising texts
- Most New Zealand 15-year-olds reported their English teacher was enthusiastic and supportive and these experiences were associated with higher reading achievement. However, students who were economically disadvantaged were less likely to experience their teachers as enthusiastic and supportive. Many 15-year-olds observed that their teachers regularly adapted lessons to meet the needs of learners, but fewer Māori or disadvantaged learners reported this. Just over half of 15-year-olds were assigned long texts to read and they tended to have higher reading performance than those assigned shorter texts.
- Few schools were found to be highly effective in both gathering and using achievement information to promote success in literacy particularly at the transition into Year 9. While more than half of 15-year-olds reported receiving frequent feedback in their English classes, boys and Pacific students reported higher levels of feedback than girls and non-Pacific students.

Te Whāriki and the New Zealand Curriculum

Te Whāriki is organised around the five strands of wellbeing, belonging, contribution, communication, and exploration. The relevant strand for early literacy skills is *communication* where they are expected to (among other things):

- develop verbal communication skills, both understanding oral language and using it for a range of purposes; and
- experience stories and symbols of their own and other cultures and thereby being able to recognise print symbols and concepts and use them with enjoyment, meaning, and purpose.

The English learning area of the New Zealand Curriculum is structured around two interconnected strands, each encompassing the oral, written, and visual forms of the language. The strands differentiate between the modes in which students are primarily:

- making meaning of ideas or information they receive (Listening, Reading, and Viewing); and
- creating meaning for themselves or others (Speaking, Writing, and Presenting).

Progress and Achievement

Early learning

The 4.5-year-olds in GUiNZ study were, on average, making good progress in developing their early literacy skills

The Growing Up in New Zealand (GUiNZ) assessed literacy skills of 4.5 year-olds using tools that measure letter naming speed and the ability to write their name in a recognisable way. ¹ Letter knowledge and naming speed, are simple early predictors of progress in literacy over the first one to two years at school. The ability to write words is a more complex measure of early literacy. It also predicts progress in reading and writing after entry to school. Lower assessment scores provide tentative indications of possible difficulties, or of potentially lower than expected progress and achievement following the transition to school.

When assessed for letter naming speed (how many randomly arranged capital and lower-case letters could be named in one minute), the large majority of children performed at a level indicating they were well on the way to being ready for school. Within this group of children that had developed literacy ready for school were both girls and boys, children from all ethnic groups and children from all levels of socio-economic deprivation. Children correctly named 8.4 letters on average but there was large variation with some children not being able to name any letters of the alphabet while others rapidly identified many letters.

More than half of the children (57%) could write their name in a recognisable way. However, this means that nearly half of the children (43%) were not able to write their name, suggesting some may make slow progress in learning to write at school. Differences in levels on entry to school in more complex measures, such as writing, tend to remain.

But there were differences across gender, ethnicity, and level of socio-economic deprivation²

Thirty-one percent of children could name no letters, indicating possible later difficulty, and this was unevenly distributed. The authors of the letter naming speed test suggest that there is no particular expected benchmark for this test but students in the lowest 20 percent should be considered at risk for poor outcomes. Of those students in this risk group there were:

- more boys (22%) than girls (16%);
- more children who identified as Māori (33%) or Pacific Island (37%) than Pākehā European (14%) or Asian (10%) children; and
- more children from homes with the high levels of deprivation (30%) than children from economically well-off homes (i.e. with the lowest level of socio-economic deprivation - 11%).³

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¹ Note that GUiNZ as a study repeatedly visited the mothers since before the birth of their child. Although light touch, it is likely to make the mothers more alert to their child's developmental needs (an intervention of sorts), so findings are likely to be slightly more positive than might be found in the population.

² Note that proportionately more Māori and Pacific learners in this study come from low socio-economic homes.

³ Note that the original analysis quotes odds ratios. For the OR values refer to the original source: https://www.educationcounts.govt.nz/__data/assets/pdf_file/0011/195185/He-Whakaaro-What-developmental-resources-do-our-pre-schoolers-have.pdf

And there were similar differences for writing ability. Of those who could clearly write their name, there were:

- more girls (68%) than boys (41%);
- more Asian children (68%) and Pākehā European children (63%) than Māori children (39%) or Pacific Island children (41%); and
- more children from economically well-off homes (i.e. with the lowest level of socio-economic deprivation 68%) than children from homes with the high levels of deprivation (41%).

About two thirds of mothers in GUiNZ believed their children had the pre-reading and writing skills necessary to start school.

The percentage of mothers who were worried (38%) that their children did not have the literacy skills necessary to start school is similar to the percentage of children judged as possibly still at early stages of literacy learning. Mothers of Māori and Pacific Islands children and mothers from homes with the high levels of deprivation, rated their children as less well prepared in literacy than other mothers rated their children.

This finding is similar to that of the Progress in International Reading Literacy Study (PIRLS) where around one-third of parents (31%) said their child could only do some of the early literacy tasks when they began school.⁴

⁴ This measure summarises parents responses to a question about how well their child could do a series of literacy activities when they began school: see http://timssandpirls.bc.edu/pirls2016/international-results/pirls/home-environment-support/could-do-literacy-tasks/

Primary School

Overall New Zealand learners in Year 5 generally perform around the middle in reading when compared to their peers in other countries

In the 2016 edition of the IEA's Progress in International Reading Literacy Study (PIRLS), on average, New Zealand learners performed around the middle when compared to the 49 other countries and 11 jurisdictions that participated. The mean reading score for New Zealand was 523, which is significantly⁵ higher than the PIRLS scale centre point of 500, but significantly lower than 29 other countries.

A reasonable percentage of New Zealand children (41%) also reached the High Benchmark in PIRLS, meaning they demonstrated an ability to engage with increasingly complex texts and questions. However, this proportion was lower than the international median and most English-speaking countries.

New Zealand has a wider variation in achievement than many other comparable countries

Compared to most other English-language countries,⁶ New Zealand had a very wide distribution of scores in PIRLS (over 300 points) which reflects the large range of abilities demonstrated by the children who participated. While one in ten New Zealand children (11%) demonstrated very strong reading comprehension skills, achieving at or above the Advanced International Benchmark, one in ten children did not reach the low benchmark (10%) which means they generally had difficulty with locating and reproducing explicitly-stated information and making straightforward inferences even when reading the simpler reading passages.

And New Zealand's overall reading performance for Year 5 dipped in 2015

New Zealand's mean reading score in PIRLS was stable from 2001 to 2010 but dropped a significant 8 points (from 531 to 523) from 2010 to 2015. New Zealand's relative ranking among countries has also dropped since 2001.⁷

The reduction in the average reading score for New Zealand was due to a decrease in performance across the board, with the whole distribution shifting. That is, on average, both the bottom 25 percent of students scored lower than previously and the 25 percent of highest performing students also scored lower, along with a downward shift in the centre of the distribution.

The proportion of learners meeting curriculum expectations for literacy declines as they move through year levels in primary school in New Zealand

In the second cycle of the National Monitoring Study of Student Achievement (NMSSA) most Year 4 students (76% and 78% respectively) are meeting curriculum expectations for listening and viewing. By year 8, the proportion of learners meeting curriculum expectations for listening and viewing was smaller (see Table 1 below). Compared with listening and viewing, the findings for reading, speaking and writing were not as positive at the Year 4 level. While the decrease for

⁵ Whenever we say 'significant' this refers to statistical significance.

⁶ The countries where either all or the majority of students assessed in PIRLS are taught entirely or mostly in the medium of English, or receive most of their instruction in English. Some children in the 10 countries learn in another language. There were also Arabic-speaking countries that assess in English but they weren't included in this particular analysis.

⁷ When compared with the other 18 countries who have participated in every cycle of PIRLS, from being around the middle in 2001 (below 10 and above 8) it has dropped to being significantly below 15 countries. This puts it in the group of 4 countries performing significantly below the average for these 18 countries. Much of the change in ranking in early years was other countries improving while New Zealand remained stable.

reading was not as large as for speaking and writing, by Year 8, the majority of learners were not meeting expectations for speaking or writing.

A large proportion of learners (approximately 40%) failed to meet curriculum expectations for reading at both Year 4 and Year 8 and nearly two-thirds did not meet expectations in writing at Year 8.

Table 1: Percentage of students meeting curriculum expectations for aspects of English assessed by NMSSA, by year level

NMSSA English learning area	Year 4 (% of students meeting curriculum Level 2)	Year 8 (% of students meeting curriculum Level 4)	Percentage change
Writing	63	35	-28
Speaking	56	40	-16
Reading	63	56	-7
Listening	76	65	-11
Viewing	78	65	-13

An analysis of e-asTTle data from 2011 to 2016 (covering learners from Year 4 to Year 10) found a similar pattern of decline in proportions meeting curriculum expectation to that found in NMSSA for both reading and writing.8 The median reading achievement for students in Year 4 to Year 7 met curriculum expectations but declined below curriculum expectations for Year 8 to Year 10. Median achievement in writing was below curriculum expectations for students for all the years from Year 4 to Year 10.

These trends suggest that not enough progress is made between Year 4 and Year 8 to meet the demands of the curriculum by the end of Year 8. Analysis also indicates that even when some learners make the expected level of progress against the curriculum, they still fail to meet curriculum expectations for their year level, due to having started already behind. These students would need to progress faster than the pace of the curriculum to catch up.

And there are wide variations of achievement against the curriculum within year levels

Data from e-asTTle across school to Year 10 indicates that the overall achievement scores in reading and writing differ widely for students at the same year level and this starts right at Year 1.9 This variation could be as much as two curriculum levels for reading, or four years of learning, between children at the same year level. The spread of achievement is wider for writing than for reading, with some learners in Year 8 still at curriculum level 2 and others achieving at curriculum level 5.

⁸ Note that the main purpose of the tool is to support teachers in their teaching. It is not used evenly across different types of schools and it is used for different purposes throughout the year. The analysis only used subsets of the full data to ensure that it reflected achievement across the year. In addition, adjustments for bias in the data were made when computing national estimates of achievement or progress, particularly for Years 9 and 10 students.

⁹ Some e-asTTle assessments only start at Year 4 but there is some data available from Year 1.

Average levels of achievement for reading and writing vary across sub-populations of learners

Socio-economic factors and gender are strongly associated with achievement in literacy. While a student's socio-economic status does not predetermine their performance in literacy, evidence has shown a clear positive relationship between average achievement at primary school and socio-economic status, either of the learner or their school (for example analyses based on school decile).

On average, learners from higher socio-economic backgrounds perform better than those from lower socio-economic backgrounds

An analysis by socio-economic levels of the students in PIRLS, (using home resources as a proxy), showed a large difference in reading achievement between those from higher socio-economic backgrounds and those from lower socio-economic backgrounds (78 points between the top 25% and the bottom 25%).

On average, learners who attend higher socio-economic schools perform better than those who attend lower socio-economic schools

The difference in average NMSSA scores between students attending decile 1, 2 or 3 schools and those attending decile 8, 9 or 10 schools is equivalent to the average amount of progress measured over about two years of schooling. The differences are bigger for listening (four years difference at Year 8) than viewing, reading, or writing, with writing having the smallest differences (roughly equivalent to one and one-and-a-half years of progress at Years 4 and 8 respectively).

The e-asTTle data shows a similar pattern, with the difference in average achievement between students in the low decile group and those in the high decile group being on average half a curriculum level, or 1 year of schooling in reading and writing.

Other countries use different measures for socio-economic status of schools than New Zealand. So, to be comparable, the IEA created a measure based on questions to principals. PIRLS showed large differences in literacy achievement by the socio-economic level of the school that learners attended (67 points – 3 times the difference between boys and girls; see below). This gap was larger in New Zealand than for most other countries in PIRLS (the international average difference was 43 points).

Socio-economic disadvantages impact more Māori and Pacific learners

The differences between broad ethnic groupings have been demonstrated to be highly related to socio-economic circumstances, but do not explain all the differences. That is when comparing for example, Māori learners with non-Māori learners, some of the difference can be attributed to socio-economic status. For example, the NMSSA, PIRLS, and PAT data show that average achievement in reading and writing is higher for Pākehā European and Asian students than for Māori or Pacific students. However, Māori and Pacific students, as a group, are more likely than other students to attend mid and lower-decile schools. In 2019 73 percent of students in deciles 1, 2 or 3 primary schools were Māori or Pacific while only 15 percent of students in decile 8, 9 and 10 primary schools where Māori or Pacific. We also know that some Māori and Pacific learners experience bias and discrimination that impact their opportunity to learn. Therefore, when reading any differences on the basis of just ethnicity, the reader should remember that some of that is the effect of socio-economic circumstances of the family and the school as well as the effect of differential opportunities to learn.

Which is important because Māori and Pacific learners are an increasing part of the population

The last few waves of census data show Māori and Pacific peoples are becoming a greater proportion of the population as are Asian peoples.

Learning in a second language can help but only under certain circumstances

Studies of literacy development in bilingualism have shown that language and reading comprehension can be enhanced by biliteracy. However, these positive outcomes are generally found when the learner has a good quality bilingual education, developing appropriately good competence in both languages. Where bilingual children are predominantly educated in their second language (in our case English), and where the first language skills aren't maintained and improved, this can in turn negatively impact the acquisition of skills in the second language.

Findings from PIRLS 2016 showed that for New Zealand Year 5 learners, those who predominantly spoke the test language at home had significantly higher achievement than those who sometimes or never did (533 and 505 respectively – a difference of 28 score points). About a quarter of learners sometimes or never spoke the language of the test at home. This differential in average achievement demonstrates that the New Zealand system may not be taking advantage of all the skills learners bring to the classroom.

On average, girls do better than boys in literacy

Boys' and girls' achievement is similar for most learning areas, however gender differences in literacy are common across jurisdictions, including New Zealand. Evidence from PIRLS shows that average reading comprehension achievement at Year 5 in New Zealand is higher for girls (533) than boys (512), and this difference is larger in New Zealand than many other countries (12th highest across the 49 countries).

The difference in achievement in writing and reading between girls and boys is maintained over the years of primary schooling. NMSSA shows that the difference in average achievement between boys and girls in reading at both Year 4 and Year 8 is equivalent to about one year of schooling, while in writing it is about one and a half years.

The variation in achievement observed in the e-asTTle data is broadly consistent with NMSSA results. For both reading and writing, the average achievement for girls is higher than for boys. At the end of Year 8 the average achievement score for girls in writing is within curriculum level 4, while almost half the boys are achieving below level 4.

Some commentators suggest this finding may be indicative of gendered expectations of boys to be more active learners and girls to be more passive learners. Others argue that texts and tasks at an early age favour the interests of girls over that of boys. Whatever the reason, the outcome is that more boys than girls are labelled as poor readers and writers and have trouble using these skills to access other parts of the curriculum.

Rates of progress appear similar across all subpopulations and differences in achievement are likely due to different starting points

Both e-asTTle and NMSSA can tell us about rates of progress across primary schooling. While e-asTTle shows us there is wide variation in the yearly progress made by students in the same year level, both e-asTTle and NMSSA data suggest that on average all student subgroups are progressing at similar rates. That is, regardless of grouping, New Zealand students are progressing more slowly against the curriculum in the upper years of primary school on average.

The differences in achievement across subpopulations largely reflect different starting points when entering the school system and a systematic failure to accelerate progress for those who have

started behind. In these circumstances, even when a learner's rate of progress meets curriculum expectations, their level of achievement may fall short of expectations.

Secondary schooling – Years 9 to 13

On average, New Zealand 15-year-old learners perform well in reading literacy internationally

The Programme for International Student Assessment (PISA) is a survey that measures the reading literacy, scientific literacy, and mathematical literacy of 15-year-olds across multiple countries. In 2018, New Zealand learners scored an average of 506 points for reading in PISA, significantly above the OECD average of 487 points.

The great majority of New Zealand learners (81%) attained at least Level 2 proficiency in reading, compared to an OECD average (77%). Level 2 is considered the minimum baseline at which students demonstrate the skills and competencies needed later in life. Thirteen percent of students in New Zealand were top performers in reading, compared to an OECD average of 9 percent.

Nationally many students leave school with a qualification indicating a functional level of literacy

NCEA Level 2 is considered an 'upper-secondary' qualification internationally and represents a basic minimum benchmark for literacy and numeracy needed to function in society. In 2019, 88 percent of school leavers left with an NCEA qualification of at least Level 1, 79 percent had achieved Level 2 or above and 54 percent left with NCEA Level 3. Thirty-nine percent of school leavers achieved a University Entrance award. ¹⁰.

Although New Zealand learners continue to have a large level of variation in achievement compared with other countries

Data from PISA shows that, as for primary learners, secondary achievement in New Zealand has a larger variation when compared internationally, with high levels of both top performers and very low performers. The difference between high and low performers was large (278 points between top 10% and bottom 10% of learners) compared to the OECD average (259).

The strong association between socio-economic factors and achievement observed at primary level is still visible at secondary and is large when compared internationally

PISA 2018 data showed a large, difference (96 points) in reading performance between New Zealand's *advantaged* students (558) and *disadvantaged* students (462 points).¹¹ The difference between these groups in New Zealand was larger than on average across OECD countries (88 points).

¹¹ PISA's measure of a student's socio-economic status is the index of Economic, Social and Cultural Status. This index is created using information about the level of parent's education and occupation, the number of home possessions that can be considered material wealth, and the educational resources available at home. Students are classified as socio-economically advantaged if their values on the ESCS index were among the top quarter in New Zealand, and socio-economically disadvantaged if their ESCS index were among the bottom quarter.

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¹⁰ Questions have been raised about the reliability of achievement standards attainment as an indicator that required literacy levels have been reached and there are plans to increase the robustness of literacy assessment in NCEA. Therefore, attainment of NCEA Level 2 may also have limited reliability in indicating the baseline levels of literacy have been achieved. NCEA data sheets can be found at educationcounts.govt.nz/statistics/school-leavers.

And this association can be seen nationally in overall NCEA data

While we don't have the evidence to demonstrate a direct causal link between lack of literacy and lack of qualification, many routes for obtaining a qualification require learners to be able to read and write to a sufficient standard. In 2019, 91 percent of students from schools in deciles 9 and 10 left school with at least an NCEA Level 2 qualification compared to 65 percent for school leavers in deciles 1 and 2. This was a stark difference of 26 percentage points. While only one in every ten students in high socio-economic schools left school with less than the minimum desirable qualification, one in every 3 students in the low socio-economic schools left without this qualification. This lack of qualification would in turn affect their chances for both well-paid employment and continuing education.

As at the primary level, we can see from the overall NCEA data that socio-economic differences impact more Māori and Pacific learners

As mentioned in the primary section, socio-economic status partially explains ethnic differences. Although not literacy-specific, when looking at NCEA Level 2 attainment by ethnicity groups, we see a similar pattern to that observed for literacy at primary school. In 2019, Asian students had the highest percentage of school leavers attaining at least NCEA Level 2 or equivalent (90%), followed by Pākehā European (82%), Pacific students, (74%) and Māori (65%).

Since 2009, there has been an 11 percentage point increase in those who attain at least NCEA Level 2 or equivalent, with 79 percent in 2019 compared to 68 percent in 2009. The largest percentage point increase in those attaining at least NCEA Level 2 or equivalent has been in Māori and Pacific school leavers, with an increase of 19 and 17 percentage points respectively between 2009 and 2019. ¹²

These changes indicate that the disparities between most ethnic groups have reduced over time but an achievement gap remains for Māori and Pacific students. The gap in NCEA Level 2 attainment between lower and higher decile schools has also reduced (from 36 percentage points to 26).

On average girls in secondary school outperform boys for reading

In 2018, 15-year-old girls continued the trend observed in all cycles of PISA of achieving at a significantly higher level, on average, than boys (520 points compared with 491 points respectively).

For female school leavers in 2019, NCEA Level 2 attainment (81%) was higher than for their male counterparts (76%). This may indicate the importance of literacy for overall performance in NCEA.

But since 2000, New Zealand's average reading performance internationally has declined significantly

According to PISA, the average performance of New Zealand 15-year-olds for reading significantly declined between 2000 and 2018 (from 529 to 506 points). Most of the decline occurred between the 2009 and 2012 cycles (from 521 to 512 points). This decline was also observed in some other jurisdictions.¹³

As was seen with the primary school cohorts, the proportion of advanced readers has declined (from 19% in 2000 to 13% in 2018). Meanwhile, the proportion of low-achieving students has

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¹² There has also been a change in proportions attaining UE during this period, but the requirements for obtaining UE also changed during this time, so the proportions are not reported here.

¹³ New Zealand is not the only country to see such a decline; Australia and Finland also had a large decline between 2000 and 2018 (26 score points). However other countries improved during that same period.

increased (from 14% in 2000 to 19% in 2018). The decline occurred for both socio-economically advantaged and disadvantaged learners as well as for girls and boys.

The average score for both advantaged and disadvantaged students has declined since 2009, with advantaged students declining slightly more (21 points), compared to the disadvantaged students (13 points). Similarly, girls have declined more (24 points) since 2009 than boys (8 points) thus closing the gap (from 45 points in 2009 to only 29 points in 2018).

Disparities in access to literacy learning may persist in secondary schooling

The Starpath project found unequal access to relevant NCEA subjects for Māori and Pacific learners and poor understanding of NCEA by them and their whānau. They found some teachers had lower expectations of Māori and Pacific learners, and even when there was a school-wide focus on high expectations, this didn't necessarily translate into appropriate actions in the classrooms.

In Phase 2 of the study, they attempted to increase the focus on subject-specific literacies. While they found an improvement in practice, they also found little evidence of a shift in the amount of 'critical' literacy discussion or instruction, theorised to be important for attainment of UE and success in degree-level study. This may be one reason why there was not a systematic upward shift in the pass rates of 'literacy rich' NCEA Level 2 achievement standards across the time period where increased NCEA attainment has been observed.

Learners with learning support needs

We don't have much data about learners with learning support needs

We know that some children have more difficulties learning to read than others. Sometimes this is due to unidentified (and identified) conditions such as dyslexia; sometimes interventions such as reading recovery help the child improve to the stage where they no longer need additional help. However, we don't have anything much in the way of system-wide data which would allow us to know what is working, for whom, under which circumstances. In particular, it has been identified that where there is data about learners with learning support needs, it is not as comprehensive as it could be. For example, we can find out about the number of learners receiving reading recovery¹⁴, but what this data can't tell us is the level of unmet need. We could, however, infer from the PISA data that those nearly 20 percent of learners who aren't achieving at or above level 2 proficiency (the minimum benchmark considered necessary to function in society) have unmet need.

NMSSA explicitly included some learners with high and moderate education needs in the assessments for reading, writing, listening and viewing and included their need assessment in the data. This enabled some analyses to be undertaken but the numbers of students were relatively small and the findings should therefore be interpreted with caution. This is particularly true with regard to the high special education needs group from which many of the special education needs student withdrawals are likely to have come. As such, this group cannot be considered a statistically representative sample.

Some students identified as having special education needs met curriculum expectations. As could be seen with the population as a whole, more learners met curriculum expectations at Year 4 than Year 8 and more were achieving in listening and viewing than in reading and writing. Of these four aspects of literacy, writing for Year 8 students was the worst, with fewest students successfully performing at or above curriculum expectations.

¹⁴ See https://www.educationcounts.govt.nz/statistics/schooling/reading-recovery. This data for 2017 suggests reading recovery was successful for about three-quarters of learners.

As shown in Table 2, a relatively large proportion of Year 4 learners with special education needs achieved at or above curriculum expectations in listening and viewing, but the proportion had decreased guite substantially by Year 8.

Table 2: Percentage of students with special education needs meeting curriculum expectations for aspects of English assessed by NMSSA, by year level ¹⁵

NMSSA English learning area	Year 4 (% of students meeting curriculum Level 2)	Year 8 (% of students meeting curriculum Level 4)
Listening	56	35
Viewing	51	28
Writing	26	7
Reading	26	18
Speaking	32	23

Key takeaways about achievement and progress

- » Overall, many of our learners are performing well in literacy achievement and progress, in both national and international contexts. However, there are wide variations throughout all year levels and across gender, ethnicity and socio-economic status groupings. Our current system for literacy learning is clearly not working for a reasonably large group of students.
- While data indicates that all student subgroups are progressing at similar rates, on average, those who start behind for literacy learning, or who fall behind early, do not always catch up. These findings indicate a need for additional and systematic support in order to accelerate progress.

¹⁵ Note that as mentioned earlier, this table should only be read as indicative as the group is small and cannot be considered representative

Student confidence and interest

Many children in New Zealand enjoy reading

New Zealand children's views about reading were 'typical' of children from other countries in PIRLS, with 44 percent reporting they very much like reading (43% on average internationally). Not all children were positive: 42 percent "somewhat liked reading", but some did not like it (14%).

The difference between the mean achievement scores for New Zealand children who said they like reading and those who do not was reasonably large; about 27 scale score points, which was statistically significant.

But they were much less confident about themselves as readers compared with their international counterparts

Compared with their international counterparts, New Zealand Year 5 students tended to have relatively low reading confidence. PIRLS found that New Zealand children generally did not view themselves as being good at reading. Only 35 percent of New Zealand children were found to be very confident compared with 45 percent on average internationally.

PISA found that New Zealand 15-year-olds generally find reading more difficult than students in the OECD on average. In particular, compared to the OECD average proportions, slightly more New Zealand students find it difficult to answer a question about a text (33% in NZ c.f. OECD average of 26%) and agreed they always had difficulty with reading (23% in NZ c.f. OECD average of 19%).

As they grow older, they become less positive and less confident about reading

NMSSA findings show that both Year 4 and Year 8 students had positive attitudes towards reading at school. The majority of students indicated that they enjoy reading. However, more Year 4 students generally had positive attitudes to reading at school than Year 8 students, with 76 percent of Year 4 and 59 percent of Year 8 saying they enjoy reading.

Generally, older children and young people were also less confident about reading than younger children. Year 4 students also scored higher, on average, on the *Confidence in English Reading* scale than Year 8 students by 6 scale score units.

Many felt more confident in some tasks than others

A large proportion of students at both levels also reported that they were good at 'understanding the ideas and characters in stories', but overall they were less confident about their ability to 'make links between what they read and what happens in their lives'.

Since 2009, fewer 15-year-olds enjoy reading and a large proportion of them do not read for fun

In 2018, just over half of 15-year-olds who participated in the PISA test indicated that they do not read for pleasure by agreeing that they 'read only if they have to' or 'only to get information they need' (52% agree or strongly agree for each statement). Students' enjoyment of reading has declined since 2009, when the proportions agreeing with these two negative statements was lower (38% and 40% respectively). Over the same period, the proportion of students agreeing that 'reading is one of my favourite hobbies' decreased (from 38% in 2009 to 34% in 2018).

More girls felt positive and confident in their reading and writing abilities than boys

More girls than boys, at both the primary and secondary levels, were positive and confident in their reading and writing abilities. NMSSA found that more girls than boys were confident in their reading and writing abilities (differences of 2 to 4 scale score units on the respective scales at each Year level).

PIRLS and PISA both found that more girls enjoyed reading than boys. Based on the data from PIRLS, there were more girls who *very much like reading* boys (50% of girls compared with 39% of boys), and more boys who *do not like reading* (9% of girls compared with 18% of boys). In PISA girls were more likely to say that they enjoy talking to others about books and that reading is one of their favourite hobbies.

There was no consistent pattern when confidence in and liking of reading were examined for each ethnic grouping

In PIRLS, more Pākehā European students (42%) were very confident readers than Asian (35%), Māori (23%) and Pacific students (21%).

However, more Pacific and Asian students were positive about reading than their Māori and Pākehā European peers. About half of both Pacific (52%) and Asian (50%) students very much like reading compared with about two in every five Māori (41%) and Pākehā/European (43%) students.

The relationship between reading achievement and students' attitudes towards reading, as measured by PIRLS, was relatively strong for Pākehā European students but weak for Pacific students. The small proportion of Pacific students (8%) who did not like reading scored an average of 12 score points higher than their counterparts who very much like reading (492 compared with 480).

Students from higher social-economic backgrounds enjoyed reading more than those from lower social-economic homes

In PISA, compared to socio-economically disadvantaged students, advantaged students reported greater enthusiasm, academic support, and engaging and adaptive instruction from teachers. Disadvantaged students tended to enjoy reading less, be assigned shorter texts, used digital devices less for schoolwork and were also less aware of effective reading strategies.

Year 4 and Year 8 students with special education needs felt less confident in their writing abilities, than those with no special education needs

There was limited data on confidence and attitudes towards literacy for students with special education needs. However, NMSSA found that students with special education needs expressed lower levels of confidence, on average, in their reading and writing abilities than students with no special education needs.

Those who were less positive and less confident also scored lower

Generally, children who enjoy and value reading are likely to read more frequently and read a wider range of material than those who get little pleasure from reading. It was evident from across the studies that those who were more positive and more confident on average scored higher than those who were less positive and less confident.

The data from PIRLS and NMSSA showed that reading achievement was strongly related to confidence. NMSSA also demonstrated that students who reported not feeling confident in reading or writing tended to perform below expected curriculum levels at both Year 4 and Year 8 in those areas of literacy. However, there were also some students who were very confident who also performed below curriculum expectations.

In PISA, students who enjoyed reading had significantly higher reading scores. For every unit increase on the enjoyment of reading index, there was an average increase of 29 points in reading performance, after accounting for students' socio-economic level and gender. Those who agreed or strongly agreed that they 'read only to get the information that they need' or they 'read only if they have to' scored about 60 points lower than students who disagreed or strongly disagreed with that statement. Students who agreed with the statement 'reading is one of my favourite hobbies' scored 45 points higher.

But achievement appears to be more closely linked to students' confidence than their attitudes

Liking reading and writing, being confident in reading, writing and viewing were all associated with higher achievement in literacy. However, in PIRLS, the relationship between students' reading confidence and their achievement after taking into account their sex, ethnic identity, language spoken in the home, the test language of the assessment, and socio-economic status appeared to be stronger than the students' liking of reading. A one point increase on the liking reading scale corresponded to a two score point increase in reading achievement, whereas a one point increase on the confidence in reading scale corresponded to a 20 score point increase in reading achievement.

Students' confidence in reading increased significantly as the frequency with which they read for fun increased and when they had access to more books at home

Both having access to books in the home, and regularity of reading for fun were related to student confidence. Greater access to books and greater frequency of reading for fun were both associated with higher student confidence. However, there was a much stronger relationship between students' confidence in reading and reading for fun, even after taking into account an estimate of students' reading ability, their sex, ethnic identity and the language in which they completed the PIRLS assessment. Additionally, having access to at least a reasonable size book collection at home meant children were more likely to read for fun than children with few books. The children surveyed in 2015 reported spending less time reading for fun than their peers in 2010.

NMSSA data shows that students in high decile schools were more likely to report reading for more than five hours per week outside of school than students in mid or low decile schools at Year 4 and Year 8.

Key takeaways about student confidence and interest

- » Enjoyment of reading and confidence in reading and writing were both strongly related to student performance on those aspects of reading. These aspects are mutually reinforcing in that confidence will increase as positive experiences increase. Having the ability to read for fun and the confidence to do so is more likely to engender that activity.
- » Areas for concern identified in this section included that compared with their international counterparts, New Zealand children and young people were moderately positive about reading, but less confident. Fewer students were reading regularly for fun than in the past and some groupings of students were less positive about reading than others.

Teaching in the Early Years

Early learning occurs in a variety of settings

From birth through to beginning school, children develop emergent literacy through engagement in both incidental and deliberate actions that support that development. Opportunities for learning can occur, both informally and formally, at home, in early learning settings, through events at social and cultural institutions, and using both human and physical resources. To be able to fully capitalise on these opportunities, it is essential that social and emotional skills are also developing within and across these contexts.

Most children spend at least some of their early learning years in an early childhood centre

Nearly all children in New Zealand (97%) attend an early childhood centre (ECE) of some sort (figures for June 2020) in the year before they attend school. However, more Pākehā European (98%) and Asian (98%) children attend than Māori (95%) and Pacific (93%). For some learners, this attendance did not consist of many hours. Nearly three quarters of 4-year-olds (74%) and 84 percent of 5-year-olds attended for at least 10 hours in the previous year. The percentages of children attending early childhood education for 10+ and 20+ hours a week are lower for Māori children, Pacific children, and children who are located in low socioeconomic areas (68%, 74% and 74% respectively). As shown later in this report, large variations in the quality of early learning and responsiveness to identities, languages and cultures can also be found which might influence uptake of early learning opportunities for these groups of learners.

The IEA's Progress in International Reading Literacy Study (PIRLS) gathered broad information on the number of years children in the study had attended ECE. Although only about half of the parents returned the questionnaire in the most recent cycle in 2015, the study demonstrated that, in general, those who attended an early childhood service for more than 1 year had higher achievement than those who didn't attend at all (3%) or those who attended for only a short time (6% for 1 year or less).

Literacy learning at home

While we know that attendance at an ECE is important for development, so is learning at home, particularly for those learners who have few or no opportunities to attend ECE.

Most parents frequently engaged in practices that promote children's literacy development

As well as through educational settings, children's development reflects their socialisation through practices and activities in family/whānau and community settings such as Pacific church groups. Some family practices are known to promote children's learning and development related to progress and achievement at school, including singing songs, using rhymes, telling and retelling stories, reading books, observing and exploring, and playing together.

The Growing Up in New Zealand (GUiNZ) longitudinal study found that, most mothers (85%) read books, sung songs or played music with their child (at 54 months old) several times a week or more. Fifty-eight percent of mothers also told stories to their children several times a week or more. About a third of mothers also encouraged their children to print letters, words or numbers (35%), or to read words (35%), once or several times a day.

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¹⁶ Retrieved from Prior participation in ECE statistics found at https://www.educationcounts.govt.nz/statistics/participation

The last cycle of PIRLS, conducted in New Zealand in 2015, found that more than half (57%) of New Zealand parents and caregivers had *often* engaged with their child in a variety of literacy-related activities such as reading books, telling stories, singing songs, playing with alphabet or word games and reading labels and signs aloud prior to them entering primary school.¹⁷ The benefit of these early activities persisted: those children whose parents had engaged with them often in these activities had higher reading achievement in Year 5 than those who sometimes or never engaged with them in this way, even when their attendance at an early childhood education programme was taken into account.

But the kinds and frequency of activities differed by the child's ethnicity and level of socioeconomic deprivation

There were minimal differences between boys and girls in the types of early literacy activities they did according to GUiNZ, though there were marked ethnicity and socio-economic differences on some activities; especially for reading books to children.

- Mothers of Asian children were more likely to print letters, words or numbers (48%), read words with their child once or several times a day (44%) and to tell stories to their child once or several times a day (33%).
- Mothers of Māori (57%) or Pacific children (53%) were more likely to sing songs or play music with their children once or several times a day.
- Mothers of Pākehā European children (72%) were more likely to read books to their child once or several times a day than mothers of Asian, Māori or Pacific children.
- Mothers whose children were in homes with the high levels of deprivation (38%) were less likely to read to their child once or several times a day, compared with mothers whose children were in economically well off homes (74%).

Literacy learning in early learning services

The majority of early learning centres have at least some focus on supporting the development of oral language but there is room for improvement

In 2015 ERO assessed 167 early learning services for their focus on supporting oral language development. ERO found that early learning services (and schools) varied in their positioning of oral language as a formal and intentional part of their curriculum and teaching programmes. In some, it was a central thread and a priority for teaching and learning; about one in five centres were considered well-focussed (19%). In others, it was not given sufficient formal consideration. ERO considered that half had some focus on oral literacy and just under a third had limited or no focus (31%).

Those centres considered well-focussed:

- had shared expectations for oral language development and had oral language as a curriculum priority as part of a literacy focus; implemented a responsive curriculum with opportunities for small group and one to one experiences; sustained rich vocabulary experiences; planned strategies targeted to individuals and groups;
- gathered and recorded information about children's oral language learning and development;
- had PLD on a variety of topics related to oral language.

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¹⁷ They had the options of Often, Sometimes, and Never or Almost never.

Areas for improvement included review of internal practice and assessment for learning

ERO found that across all the early learning services:

- internal evaluation, research and reflective practice related to oral language was not strong
- few were building a picture of oral language progress over time in assessment information
- PLD was variable and often coupled with a poor understanding of oral language development including a focus just on speech concerns.

ERO concluded that in general early learning services need additional guidance to implement a curriculum with a strong oral language focus

Improvements were needed in many early learning services to support oral language learning and development. These included:

- leadership capability to support teachers to design and implement a curriculum that:
 - gives priority to oral language and recognises oral language as an integral part of early literacy learning
 - is based on a shared and explicit understanding of children's oral language development
 - o includes deliberate teaching strategies to support all learners, making children's oral language learning and development visible in assessment information
- evaluating the impact of practices and strategies on improving oral language outcomes
- capitalising on 'home languages' as a foundation for other language learning
- being prompt and proactive where concerns are identified about children's oral language learning and development.

The level of understanding regarding early literacy practice varied widely

ERO's earlier review of literacy teaching and learning in early childhood services in 2009 and 2010 highlights the wide variety of understanding of early literacy and accompanying practice across the early childhood sector. In services where educators had strong and in-depth knowledge of how children's literacy learning develops, high quality literacy practices were evident. However, in services where ERO observed few or poor quality literacy practices, children were not well engaged with literacy learning.

In most services, literacy teaching and learning was child-initiated through play, with children using resources in meaningful ways. However, the literacy teaching and learning in some services was inappropriate and did not reflect the socio-cultural framework provided by *Te Whāriki*, or did not align with what is known about good teaching and learning in early childhood education. In particular, practices in formal transition-to-school groups were variable, with some activities so poor, uninteresting, and inappropriate that they had the potential to create negative attitudes to literacy learning. They also found that early childhood pedagogy is often based on common practice rather than a deeper understanding of children's learning progressions in literacy.

Many services did not cater for diversity of learners in their literacy programmes in any way and where they did, it was mostly by age and ability rather than gender or ethnicity

Research shows a disparity in achievement later in life between girls and boys and between different ethnic groupings. Attempts to reduce these disparities need to begin early. However, many services indicated that they did not differentiate their programme in any way. While these services said they catered for children as individuals and provided equitable access for all, many

did not plan for specific needs, or recognise that some activities did not appeal to particular children or groups of children, or were not appropriate for them.

Services were most likely to differentiate instruction or cater for differing needs on the basis of age and ability, and less likely to cater for gender and ethnicity needs. Most services promoted literacy appropriately and in different ways to different age groups such as infants, toddlers and young children. In some services, however, boys were not well catered for and were often bored with the literacy activities provided. Most services with some differentiation provided books and resources, or planned different activities and environments, so both boys and girls had access to literacy learning that would engage them. This is not meant to imply there should be gender-specific activities available, but that teachers need to ensure that boys are engaged by literacy activities.

While most services promoted literacy for children from different ethnicities, the quality of this was variable. Some services had a high percentage of Māori children but did not reflect this in the programme. RRO has previously found that over half the services were not implementing practices that supported Māori children as learners. Many services incorporated basic greetings and instructions in te reo Māori into daily routines, but did not extend further. Services that sought to promote literacy for Māori in more meaningful contexts and based on children's interests did so through a wide variety of activities and contexts including:

- waiata, karakia, mihi/pēpeha, whakapapa, pōwhiri, haka, poi, rākau
- designing pounamu, moko, kōwhaiwhai
- making piupiu
- · celebrating Matariki
- noho marae
- learning about local history, legends and spiritual contexts.

Good leadership was crucial to educators developing a shared understanding of early literacy, and to implementing best practice consistently across the service.

ERO found that effective leaders had a professional approach to reflecting on and drawing on current research about curriculum and assessment as part of the service's self-review and development. Shared understanding in the service was developed through PLD and resulted in an expectation of including literacy throughout the curriculum on a daily basis, and the encouragement of ongoing reflective practice.

Just over a third of centres were intentionally capitalising on home languages

The early learning and schooling population in New Zealand is rapidly becoming more diverse. This trend is evident through the diversity of learners' ethnicity, language, heritage, and immigration status. In 2018, ERO investigated how a group of early learning services (74) and schools (38) in Auckland responded to increasing cultural and linguistic diversity in their learning community.

There is an overall need for services and schools to improve their response to culturally and linguistically diverse (CLD) learners. Most of the services and schools knew who these learners were and had, to some extent, taken steps to respond to their language and culture. However, only 37 percent of services were intentionally promoting learning by using a home language or cultural lens to support the learner's acquisition of the English language, and to promote engagement with the learner, their parents, whānau and communities.

¹⁸ On page 32 of Te Whariki, the early childhood curriculum, it states that "All children should be able to access te reo Māori in their ECE setting, as kaiako weave te reo Māori and tikanga Māori into the everyday curriculum."

Those centres that were not as responsive tended to try to make learners fit into the existing system rather than adapting to the needs of CLD learners. They lacked clear direction and deliberate planning to promote and celebrate learners' culture and language as well as integrating English as a second or subsequent language in the curriculum.

In centres deemed responsive to culturally and linguistically diverse (CLD) learners, teachers prioritised building strong relationships with parents and whānau, and took deliberate actions to maintain home languages

ERO found that the most responsive services prioritise building strong relationships with parents and whānau. Parents were comfortable to share their aspirations for their children and participated in centre activities (along with adults from the learners' community). Strategically appointed staff were bilingual and understood the challenges of learning English.

Studies of literacy development in bilingualism have shown that language and reading comprehension can be enhanced by biliteracy. But this only helps when the first language is part of the second language instruction. ERO found that teachers in responsive early learning services believe strongly in the importance of maintaining learners' home languages, as it nurtured each learner's identity and helped them develop a sense of belonging. Cultural displays and resources in the learners' home languages were evident. Teachers designed a curriculum that was connected to the learners' interests and strengths, and supported the rich and sustained use of the learners' home languages.

Transition to primary school

As children transition into school they are usually moving from more informal learning to more formal learning. The difference between the two settings will vary depending on experiences and differences in the beliefs, capabilities and learning programmes (including differences in curriculum). The stress this creates and the ease of transition will therefore vary. Preparedness for transition is also dependent on literacy skills and knowledge as well as social and emotional skills. These also have been shown to vary greatly among learners. Schools and early childhood centres need to think of this transition as a process rather than a point in time and take deliberate actions to facilitate the transition.

ERO found that just over half of early learning centres had practices that supported transitions

In 2013, the Education Review Office (ERO) evaluated how well early childhood services and schools supported children through the transition to school. Just over half of the services were implementing a curriculum that supported children to develop the dispositions and strong sense of identity and belonging needed to support a successful transition. They collected relevant assessment information about children's learning and progress. These services also had collaborative relationships with parents and whānau, schools and external agencies that focused on helping children experience a successful transition.

In the least supportive services, neither the curriculum, nor assessment of learning and progress supported children to develop the strong learning foundations crucial to successful transitions. It is of concern that services with high numbers of Māori and Pacific children were disproportionately over-represented in the least supported group.

And more than two-thirds of schools were either very responsive or mostly responsive to needs at transition

ERO found that 29 of the 100 schools reviewed were 'very responsive', and another 41 were 'mostly responsive' to the needs of children starting school. Most of the 29 'very responsive' schools arranged a variety of opportunities for the child, parents and whānau to visit the school and

become familiar with the surroundings, meet key people and share expectations and aspirations. Leaders and teachers typically had strong partnerships with parents and whānau and used their input to improve curriculum and processes for settling into school.

Sharing information through good relationships was key

When transition worked best for children, early childhood and school leaders and teachers developed good relationships with each other, with parents and whānau, and with the children. As a result, school teachers gained a picture of the child as a learner, their interests, strengths, prior knowledge and dispositions for learning. They used this information to bridge from familiar experiences to ones that extended their learning. Teachers monitored progress and provided support as required. Children settled quickly, were engaged and confident in their learning.

In just under a third of the schools, the curriculum had little relationship to early childhood learning. In these schools, communication of information tended to be one way (from the school). School leaders did not invite parents and whānau to talk about their aspirations for their child or their child's culture, strengths and interests. These leaders missed the opportunity to develop true partnerships in learning with parents and whānau and the children. An inflexible curriculum meant that the child had to fit the school.

Teaching in Primary and Secondary Schooling

Primary School - Years 1 to 3

The beginning school years are crucial in a child's development of literacy skills, particularly for reading and writing, but also for verbal and non-verbal communication. Fundamental literacy skills can be grouped into two categories: constrained skills, which are readily teachable because they are finite (e.g. letters of the alphabet or phonemic awareness); and unconstrained skills which will continue to grow throughout life (e.g. vocabulary and background knowledge). Both of these types of literacy skills need to be developed in conjunction with each other and initially in familiar contexts.

Just over two-thirds of schools had good or high-quality reading instruction

There is not a lot of recent **large-scale** research that focuses explicitly on literacy teaching and learning in the early years. In 2009, ERO evaluated the effectiveness of reading and writing instruction in Years 1 and 2 in 212 schools. They found a wide range in the quality of reading teaching across and within some schools, with 26 percent categorised as high quality and a further 43 percent as good. The remaining 31 percent were categorised as of adequate quality (21%) or limited quality (10%). They did not define these categories explicitly, but did elaborate on what effective reading instruction looked like.

The best schools had strong literacy leadership and used a range of strategies to meet the needs of their diverse learners. Reading lessons were deliberately planned and learning goals were clearly communicated to learners. Instruction combined approaches including whole language, emphasising meaning and strategy instruction, and phonics-based methods of teaching. Oral language development was part of reading instruction, including the exploration of the meaning of new words. Teachers used a range of varied resources, including games and digital technology, to give a wide range of experiences and to keep learners engaged. Parent helpers and teacher aides were given focused training from the class teacher or literacy leaders and reading goals were regularly communicated and clearly understood.

But many schools used inexperienced teachers to teach in junior classrooms

ERO found that it was relatively common for beginning teachers or inexperienced literacy teachers new to the school to be given responsibility for teaching in the critical Years 1 and 2 class levels, or for leading junior children's reading programmes. This sometimes happened even when other teachers in the school had recently completed extensive literacy PLD. These teachers often did not know how to teach reading effectively and generally did not have a wide range of strategies. It was also common that while working with one group on reading, the rest of the class were given busy work to do, rather than tasks which extended or consolidated teacher-led instruction on reading.

Just under two-thirds of schools had good or high-quality writing instruction

In the same review, ERO also found a wide range in the quality of writing programmes, with 25 percent categorised as high quality and a further 39 percent as good. The remaining 35 percent were categorised as of adequate quality (22%) or limited quality (14%). They did not define these categories explicitly, but did elaborate on what effective writing programmes looked like.

Effective writing programmes coupled writing with reading and oral language activities. Teachers linked writing activities to children's ideas, interests, experiences, and to objects, artefacts, visual images, and books. They helped children extend their vocabulary and improve their writing. They explicitly planned lessons and taught explicit writing skills. They provided resources such as simple

word dictionaries and computers for word processing to develop independent writing. Children were taught how to critique their own and others writing, including that of their peers. They were given lots of opportunities to celebrate and affirm their writing activities.

Ineffective writing programmes lacked direction, didn't link to children's interests, ideas or needs. There was no explicit skill development and little or no feedback on how to improve. There were few or no resources or instruction to help children write independently.

Effective instruction requires effective assessment

Effective assessment enables teachers to modify instruction to meet the diverse needs of learners. This is particularly important in light of the findings that learners begin school with widely different literacy knowledge, skills, and experiences. Teachers with rich information about children's knowledge, skills, and experiences can actively involve them in their learning by helping them understand what they need to do next to progress. They can also collect or share assessment information with parents and whānau to help children's literacy learning at home and to link learning at home with learning at school in meaningful ways.

But nearly one third of schools were using reading assessments ineffectively or not at all

ERO found that teachers in just over two-thirds of schools made good (35%) or very good (32%) use of their assessments to plan and evaluate the impact of reading programmes on individual learner outcomes, and share information with parents and children. Just over a quarter of schools made some use of assessments they collected (26%), while seven percent made little use of the reading data.

And fewer schools were effectively using writing assessments to improve teaching and learning

Fewer schools were making good or very good use of writing assessments compared to reading assessments. ERO found that teachers in 60 percent of schools made good (33%) or very good (27%) use of their assessments to plan and evaluate writing programmes, and to share information with parents and children. Just over one-fifth of schools made some use of assessments they collected (21%), while 19 percent made little use of the writing data.

In effective schools, teachers discussed achievement data together and used it to reflect on how well children were progressing. They used data to help decide on teaching objectives and adapt their teaching to the needs of their learners. Lead teachers used data and conversations about it to help other teachers decide on or modify instructional practices. Professional development and the use of research about good practice informed their practice. Individual teachers used data to provide feedback directly to learners.

ERO observed the poor use of assessments in both reading and writing in some schools, noting that they were not used for diagnostic purposes. A 'one-size-fits-all' model of teaching was often used, even after assessment data showed that the children had different strengths and needs.

Materials used were not always culturally appropriate, nor were they appropriate to the abilities and interests of learners. This limited some student's success and enjoyment with early reading and writing, with students disengaged and unchallenged.

Two-thirds of schools had at least some focus on supporting oral language development but this tended to be stronger in Year 1 than in Years 2 and 3

In 2015 ERO assessed 104 schools for their focus on supporting oral language learning development. ERO found that most schools focused on getting to know children's oral language strengths and needs in their first year at school. Some schools continued to respond appropriately to the range of oral language learning needs across Years 2 and 3 by providing a suitably

resourced language/arts curriculum, implemented by capable staff and suitably monitored and evaluated. They considered over a third of schools well-focussed (35%) and a further just over a third had some focus (36%). Just under a third of schools had limited or no focus on oral literacy (29%).

Those schools considered well focussed on oral language learning:

- had effective transition to school programmes;
- had clear school-wide progressions for oral language and teachers were expected to have an oral language component as part of the daily literacy programme;
- had both formal assessment and informal monitoring of oral language in early months at school and progress was clearly communicated to learners and their whānau;
- assessment and monitoring was used for planning and to identify needs requiring specialist help;
- had PLD related to oral language.

Well-focused schools embed speaking and listening activities into the curriculum through Years 1 to 3

The 'well-focused' schools identified key needs and provided a variety of planned speaking and listening activities for students across Years 1, 2 and 3. Teachers in these schools linked early literacy developments (reading and writing) with a rich oral language programme and developed the language capability of staff and students. They applied this to learning and teaching across the curriculum.

However, some schools focussed on reading and writing more than oral language in Years 2 to 3 and some only considered oral language development at school entry

Schools with 'some focus' tended to focus on oral language in Year 1, with more attention paid to reading and writing in Years 2 and 3 than to oral language. These schools also gave less attention to systematically building capability of staff and students than the well-focused schools. The schools rated as having 'limited' or 'no focus' paid little attention to oral language learning needs or developmental possibilities after school entry.

ERO concluded that improvements were needed in many schools to support oral learning and development

These included:

- giving greater attention to the oral language learning of new entrants (within a rich curriculum) developing formal expectations for monitoring oral language progress or development across Years 1 to 3 and beyond, across all key learning areas;
- taking a formalised approach to identifying students' oral language strengths (including capabilities in languages other than English), needs and concerns, rather than relying on informal observation and 'gut feeling';
- systematically planning for interventions, where particular concerns or needs for oral language learning and development are identified;
- teachers building on the advantage linguistically-diverse learners bring to language learning;
- building and strengthening teacher capability to support oral language teaching and learning.

They also recommended that the Ministry of Education develop a more coherent and systematic set of curriculum expectations, assessment tools and resources for oral language in the early years (0-8 years) to support children's learning across the curriculum.

Just over half of schools were intentionally capitalising on home languages

As mentioned earlier, in 2018, ERO investigated how a group of early learning services (74) and schools (38) in Auckland responded to increasing cultural and linguistic diversity in their learning community. They found that there is an overall need for services and schools to improve their response to culturally and linguistically diverse (CLD) learners. Most of the services and schools knew who these learners were and had, to some extent, taken steps to respond to their language and culture. However, just over half (58%) of schools intentionally promoted learning by using a home language or cultural lens to support the learner's acquisition of the English language, and to promote engagement with the learner, their parents, whānau and communities.

Those schools that were not as responsive tended to try to make learners fit into the existing system or used regular withdrawal programmes rather than adapting to the needs of CLD learners. Most teachers were generally unaware of available ESOL resources and had no specific PLD for teaching culturally and linguistically diverse learners. Expectations for learner success were insufficiently planned or articulated.

Teachers prioritised building strong relationships with parents and whānau in schools deemed responsive to culturally and linguistically diverse (CLD) learners

ERO found that the most responsive services had good relationships with agencies and networks who could support CLD learners, their parents and whānau to settle into the community. These schools encouraged learners' use of digital technology and apps like Google Translate to support them to learn English and communicate with their teachers, peers, and parents. Home-school partnerships were a priority and parent workshops such as Reading Together and parent fono/hui were regularly organised.

And they create a learning environment which promotes positive interactions between CLD learners, their teachers and other learners

ERO's findings suggest that all students learning English need opportunities to extend their language learning and apply language skills already in their repertoire. Therefore, teachers should create opportunities for students to try, use, and manipulate language, symbols, and information to make sense and create meaning for themselves. Teachers' use of particular strategies, and the reorganisation of lesson formats, standards for behaviour, curriculum materials, and assessment practices can make the learning environment more inclusive and responsive to these children.

Teachers reflected regularly about their practice, and accessed relevant PLD and resources to support their teaching practice.

To better serve an increasingly diverse population, leaders and teachers need to have general and specific sociocultural knowledge and social identity theory¹⁹, know about second-language acquisition, and the ways in which socioeconomic issues shape educational achievement, as well as specific knowledge about the languages, cultures, and circumstances of particular learners. ERO's research found that leaders and teachers in responsive schools valued the TESSOL qualification as it helped them to implement teaching strategies that supported CLD learners.

¹⁹ Social identity is a person's sense of who they are based on their group membership(s). See https://www.simplypsychology.org/social-identity-theory.html for a fuller explanation.

Boards and leaders expected ESOL teachers to have, or supported them to attain, an appropriate qualification such as TESSOL; they also employed bilingual staff such as teacher aides.

ERO also found that there was a growing recognition for teachers to provide more in-class support to these learners. Teachers in responsive services and schools used relevant tools and resources such as English Language Learning Progressions and other specific PLD to support their assessment of CLD learners. A few schools delayed their assessment of learning the English language to allow teachers to get to know the learners better and for the learners to settle and feel comfortable in school. These learners knew what they were working on and were confident to ask questions or seek clarification.

Teachers had high expectations

Other important practices include teachers' collective understanding about expected outcomes for CLD learners, and shared information about individual learner's progress with each other and parents. Effective leaders and teachers recognised that to maximise learning, they must get to know each learner. They also recognised that the emotional wellbeing of the learner and whānau was critical for any learning to occur. It is critical for teachers to believe that all CLD learners can succeed in learning English, and to communicate this to the learners in a range of ways. Equally important is the personal commitment by teachers to work towards success for all learners, including those who are struggling to succeed. Leaders of the responsive schools understood the changing demographics of their school community and reviewed the curriculum in response to learners' strengths, interests, and learning priorities as well as their cultural backgrounds.

Providing books for children to read over summer holidays can reduce reading learning loss

Although there is not a huge body of research about this in New Zealand, there is a documented summer learning loss. This means that students scored higher for their skills and abilities, such as those associated with reading literacy, before they start their summer break when compared to after the break. Overseas studies have shown that this loss is often larger for those from disadvantaged backgrounds. Giving Year 2 and 3 learners books to read over the summer holidays can reduce learning loss, particularly for poor readers. Turner and Tse found that even students who were given maths books improved in reading. Their process included home-liaison visits and introducing strategies for parents and family members to assist their children. They found that improved results could be achieved by starting summer reading programmes at a younger age and extending them for several years.

Primary School - Years 4 to 8

Through the middle to upper primary school years, children are transitioning from learning to read and write to needing to use their skills and abilities in reading and writing, listening and speaking to learn across the whole curriculum. At this point they should be mostly growing their unconstrained literacy skills, although this will depend on need. Two types of reading and writing are necessary at this level: generic literacy skills and content (subject) specific literacy skills.

- Generic skills include strategies for comprehending and understanding features of text structure (oral and written). Critical literacy and collaborative reasoning become important generic skills.
- Critical and creative thinking skills and literacy skills differ across subject areas and need to be taught explicitly in those subjects. Each subject has its own vocabulary. Writing for subject specific purposes will often have its own specific / expected style.

Differences between learners in literacy abilities observed at younger ages persist and gaps can be revealed by the need to use literacy skills in other subject areas. This will restrict the level of access to curriculum areas for children who are falling behind on their literacy.

Many children lack a literacy-rich environment at home

PIRLS asked both parents and children about the reading environment at home. Only about half of the parents responded in 2015, so where possible, student responses are used.

One in ten learners estimated that there were 10 or fewer books in their home, and a further 21 percent thought there were between 11 and 25 books. This is fairly similar to what the parents who responded reported. The average number of books in the home has been dropping since the first international study asked this question in 2001, but children can now use digital devices for reading if they have them. Parents were also asked if there was a digital device that could be used for reading available for their child and just under two-thirds (64%) said there was. Those with more books in their home had higher achievement, on average, than those with fewer or none.

Modelling positive behaviours is one way for parents to help their children develop those behaviours. However, one in 5 parents reported that they read for enjoyment at most twice a month (8% never read for enjoyment; 13% once or twice a month). Thirteen percent of parents were categorised as not liking reading. This follows the trend of parent's enjoyment of reading reducing for most countries, including New Zealand.

One in five Year 8 students say they spend very little time reading in their own time

NMSSA asked students in Year 8 how much reading they did in their own time, when not at school. Forty percent of students said they spend more than 2 hours a week, and a further 22 percent estimated they spend one to two hours per week reading in their own time. Nineteen percent said they spend up to an hour a week reading in their own time and a further 19 percent said they spend very little or no time at all reading. Those who indicated that they read for more than 5 hours a week in their own time had an average score that was 20 units higher than students who reported that they did little or no reading in their own time.

More boys, more ākonga Māori, and more students with special education needs report spending very little time reading in their own time

Year 8 boys were more likely than girls to report no or very little reading in their own time (23% compared with 14%, respectively). Māori students were more likely than non-Māori students to report that they did no or very little reading (27% compared with 16%, respectively). Twenty-nine percent of students with special education needs indicated they did little or no reading in their own time, compared with 18 percent of students with no special education needs.

New Zealand teachers of Year 5 students were using similar practices teaching reading to teachers in other countries but there were some significant differences

Using data from PIRLS 2016, Chamberlain examined the similarities and differences in practices used by New Zealand teachers compared to teachers in other English-language countries and jurisdictions when teaching reading comprehension at the primary level. This attempted to understand both the relatively lower average achievement of New Zealand Year 5 students compared with other English-language countries, and the overall weakening in reading performance from 2010 to 2015²⁰.

²⁰ Some languages are more regular than English and are therefore easier to learn, so comparing instructional techniques across countries where English is the language of instruction gives us a better base for comparison.

New Zealand teachers were more likely to teach reading to children in same ability groups and less likely to use whole class teaching

Same-ability grouping was the preferred approach used by New Zealand teachers with 43 percent of Year 5 students taught in classes where this approach was 'always or almost always' used; a similar percentage (39% of students) were 'often' taught reading this way. On average internationally, just 10 percent of students were 'always or almost always' taught in same-ability groups (with 29% 'often'). Only Northern Ireland recorded a higher percentage than New Zealand (55% always/almost always and 37% often).

At the point where children are extending their unconstrained skills, whole class teaching has the advantage of allowing all the children to have shared opportunity to have the same instruction and extend their vocabulary. In contrast with New Zealand, whole class teaching was the preferred approach in many of the English-language countries (i.e. they were more likely to use whole class teaching always or often than same ability grouping or mixed ability grouping). Further to this, teachers in New Zealand were least likely among the English-language countries to regularly use whole class teaching. Only 2 percent of New Zealand Year 5 children were taught in this way always or almost always, with a further 11 percent taught this way often. Northern Ireland (46% - 6% always or almost always; 40% often) and England (51% - 12% always or almost always; 39% often) had the next lowest use of whole class teaching.

The relationship between organisational practices and achievement was complicated. Teaching reading often, by any grouping method, was associated with lower achievement than teaching it less often by that method. There are two possible conclusions to this finding: either a mix of whole class and grouping by same ability and mixed ability is the optimal condition for higher achievement, or explicit teaching of reading at this age is more often done when learners are struggling to learn to read.

One of the arguments for using same ability grouping is to meet differentiated needs of students. Teachers in NMSSA were asked to show which listed approaches they used to meet differentiated needs of the students in their class in the areas of reading and writing. Teachers used a range of approaches for both reading and writing including both whole class and grouping, both of which were common activities in both Year 4 and Year 8. Providing remedial writing activities outside the classroom was relatively common in these year groups though more common at Year 4 (37%) than at Year 8 (29%). In contrast extension writing activities outside the classroom was reported more often by teachers at Year 8 (36%) than at Year 4 (28%). The use of specialist advice to adapt the curriculum for learners with special needs was reported more frequently by teachers at Year 4 (27%) than at Year 8 (15%).

Learners need lots of opportunities to learn

To get better at literacy, students need to have time to engage with all the different aspects: this concept is termed 'opportunity to learn'. As explained in the New Zealand Curriculum, "Students learn most effectively when they have time and opportunity to engage with, practise, and transfer new learning. This means that they need to encounter new learning a number of times and in a variety of different tasks or contexts." (Pg 34 NZC).

New Zealand teachers were more likely to explicitly teach decoding strategies than they were to teach new vocabulary

In each of the other English-language countries, the proportion of students being taught new vocabulary (systematically) at least weekly was higher than the proportion of students being taught decoding strategies. In contrast, in New Zealand, a higher proportion of students were taught decoding strategies (84%) than new vocabulary (81%).

There was a slightly greater emphasis in New Zealand on teaching decoding strategies in 2015 (84%) than nearly 15 years earlier in 2001 (80%). Similarly, there was a higher emphasis on new vocabulary in 2015 (81%) than in 2001 (71%).

And those frequently learning decoding skills had lower achievement

There was a relatively strong relationship between how often Year 5 students were taught decoding skills and their reading achievement, with those taught them more often having lower achievement than those taught less often. Students who were taught daily (34%) had significantly lower achievement, on average than those taught weekly (50%), which was in turn significantly lower than the small group (2%) who were never taught these skills. There are two possible interpretations of this relationship: students who had gaps in learning were more likely to be taught decoding, or time spent on decoding wasn't allowing enough time for extending the comprehension skills (possibly some of these learners didn't need any more teaching on decoding skills).

There was no statistically significant difference in reading achievement between learners taught new vocabulary daily and those who were rarely taught it.

Teaching children to summarise main ideas and how to skim or scan were common activities in New Zealand and other English-speaking countries.

About 80 percent of New Zealand Year 5 students were taught to summarise the main ideas at least weekly. Fewer students, just over 60 percent were taught skimming and scanning strategies at least weekly. Students in all English-language countries were taught this strategy less frequently than summarising the main ideas in a text.

New Zealand teachers were more likely to ask their students to read silently on their own and much less likely to ask their students to read aloud

New Zealand had the highest percentage of Year 5 students who were asked to read silently on their own daily (88%) across all 49 PIRLS countries, though this was also a relatively common activity in many English-language countries. NMSSA similarly found high levels of silent reading (91% at Year 4 and 87% at Year 8). In contrast, New Zealand students were least likely to have to read aloud as part of their daily instructional programme (29%).

It was also relatively common for New Zealand Year 5 teachers to read aloud to their students daily (71%) and this activity varied widely among English-speaking countries. The teacher reading aloud was a less common activity at Year 8 (66%) compared to Year 4 (95%).

Almost all students in English-language countries were asked to practice their text-based comprehension skills at least weekly

Similar proportions of New Zealand teachers asked learners to practice their text-based comprehension skills, compared with other English-language countries. About the same percentage of New Zealand students were exposed to the strategy of making connections between the text they are currently reading and their own experiences (87%) or other reading material (76%) compared with other countries (around 75% to 90%). At least 90 percent of students in eight of the English language countries including New Zealand were asked to practice predicting at least weekly. Similarly, at least 90 percent of students in five of the English language countries, including New Zealand, were asked to practice inferring from their reading materials (at least weekly). Fewer New Zealand students were asked to describe the style or structure of a text at least weekly (70% compared with England 83%) or identify an author's intent (66% compared with 85% in the US) than some of their peers.

New Zealand teachers were mostly using short stories and were less likely to use longer fiction books than other English-language countries

In PIRLS New Zealand students tended to be stronger in their literary reading than informational reading. Interestingly, teachers reported using fictional reading in similar proportions to non-fiction texts.

Among the fictional texts, New Zealand teachers were more likely to use short stories at least weekly (77%) than longer fiction books with chapters (62%), poetry (24%), or plays (16%). Compared with other English-language countries, New Zealand teachers were less likely to use longer fiction books and more likely to use plays. The proportion using short stories was similar; poetry was not asked about in an international context.

For informational reading, 80 percent of New Zealand students were working with non-fiction subject area books at least once a week, with fewer using articles (65%), non-linear reading material on websites (65%), or longer non-fiction books with chapters (38%). More New Zealand students were working with non-fiction subject area books and articles than higher-achieving English-language countries such as England (67% and 51% respectively) and Singapore (59% and 45% respectively). Students in all English language countries were less likely to use longer non-fiction books with chapters.

Where teachers had a higher emphasis on academic success, students tended to do better at reading comprehension

A relatively high percentage of New Zealand Year 5 students were taught by teachers who reported a very high emphasis on academic success (13%), compared to their international peers (8%). Two-thirds of New Zealand Year 5 students (65%) attended schools with teachers who placed a high emphasis on academic success, higher than the international mean (55%). On average internationally, there was a positive relationship between reading achievement and teacher's emphasis on academic achievement. In New Zealand, this relationship was a little stronger than observed internationally (a difference between the lowest and highest categories of the scale of 44 scale points in NZ compared with 25 points on average internationally).

Opportunity to learn through reading activities was higher than through writing activities

Explicit writing instruction was not a common activity with this happening fairly irregularly for both Year 4 and Year 8 students (only around 10% of teachers did this weekly). Explicit reading instruction, on the other hand was much more common. Nearly all teachers reported they had the class critically analyse the texts they read in class at least once a week at both Year 4 and Year 8. Similarly, nearly all teachers at both Year levels reported having the class discuss the meaning and structure of the text at least once a week. Around one in five teachers reported doing these activities 4 to 5 days a week.

Overall, Year 4 students in NMSSA reported more frequent involvement in writing activities than Year 8 students did. The activities most often rated as highly frequent (*heaps*) at both year levels were "sharing your writing with the teacher" and "writing about something your teacher has asked you to write about". A fairly large proportion of students in both year levels reported infrequent involvement in many of the writing experiences. One third of Year 4 students reported that they *hardly ever or never* wrote about things they found out for science, topic or inquiry and this figure was even higher for Year 8 (over 40%).

Teachers were asked similar questions; they also reported teacher-directed writing as the most frequent activity, though they reported greater use of writing in a learning area other than English (the question differed slightly from that of the students).

Attendance at school matters - students who reported a greater number of absences tended to score lower

At both Year 4 and 8, students who reported greater numbers of absences (being away from school for a whole day) and instances of being late for school scored lower on average on the NMSSA reading assessment than students who reported fewer absences and instances of lateness. At both year levels, a greater proportion of students from low decile schools than from mid or high decile schools reported that they were absent from school three or more times during the previous 2 weeks.

Though by no means the worst in an international context, relatively few Year 5 students had good attendance (61% reported they were never or hardly ever absent compared with 68% on average internationally; a range from 41% in Egypt to 89% in Hong Kong). Those who were absent more frequently than once a month (17% of New Zealand students) had lower achievement than their peers who were absent once a month or less.

Spending more time in reading instruction didn't necessarily equate to higher reading achievement

In PIRLS, opportunity to learn was measured by how much time is allocated to teaching formal and informal reading and reading across the curriculum. New Zealand is one of several countries (e.g., both the French and Flemish Belgian systems, Norway, and Spain) that do not specify the number of instructional hours for any learning area or subject in their intended curriculum. New Zealand learners spent more time on average than their international peers on language or language-related instruction including reading, writing, speaking and other language skills (37% or 340 hours compared with 27% or 242 hours on average internationally). Similarly, New Zealand learners spent more time on average than their international peers on formal and informal reading, including reading across the curriculum (24 percent or 215 hours compared with 18 percent or 156 hours internationally). There was no obvious relationship between instructional time and reading achievement. Some higher-performing countries spent less instructional time on reading or language than New Zealand (e.g., Ireland, Finland) while other countries spent more time (e.g., the Netherlands, United States – the US spent more time on reading instruction and less on total language instruction).

Almost all teachers at both year levels reported being confident about teaching English, but more in some areas than others

Nearly all Year 4 and Year 8 teachers, who participated in the NMSSA survey, indicated some degree of confidence about teaching each of the modes of the English learning area. However, teachers are most confident in teaching reading, followed by writing, and then viewing.

Teachers were positive about using digital technologies and used them often

At both Years 4 and 8, the majority of teachers surveyed by NMSSA were positive about the effects of digital technology on students' learning. According to the learners, the most common learning opportunities (not necessarily literacy focussed) at both Year 4 and Year 8 were to 'search for information on the Internet', 'use online learning activities/games', and 'work with others on an activity using a digital device' (at least 60% of learners reported doing these *often* or *very often*). This finding was generally similar across decile bands. Though the percentages of students reporting *often* or *very often* were generally lower than the teachers, the most frequent learning opportunities as reported by teachers were consistent with students' reports.

PIRLS asked similar questions with a focus on reading instruction. Asking students to read digital texts and asking them to write stories or other texts were activities that were more common in New Zealand and Australia than in other countries. More than half the New Zealand students were asked to do these two activities at least weekly (57% and 64% respectively, with the international

averages 19% and 17% respectively). Teaching students to be *critical when reading* was more common in New Zealand, Australia, and Israel (with just over 40% of students being asked to do this at least weekly), than all other countries (international average 17%).

But digital technology was used a lot for searching for information

The activity that digital devices were most commonly used for was to search for information. NMSSA found that searching for information on the Internet (general rather than literacy specific) was reported as being done often or very often by nearly three quarters of Year 4 learners (73%) and nearly all Year 8 learners (92%), Similarly, PIRLS found that New Zealand students were often *looking up information* (78% of students) and researching a topic (70%) during reading. Year 5 students were more likely to be asked by their teachers to do these activities on at least a weekly basis than students in any other country.

Frequent use of digital devices did not equate to higher achievement

About 15 percent of Year 4 and Year 8 students indicated they spent more time reading on electronic devices (such as computers, iPads and cellphones) than reading books. Year 4 students' average scores on the NMSSA reading assessment increased with the relative amount of time spent reading from a book rather than an electronic device. However, a similar relationship was not found for Year 8 students.

PIRLS found no statistically significant relationship between reading achievement and how often digital devices were used for reading or writing.

New Zealand Year 5 students are assessed less frequently than other countries

New Zealand schools design assessment in their classrooms so that teaching and learning is meaningful and meets the needs of their students.²¹ In New Zealand, Year 5 students are assessed formally less often compared with other countries. More than half (52%) of students' teachers never (or almost never) have the students take a written test or quiz during reading compared with around one in ten on average internationally (13%). However, they use student work quite commonly to monitor progress (71% place major emphasis on this) rather than tests (12% a major emphasis).

It may be that tests would be used more if there were ones that helped indicate to teachers specific targeted activities for learners to strengthen particular skills and enabled them to know when they should seek further help for the learner.

But are more likely to be given individualised feedback frequently than other countries

Teachers of most Year 5 students (79%) reported regularly giving individualised feedback to each student (about half the lessons or more often; c.f. 60% on average internationally), though the learners were less likely to recognise this was happening (65% reporting this happens about once or twice a week or more often).

There was a negative relationship between regular feedback and reading achievement: the more regular use of feedback was associated with lower achievement in New Zealand classrooms. This doesn't mean that feedback is bad. On the contrary, where it is used well it can help learners set next learning goals. This finding may well signal that teachers used feedback more commonly with learners who were struggling or that the feedback wasn't working as intended.

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²¹ http://assessment.tki.org.nz/Assessment-for-learning

Few teachers have a specialisation in writing

NMSSA found that only 8 percent of teachers at Year 4 and 12 percent of teachers at Year 8 had specialist qualifications in writing. Support in the classroom was received from a wide variety of sources. Most often the support was from a teacher aide, especially in Year 4, or from students assisting each other in a peer support role.

Teachers, in general, were very positive about writing and were confident in their ability to teach writing. Over 80 percent of Year 4 and Year 8 teachers enjoy teaching writing. Nearly 80 percent of teachers at both Year levels felt confident in teaching writing.

Most teachers had undertaken some form of literacy PLD recently

Over 80 percent of Year 4 teachers and 75 percent of Year 8 teachers reported in NMSSA that they were involved in professional development and learning focused on writing in the last 12 months. About 55 percent of teachers reported that they had received reading-focused PLD in the last 12 months.

PIRLS showed that most teachers had had some formal reading-focused PLD in the last 2 years (only 7% had not). Some teachers had had quite a substantial number of hours of reading PLD, with 17 percent having between 16 and 35 hours and a further 24 percent having more than 35 hours of reading PLD.

About 85 percent of teachers at both year levels in NMSSA reported that they regularly (once a term or more) worked together to plan and prepare materials, discuss useful approaches to teaching writing to a diverse range of students, and discuss samples of students' work.²²

Secondary school particularly Years 9 to 11

As learners move into secondary school, they face quite a different learning environment. At this point, teachers expect their literacy skills to be developed and able to be used across subject areas. Learners will still be developing their generic literacy skills (critical literacy and collaborative reasoning) and subject-specific literacy skills and vocabulary. Differences between learners in literacy abilities observed at younger ages can persist, but without anyone obviously responsible for providing targeted support, there are limited opportunities for these skills to be grown deliberately.

For most the learning environment changes physically too: new classrooms, new teachers, new peers, and for many they move from the oldest learners in the school to the youngest. Alongside this, the role of teachers is changing and assessments are becoming more significant. The learners are changing from children into young adults, and their responsibilities and independence grow.

To cope with all this change, social and emotional skills of the learner and the strength of the emotional support provided by the home, the school, and their peers are important.

As children become young people, they report less engagement and are absent from school more

A number of studies have found a decrease in positivity about learning between mid-primary and early secondary. For example, NMSSA found more Year 4 students positive about reading at school than Year 8 (for example 87% of Year 4 agree at least a little that reading is their favourite subject compared with 75% of Year 8).

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²² This may have been driven by the context at the time of needing to collect reliable data for national standards reporting.

The percentage of students attending regularly increases from Year 1 to Year 6 and then tends to fall through intermediate and secondary years.²³ Fewer students attended regularly in lower decile schools than in higher decile schools.

A successful transition to secondary school is reliant on good relationships, culture, and curriculum

In a review of research and their reports, ERO stated that a student's transition can be complicated by the social, emotional and physiological changes that can negatively impact on their learning. Staff at both primary and secondary schools have important roles supporting transitions. Primary schools are responsible for preparing students academically and socially for secondary schools and sharing information with the student, families, whānau and the receiving school. The values, ethical orientation and culture within a secondary school is fundamental to how well it welcomes and supports students. Transition processes at effective schools include more than just orientation programmes and are accompanied by a responsive curriculum.

Few schools were found to be highly effective in both gathering and using achievement information to promote success in literacy particularly at the transition into Year 9

To be able to provide feedback, teachers need to be gathering information about how students are achieving. In 2011 ERO examined how effectively schools sought and used achievement information at key transition points. Only nine percent of schools were judged as having highly effective processes in terms of gathering and using information at these key transitions. ERO were looking for exchanges of information about learning needs and strengths with the students themselves, their families and whānau, and with other teachers and school leadership. They expected this information to be used to improve school and classroom practices, as well as for learners to improve and to plan learning pathways. Fifty-seven percent of schools were partially effective in these practices, with very few providing opportunities to students to set their own goals, assess their performance, and receive feedback on their progress.

Most secondary schools sought information from contributing schools, but they often retested Year 9 learners despite having this information (both on literacy and social development). They mostly commonly used this for class placement or to identify students with additional learning needs.

Fewer 15-year-olds enjoy reading or read for enjoyment than used to

Enjoyment of reading and regularly reading for pleasure are associated with higher reading achievement (around 40 to 60 points difference depending on the measure). What is most concerning about the 2018 PISA findings was that there was an increase in the proportion of learners who indicated they do not read for enjoyment (from 30% in 2000 to 43% in 2018). The proportion enjoying reading had also declined with about half of 15-year-olds indicating that they only read if they have to (up from 38% in 2009).

And many were not aware of effective strategies for understanding, remembering and summarising texts

Less than half of students demonstrated awareness of effective reading strategies for understanding, remembering and summarising text. There was a decline in awareness of all strategies since 2009. Awareness of effective reading strategies was strongly associated with increased reading scores.

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 $^{{\}color{red}^{23}}\ Retrieved\ from\ \underline{https://www.educationcounts.govt.nz/statistics/indicators/main/student-engagement-participation/1935}$

Most New Zealand 15-year-olds reported their English teacher was enthusiastic and supportive and these experiences were associated with higher reading achievement

PISA found three aspects of enthusiasm and support provided by teachers were associated with higher reading scores of 15-year olds, even when gender or socio-economic profile was taken into account. These were that:

- their teacher was enthusiastic about teaching them (80% or more agreed or strongly agreed with statements about their English teacher's enthusiasm);
- their teacher shows academic support frequently (in most or all English lessons at least 75% agreed with statements about their English teacher's academic support);
- their teacher provides them emotional support (at least 75% agreed or strongly agreed with statements about their English teacher's emotional support).

However, students who were economically disadvantaged were less likely to experience their teachers as enthusiastic and supportive

Disadvantaged students were less likely than advantaged students to report frequent academic support or to report that their teachers were enthusiastic. Māori and Pacific students reported lower teacher enthusiasm than their counterparts, though they reported similar or higher levels of support as learners in other ethnic groupings.

Many 15-year-olds observed that their teachers regularly adapted lessons to meet the needs of learners, but fewer Māori or disadvantaged learners reported this

Around half or more of New Zealand students, reported some form of adaptive instruction occurs regularly. That is, the teachers adapt the lesson (58%), change the structure of the lesson (48%), or provide individual help (70%) when students have difficulty understanding. Students who reported adaptive instruction more regularly were significantly more likely to achieve higher scores in reading. Māori and disadvantaged students were significantly less likely than non-Māori and advantaged students to report adaptive instruction from their teachers.

Just over half of 15-year-olds were assigned long texts to read and they tended to have higher reading performance than those assigned shorter texts

A larger proportion of New Zealand students (58%) had been assigned at least one text of at least 100 pages in the past year, compared to the OECD average of 43%. However, just over one-quarter of 15-year-olds had only been assigned texts of 10 pages or fewer in length. Performance in reading was strongly associated with the length of texts in English classes – generally, as the length of text increased so too did reading scores, even after accounting for gender and socio-economic background.

Teachers may not be giving all students sufficient opportunities to learn in English lessons; Māori, Pacific and disadvantaged learners have fewer opportunities

While students in New Zealand were assigned longer texts than students in the OECD on average, four in ten had not been assigned a novel length text in that school year, and a half or more students were regularly assigned less challenging tasks in English such as summarising texts or giving personal opinions. Fewer ākonga Māori, Pacific learners, or economically disadvantaged learners were assigned longer texts.

This set of findings, combined with the teacher behaviour findings, signals that teachers do well in supporting some (but not all) students, but are potentially not challenging students enough.

More than half of 15-year-olds reported receiving frequent feedback in their English classes

Sixty-four percent of 15-year-old students reported frequently (many lessons, or every or almost every lesson) receiving feedback from their teachers in English classes on areas that need improvement, with 62 percent receiving feedback on how to improve. Feedback on strengths happened frequently for fewer students (56% reported this happened in many lessons, or every or almost every lesson). However, there was a sweet point with the quantity of feedback: those who reported feedback in 'every lesson or almost every lesson' scored significantly lower than those who reported they received feedback in many lessons (this grouping had the highest reading achievement). This relationship with reading achievement also signals that giving feedback matters, but it is likely that the quality of feedback matters most, not the quantity.

Boys and Pacific students reported higher levels of feedback than girls and non-Pacific students

This analysis was done by combining the questions about feedback, both areas for improvement (what and how) and feedback on strengths. We don't know if boys and Pacific students had more feedback on areas for improvement, or strengths, or both.

Teaching in general – primary and secondary schools combined

There will be some aspects of teaching that are not literacy specific that will impact how children learn literacy, particularly but not limited to providing an environment where children feel happy, supported, and able to learn.

Teachers believed that they take responsibility for their students' wellbeing

The Teaching, School, and Principal Leadership Practices Survey (TSP) is available for free use by schools for their own development. The teachers surveyed in 2018 and 2019 believed that they were able to improve the learning outcomes of all the students they teach (53% believe they do this very well - 2019) and take responsibility for their students' wellbeing (65% believe they do this very well - 2019).

However, fewer teachers believed they could use practices for teaching critical thinking or supporting learners' culture

Fewer teachers believed they could draw on students' different languages, cultures, and identities as resources for the learning of all (20% believe they do this very well - 2019) and ensure that expertise held by whānau and members of the local community is used to support collective learning in class or other school activities (9% w.r.t. local community and 18% w.r.t. parents/whānau believe they do this very well - 2019). More decile 1 and 2 teachers reported that practices supporting Māori student learning and belonging are "very like our school" (a finding from the 2018 survey).

Fewer teachers believed they could ensure students direct their own learning pace, content, and goals (16% believe they do this very well in 2019) or ensure that students interact with information to critique and create knowledge (12% believed they do this very well in 2019).

New Zealand teachers reported more frequent use of cognitive activation practices than the OECD average

Based on the most recent TALIS (2018) findings, New Zealand Year 7 to 10 teachers reported more frequent use of *cognitive activation practices*, such as giving tasks that require students to think critically, and having students work in small groups or decide on their own procedures to solve problems, than on average across the OECD. This type of practice requires students to evaluate, integrate and apply knowledge within the context of problem-solving. Teachers who

reported that they participated in professional development in the previous 12 months which had a positive impact on their teaching were more likely to also report that they often employed cognitive activation practices.

New Zealand teachers also reported confidence in their use of instructional practices and their ability to engage students in learning. Teachers reported the most confidence in getting students to believe they can do well in their schoolwork (90%). A greater proportion of experienced teachers reported confidence in three of the four items of student engagement than novice teachers, but similar proportions of novice teachers (79%) and experienced teachers (83%) felt they could help students think critically.

A high proportion of New Zealand teachers often have students use ICT for projects and class work

A high proportion of New Zealand Year 7 to 10 teachers (80%) use ICT for projects and classwork, an increase of 25 percentage points since 2014, and much higher than the OECD average of 53 percent. Three quarters (76%) of them felt confident that they could support student learning through the use of digital technology, which was higher than the OECD average (67%). The use of digital technologies was the one item of practice where greater proportions of novice teachers were confident (81%) than their more experienced peers (75%). This difference in confidence between novice and experienced teachers was also seen across the OECD but was much greater for New Zealand teachers.

Most teachers feel confident using a variety of assessment strategies, particularly experienced teachers

Most Year 7 to 10 teachers (79%) who participated in the 2018 TALIS survey felt confident in using a variety of assessment strategies, although experienced teachers (81%) more often agreed that they felt confident in using a variety of assessment strategies than novice teachers (72%). Most Year 7 to 10 teachers in New Zealand provide feedback to students based on observations. A greater proportion of primary teachers let students evaluate their own progress than secondary teachers. Teachers' use of written feedback has increased by four percentage points since 2014 but the use of student self-evaluation has dropped by five percentage points during this same period.

Almost all teachers had engaged in some professional development in the 12 months prior to the survey and they felt it was impactful

According to the 2018 TALIS findings, almost all teachers (98%) had engaged in some form of professional development activities in the 12 months prior to the survey.-In comparison to the OECD average, New Zealand responses showed high proportions of teachers participating in professional development focused on ICT skills for teaching (73%), teaching in a multicultural or multilingual setting (47%), analysis and use of student assessments (58%) and communicating with people from different cultures (29%). Most teachers (87%) reported a positive impact on their teaching practice from at least one of their professional development activities during the previous 12 months.

Key takeaways about teaching

- » Across the education sector, there are many areas where teaching and instruction of literacy skills in New Zealand classrooms are different from common international practices. This paper does not intend to identify the best practice and evidence for teaching literacy skills, nor does it suggest areas that need to change. However, it indicates areas of practice that we may wish to examine further.
- » Teachers' confidence and preparation, along with their teaching methods, have an impact on students' opportunity to learn and academic outcomes in literacy. Likewise, having a literacy-rich environment as well as sufficient opportunities to learn at both home and school, play an important role in the development of students' skills, behaviours, and interests in literacy.
- » Currently, however, many of our learners and young people lack a literacy-rich environment at home and not everyone is given sufficient opportunities at school to learn, practice and engage with all aspects of literacy learning, which adds to our concerns.

References

Chamberlain, M. (2019). PIRLS 2016: Reading literacy and the classroom. Wellington: Ministry of Education. Retrieved from

https://www.educationcounts.govt.nz/__data/assets/pdf_file/0012/195888/Classroom-and-Practice for-ECounts UDb.pdf

Chamberlain, M. (2017). *PIRLS 2016: New Zealand's Achievement.* Wellington, New Zealand: Ministry of Education. Retrieved from

https://www.educationcounts.govt.nz/__data/assets/pdf_file/0007/183697/PIRLS-2016-NZs-Achievement_REV.pdf

Chamberlain, M. with Forkert, J. (2019). Reading literacy instruction in the English language countries: similarities and differences. Retrieved from

https://www.educationcounts.govt.nz/__data/assets/pdf_file/0008/195740/Teaching-in-NZ-Reading-Literacy-Instruction_ud.pdf

Educational Assessment Research Unit and New Zealand Council for Educational Research. (2013). *NMSSA English writing 2012*. Retrieved from

https://www.educationcounts.govt.nz/data/assets/pdf_file/0008/144377/NMSSA-English-Writing-2012.pdf

Educational Assessment Research Unit and New Zealand Council for Educational Research. (2015). *NMSSA English reading 2014*. Retrieved from https://nmssa.otago.ac.nz/reports/2014/Reading CON.pdf

Educational Assessment Research Unit and New Zealand Council for Educational Research. (2013). *NMSSA English writing 2012*. Retrieved from

https://www.educationcounts.govt.nz/__data/assets/pdf_file/0008/144377/NMSSA-English-Writing-2012.pdf

Educational Assessment Research Unit and New Zealand Council for Educational Research. (2017). *Using Digital Technologies for Teaching and Learning 2016*. Retrieved from https://nmssa.otago.ac.nz/reports/2016/2016%2014_Digital_Tech%20AccessiblePDF.pdf

Educational Assessment Research Unit and New Zealand Council for Educational Research. (2015). *NMSSA English reading 2014: Contextual report.* Retrieved from https://nmssa.otago.ac.nz/reports/2014/Reading_CON.pdf

Educational Assessment Research Unit and New Zealand Council for Educational Research. (2013). *NMSSA English reading 2014: Overview.* Retrieved from

https://www.educationcounts.govt.nz/data/assets/pdf_file/0006/170457/2014-NMSSA-English-Reading-Overview.pdf

Educational Assessment Research Unit and New Zealand Council for Educational Research. (2017). *NMSSA 2019 English Key findings*. Retrieved from:

https://www.educationcounts.govt.nz/publications/series/nmssa/english/nmssa-2019-english-key-findings

Education Review Office (2015). *Continuity of learning: transitions from early childhood services to schools.* Retrieved from https://www.ero.govt.nz/publications/continuity-of-learning-transitions-from-early-childhood-services-to-schools/

Education Review Office. (2012). *Evaluation at a Glance: Transitions from Primary to Secondary School.* Retrieved from https://www.ero.govt.nz/publications/evaluation-at-a-glance-transitions-from-primary-to-secondary-school/

Education Review Office. (2017). *Extending their language – expanding their world: Children's oral language (birth-8 years)*. Retrieved from https://www.ero.govt.nz/assets/Uploads/Extending-their-language-expanding-their-world2.pdf

Education Review Office. (2012). *Literacy and Mathematics in Years 9 and 10: Using Achievement Information to Promote Success.* Retrieved from https://www.ero.govt.nz/assets/Uploads/Literacy-and-mathematics-Years-9-10-Nat-Rep.pdf

Education Review Office. (2011). *Literacy in Early Childhood Services: Teaching and Learning*. Retrieved from https://www.ero.govt.nz/publications/literacy-in-early-childhood-services-teaching-and-learning/

Education Review Office (2009). *Reading and Writing in Years 1 and 2.* Retrieved from https://www.ero.govt.nz/assets/Uploads/readingwriting-y12-dec09.pdf

Education Review Office (2018). *Responding to language diversity in Auckland*. Retrieved from https://www.ero.govt.nz/assets/Uploads/ALD-report2.pdf

Good, R.H., & Kaminski, R. A. (Eds.) (2002). *Dynamic Indicators of Basic Early Literacy Skills (6th ed.)*. Eugene, OR: Institute for the Development of Educational Achievement. Available: http://dibels.uoregon.edu/

International Association for the Evaluation of Educational Achievement. (2016). *PIRLS 2016 International results in reading: Home Environment Support.* Retrieved from http://timssandpirls.bc.edu/pirls2016/international-results/pirls/home-environment-support/early-literacy-activities/

International Association for the Evaluation of Educational Achievement. (2016). *PIRLS 2016 International results in reading: Home Environment Support.* Retrieved from http://timssandpirls.bc.edu/pirls2016/international-results/pirls/home-environment-support/attended-preprimary-education/

May, S. with Jang-Jones, A. and McGregor, A. (2019). *PISA 2018 New Zealand Summary Report System Performance & Equity*. Retrieved from https://www.educationcounts.govt.nz/ data/assets/pdf file/0006/196629/PISA-2018-NZ-Summary-Report.pdf

Medina, E. and McGregor, A. (2019). *Reading in New Zealand: reading achievement and experiences of 15-year-olds*. Wellington: Ministry of Education. Retrieved from https://www.educationcounts.govt.nz/ data/assets/pdf file/0003/196626/PISA-2018-Reading-in-New-Zealand.pdf

Medina, E. (2019). *How often are students being assessed, and for what purposes?* Wellington: Ministry of Education. Retrieved from

https://www.educationcounts.govt.nz/publications/series/insights-for-teachers/teaching-in-nz-assessment.

Medina, E. with McGregor, A. (2019). PISA 2018 Reading in New Zealand Reading achievement & experiences of 15-year-olds. Retrieved from

https://www.educationcounts.govt.nz/ data/assets/pdf file/0003/196626/PISA-2018-Reading-in-New-Zealand.pdf

Medina, E. (2019). How much feedback are students receiving from teachers? Wellington: Ministry of Education. Retrieved from

 $\underline{https://www.educationcounts.govt.nz/__data/assets/pdf_file/0005/195737/Teaching-In-NZ-Feedback2.pdf}$

Ministry of Education (2018). Achievement and progress in mathematics, reading and writing in primary schooling: Analysis of e-asTTle assessment data 2011 to 2016. Retrieved from https://www.educationcounts.govt.nz/ data/assets/pdf file/0019/185023/20171213-Achievement-and-Progress-in-mathematics-reading-and-writing.pdf

Ministry of Education. (2018). He Whakaaro: What can the NMSSA tell us about student progress and achievement? Retrieved from He-Whakaaro-What-can-NMSSA-tell-us-about-student-progress-and-achievement.pdf (educationcounts.govt.nz)

Ministry of Education. (No date). *TALIS 2018: Year 7-10 teachers' training and professional development.* Retrieved from

https://www.educationcounts.govt.nz/__data/assets/pdf_file/0008/194849/TALIS-2018-Teacher-training-and-professional-development.pdf

Ministry of Education. (No date). *TALIS 2018: Year 7-10 teachers' teaching and assessment practices*. Retrieved from

https://www.educationcounts.govt.nz/__data/assets/pdf_file/0006/194820/TALIS-2018-Year-7-10-teachers-teaching-and-assessment-practices.pdf

Ministry of Education. (2007). The New Zealand curriculum. Wellington: Learning Media.

Ministry of Education. (2017). Early Childhood Education Participation Intensity Measure 30 June 2020 results. Retrieved from

https://www.educationcounts.govt.nz/__data/assets/pdf_file/0003/195816/ECE-Participation-Intensity-Measure-30-June-2020-results.pdf

Ministry of Education. (2017). *PIRLS 2016: New Zealand's Achievement*. Retrieved from https://www.educationcounts.govt.nz/ data/assets/pdf_file/0007/183697/PIRLS-2016-NZs-Achievement REV.pdf

Ministry of Education. (2017). *PIRLS 2016: New Zealand's Achievement*. Retrieved from https://www.educationcounts.govt.nz/ data/assets/pdf_file/0007/183697/PIRLS-2016-NZs-Achievement.pdf

Ministry of Education. (2017). *PIRLS 2016: New Zealand's Achievement*. Retrieved from https://www.educationcounts.govt.nz/ data/assets/pdf_file/0007/183697/PIRLS-2016-NZs-Achievement REV.pdf

Ministry of Education. (2017). *PIRLS 2016: New Zealand's Achievement*. Retrieved from https://www.educationcounts.govt.nz/ data/assets/pdf file/0007/183697/PIRLS-2016-NZs-Achievement.pdf

NZ Stats. (2019). *New Zealand's Population Reflects Growing Diversity*. Retrieved from https://www.stats.govt.nz/news/new-zealands-population-reflects-growing-diversity

Snow, C.E., & Matthews, T.J. (2016). Reading and Language in the Early Grades. *The Future of Children*, 26(2), 57-74. Retrieved from www.jstor.org/stable/43940581

Stephen G. Schilling, Joanne F. Carlisle, Sarah E. Scott, and Ji Zeng, Are Fluency Measures Accurate Predictors of Reading Achievement? The Elementary School Journal 107, no. 5 (May 2007): 429–448, https://doi.org/10.1086/518622 Cited by Thomas, S, Meissel, K. and McNaughton, S. (July 2019). He Whakaaro: What developmental resources do our pre-schoolers have approaching the transition to school. Ministry of Education.

Thomas, S. Meissel, K. and McNaughton, S. (July 2019). *He Whakaaro: What developmental resources do our pre-schoolers have approaching the transition to school.* Ministry of Education. Retrieved from https://www.educationcounts.govt.nz/ data/assets/pdf file/0011/195185/He-Whakaaro-What-developmental-resources-do-our-pre-schoolers-have.pdf

Tsimpli, I.M. (2017). *Multilingual education for multilingual speakers*. Retrieved from https://www.repository.cam.ac.uk/bitstream/handle/1810/264337/Tsimpli%20JLSP%202017.pdf?sequence=6

Turner, L. and Tse, L. (2015). *Solving summer slide: strategies and suggestions*. Retrieved from https://www.nzcer.org.nz/system/files/set2015_1_016.pdf

Webber, M., Eaton, J., Cockle, V., Linley-Richardson, T., Rangi, M., O'Connor, K. (2018). *Starpath Phase Three – Final Report*. Auckland: Starpath Project, The University of Auckland. Retrieved from

 $\frac{https://cdn.auckland.ac.nz/assets/education/about/research/starpath/documents/Starpth%20Phase% 203% 20Final%20Report.pdf$

White, B. (2007). Are girls better readers than boys? Which boys? Which girls? *Canadian Journal of Education 20*(2), 554-581. Retrieved from http://journals.sfu.ca/cje/index.php/cje-rce/article/download/2965/2254/

Wylie, C. and Hodgen, E. (2020). *Teaching, School, and Principal Leadership Practices Survey 2019*. Wellington: New Zealand Council for Educational Research. Retrieved from https://www.nzcer.org.nz/system/files/TSP%20aggregate%20report%202019%20FINAL.pdf





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