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National Standards: School Sample Monitoring & Evaluation Project, 2010-2014

Report to the Ministry of Education

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1. Executive summary

The National Standards School Sample Monitoring and Evaluation Project describes and evaluates the implementation of National Standards in New Zealand schools from 2010 to 2014. This is the final report from the project, which has been operating since the standards were first introduced. This report summarises findings from all five years of the project, and describes results collected in 2014.

Over the duration of the project, information has been collected from a sample of approximately 100 schools selected to be representative of the population of New Zealand schools with respect to three variables: school type, school decile, and region. School size was also accounted for during the sample selection process. Response rates have been consistently high so findings provide information about the implementation of National Standards in schools across New Zealand.

The project utilises a variety of data sources. In 2014, four types of data were collected at two time points. Copies of schools' 2014 student achievement targets and 2013 analysis of variance reports were collected in the middle of the year. At the end of the year, overall teacher judgments (OTJs) in reading, writing, and mathematics were collected for all students, copies of end-of-year reports to parents, families and whānau were obtained, and an online survey of principals was conducted. In previous years the project has also included online surveys of teachers and Boards of Trustees Chairpersons (2010, 2011, and 2012), teachers' responses to assessment scenarios designed to collect information about teachers' judgments in relation to the standards (2011 and 2012), and judgments from the PaCT mathematics national trial (2013).

Overall teacher judgments

The OTJ, as a judgment of each student's achievement in relation to the National Standards, is central to the implementation of the standards initiative overall. The information OTJs provide is reported to parents, families and whānau and to Boards of Trustees. It is also used by schools to tailor teaching programmes and target students for intervention. For these programmes and interventions to successfully raise student achievement, OTJs need to be dependable.

Generally, it was more common for schools to moderate writing OTJs than it was for them to carry out moderation in reading or mathematics. On average 84% of schools used formal processes to moderate writing OTJs from 2010 to 2014, while an average of 62% of schools used formal processes to moderate reading and mathematics OTJs in this period. There were small overall increases in the proportions of schools using formal processes to moderate OTJs during the first five years of implementation. In reading this proportion rose 5% from 2010 to 2014, and similar sized increases were seen in writing (3% increase) and mathematics (8% increase). Principals reported that a variety of reference points for student achievement were used in moderation discussions at their school. In 2014, all principals noted that the National Standards themselves were used for this purpose, while the majority of principals (88%) noted that learning progressions such as the literacy learning progressions or the Number Framework were used. In both 2013 and 2014, just over half of the principals (51%) indicated that school-developed resources such as descriptions of performance or annotated work samples were used. The extent to which these resources accurately describe student capability in relation to the National Standards is unknown and if there is variation in the criteria developed by schools this may be an element which contributes to any inconsistencies in judgments between schools.

Over its duration, this project has collected a variety of evidence regarding the dependability of OTJs. The strongest evidence is found in the substantial variation by school type of the OTJs of students in Years 7 and 8 reported in

relation to the 2012, 2013, and 2014 data collection. For example, 79% of Year 8 students at full primary schools were rated 'at' or 'above' the mathematics standards in 2014 compared with 67% of Year 8 students at intermediate schools. The low levels of agreement between mathematics OTJs made using schools' regular processes, and mathematics ratings generated from teachers' judgments in the PaCT mathematics national trial[1] in 2013 also provided strong evidence that OTJs lack dependability. Overall, 40% of school OTJs were in agreement with PaCT mathematics national trial ratings. Substantial variation has also been observed in the OTJs of individual students from 2011 to 2014, and considerable variability was observed in the accuracy of teachers' ratings in relation to the writing and mathematics standards in the assessment scenarios in the 2011 and 2012 data collection. In 2013 and 2014, principals' perceptions provided another source of evidence that casts doubt on the dependability of OTJs.

Considered together, this body of evidence strongly suggests that OTJs lack dependability, which is problematic as OTJs are a central element of the National Standards system. It should be noted that there is no suggestion that all OTJs are inaccurate, but evidence indicates that a reasonable proportion may be. While the trends described above support the view that OTJs lack dependability, it is unsurprising that these consistency issues are present, given the recentness of the initiative and the ongoing development of tools to support teachers to make judgments in relation to the National Standards.

Reporting to parents, families, and whānau

Clear reporting to parents, families and whānau is a key element of the National Standards initiative. The intention is that families are well informed about their children's learning and, therefore, better able to support this in the home.

Findings indicate that increasing proportions of schools reported National Standards information to parents, families, and whānau from 2010 to 2014. The proportion of end-of-year reports that referred directly to the National Standards increased over time (from 79% in 2010 to 97% in 2014), although overall the proportion of reports that sufficiently described student achievement in relation to the National Standards did not increase substantially in this period (60% in 2010 and 65% in 2013). Small proportions of reports (up to 18%) included information about students' progress in relation to the National Standards in reading, writing, or mathematics from 2010 to 2014. Results suggest the clarity of National Standards reports has been reasonably consistent, although concerningly low, over the first five years of implementation, with 40 to 50% of reports rated as clear from 2010 to 2014.

Student achievement targets

OTJs are reported to Boards of Trustees and used to inform annual student achievement targets, which guide decisions about the teaching support individual students receive.

Evidence from the project indicates that overall, increasing proportions of schools included targets in their charters that addressed student achievement in relation to the National Standards (75% in 2011 and 90% in 2014). There was, however, a small decline in this proportion from 2013 to 2014 (from 95% to 90%). National Standards achievement targets were also increasingly differentiated to accelerate the progress of specific groups of students as implementation progressed. For example, 65% of National Standards reading targets were differentiated in 2012 and this increased to 88% in 2014. In general, year level was the most common focus for differentiated National Standards targets. Between 43% and 60% of National Standards reading, writing, and mathematics targets were differentiated by year level from 2012 to 2014. A focus on Māori students was also reasonably common, with 26% to 50% of targets differentiated on

[1] The PaCT is an online tool that was developed by the Ministry of Education to improve the reliability and consistency of judgments over time. The mathematics national trial was held as part of its development in 2013. The PaCT became available to all schools in 2015.

this basis. Smaller proportions of National Standards targets focused on students by gender (12% to 35%), Pasifika students (6% to 23%), and students with special education needs (1% to 10%).

Results indicate that the majority of schools used baseline data to inform their National Standards targets (over 90% from 2010 to 2014), and focused targets on students who were 'below' or 'well below' the standards (over 80% from 2010 to 2014). There was, however, a notable decrease in the proportion of schools that considered all year levels when setting targets (from 83% in 2012 to 70% in 2014).

Schools' use of National Standards data

It is intended that schools will use National Standards data to inform the provision of targeted teaching interventions to students, with the ultimate aim of improving student achievement.

Results indicate that, overall, the proportion of schools that collated National Standards achievement data increased from 2011 to 2014 (in mathematics this was from 76% to 92%). The majority of schools also appear to be systematically tracking the progress of individual students in relation to the National Standards (72% of schools tracked mathematics achievement from the end of 2013 to the end of 2014).

Evidence suggests that the majority of schools provided interventions to students rated 'below' the standards within the classroom programme from 2012 to 2014. For example, just over 70% of schools provided such reading interventions in these years. Similarly, most schools provided reading interventions to students rated 'well below' in addition to the classroom programme, and this proportion increased over time, from 78% in 2012, to 90% in 2014. In contrast, fewer schools provided writing and mathematics interventions additional to the classroom programme to students rated 'well below' the standards, and this difference can largely be attributed to reading recovery, an intervention that is well embedded in schools' practices.

Results suggest that teaching interventions were delivered in a variety of ways. For example, in 2014 over 62% of principals reported that within the classroom, regular classroom teaching programmes were differentiated to meet students' learning needs (62% in reading, 76% in writing, 68% in mathematics). Principals noted that support external to the classroom programme was provided in 2014 both by qualified teachers (74% in reading, 57% in writing, 61% in mathematics) and teacher aides (41% in reading, 29% in writing and 32% in mathematics).

National Standards achievement data, 2010 to 2014

There have been small increases in the proportions of students rated 'at' or 'above' the Reading, Writing and Mathematics Standards over the first five years of implementation. For example, 64% of students were rated 'at' or 'above' the Writing Standards in 2010, and this increased to 70% in 2014. While these increases are reasonably small, they represent large shifts in the achievement of the population of students. Increases (of at least 10%) in the proportions of students rated 'at' or 'above' were also observed for particular demographic sub-groups: Pasifika students, Year 7 and 8 students, and students at low decile schools. These increases must be interpreted with caution; they represent changes in teachers' judgments of student achievement over time .

Given the magnitude of the improvements in achievement that are suggested by the OTJ data, the evidence that suggests OTJs lack dependability, and evidence about patterns of student achievement in New Zealand from international studies, the OTJ data cannot be taken as evidence that student achievement is improving over time.

Summary

Overall, the project has collected a wide variety of information, from a representative sample of schools, over the first five years of the implementation of National Standards. The data collected has shown reasonably consistent patterns over time which can be taken as an indication that schools have developed ways of the working with the National Standards that are now embedded in their regular practices. It seems likely that these practices will continue uninterrupted for as long as the environment within which schools operate remains the same.

2. Methodology

The National Standards School Sample Monitoring and Evaluation Project provides information about the implementation of National Standards and has been operating since 2010 when the standards were first introduced. It was initially designed as a three-year project. It was extended to include 2013 and 2014 and to continue monitoring key elements of the implementation of National Standards.

This is the final report from the project. It describes information collected in 2014, and outlines trends that have been observed over the five years of implementation to date.

2.1 Monitoring and evaluation questions

The study has two purposes:

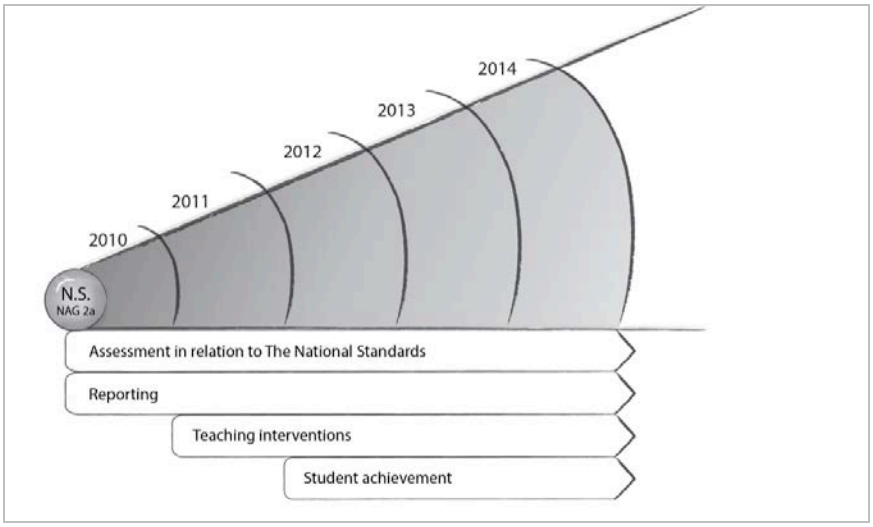
1. To describe the implementation of National Standards within schools

2. To monitor and systematically evaluate the effect of National Standards on students, teachers, schools, and parents, families, and whānau.

The descriptive component of the study is focused around seven open-ended monitoring questions. The evaluative component is focused on the extent to which National Standards are operating as intended, and is based on five statements that describe the intended outcomes of National Standards. Each of these statements has related performance criteria.

Because the effects of National Standards in schools develop over successive years of implementation, the focus of the study has changed over time. Initially, changes in assessment practices were required by the alteration of National Administration Guideline 2A: teachers needed to make overall teacher judgments (OTJs) in relation to the National Standards. Following on from this, these judgments are reported to parents, families and whānau, and Boards of Trustees. Collated information can then be used as the basis on which students receive targeted teaching interventions. The final anticipated effect is a resultant improvement in student achievement. Figure 1 illustrates this series of effects, and identifies the expanding focus of the project. The bands at the bottom of the figure indicate the year in which each effect was first reported.

Figure 1: Anticipated series of effects in schools as a result of the introduction of National Standards



Because the focus of the project has expanded each year, longitudinal information is available for some effects. For example, information about OTJs has been collected from 2010 to 2014, while information is available from 2011 to 2014 on the ways in which schools identify students for intervention.

Table 1 outlines the monitoring and evaluation questions, along with the associated statements of intent. This report is structured around these questions, and Table 1 also shows the chapter in which each of these questions is addressed. The relevant performance criteria are presented at the start of each chapter.

Table 1: Monitoring and evaluation questions and statements of intent

Statements of intent	Monitoring and evaluation questions	Report chapter
Teachers make defensible, trustworthy judgments against the National Standards.	What processes are used to moderate OTJs?	Chapter 3
	How dependable and consistent are teachers' overall judgments?	Chapter 4
Schools use National Standards assessment information to communicate clearly with parents, families, and whānau about their child's achievement and progress.	How do schools use information from National Standards to report to and communicate with parents?	Chapter 5
National Standards provides clear information about student achievement for Boards of Trustees that can be used in decision-making and resource allocation processes.	In what ways is information from National Standards used by schools to set achievement targets?	Chapter 6
National Standards achievement information is used by teachers and schools to monitor student progress and achievement against the Curriculum. As a result of this, students requiring teaching interventions will be identified, and interventions will be provided.	In what ways is information from National Standards used by schools to describe student achievement and progress?	Chapter 7
	In what ways is information from National Standards used to provide targeted teaching interventions?	
Student achievement will improve.	What changes in student achievement in reading, writing, and mathematics, as indicated by OTJs, are observed as National Standards are introduced?	Chapter 8

2.2 Sample

The sample included 95 schools. Seventy-three of these schools have participated in the project since it began in 2010. The remaining 22 schools participated for the first time in 2013 when the sample was replenished for the extension of the project.

A stratified sampling procedure was used, both to select the initial sample in 2010, and to select schools that were recruited in 2013. The sampling frame included all English medium, full primary, contributing, and intermediate state schools, and is stratified according to three school characteristics, with three groups within each characteristic:

1. School decile: one to three, four to seven, eight to ten.
2. School type: full primary, contributing, and intermediate.
3. Regions: Auckland, North Island excluding Auckland, and South Island.

Table 2, Table 3, and Table 4 show the demographic characteristics of the 95 schools in the sample, and compare these to national data. The national information was sourced from the Ministry of Education's administrative data. Note that throughout the report some percentages do not sum to 100 due to rounding error.

Table 2: School sample by school decile

Decile	Sample	National
1 to 3	23%	27%
4 to 7	44%	41%
8 to 10	33%	32%

Table 3: School sample by school type

Years	Sample	National
1 to 8	48%	45%
1 to 6	33%	34%
7 to 8	19%	21%

Table 4: School sample by region

Region	Sample	National
Auckland	27%	23%
North Island (excluding Auckland)	43%	48%
South Island	29%	29%

As shown in Tables 2 to 4 the sample can be considered representative of the national population of schools in terms of the three stratifying characteristics. The sample composition matches that of the national population within four percent by school decile, within three percent by school type, and within five percent by region.

2.3 Methods and participants

Four types of data were collected:

1. School documentation including copies of student achievement targets and analysis of variance reports.
2. OTJs, collected electronically.
3. Students' end-of-year reports.
4. Online survey of principals.

School documentation was collected mid-year. Principals received an email request on 21 July asking them to forward copies of their school's 2013 analysis of variance report, and the section of their school's 2014 charter that included school-wide targets for student achievement in relation to the National Standards. Principals who had not responded by the due date were sent reminder emails and contacted by phone.

All other data was collected at the end of the year. Early in November 2014 all principals were sent an email request asking them to:

a. Complete an online survey, accessible from a given web-link.
b. Provide the OTJs in reading, writing, and mathematics for every student in their school.
c. Provide copies of a sample of students' end-of-year reports. Schools were asked to send a copy of the report for the student in each year level whose birthday was closest to 1 January.

It was initially requested that all data be provided by 5 December, and where OTJs would not be ready by this date schools were asked to provide an alternative date. Principals were sent two email reminders during the data collection period, on 24 November and 1 December. A follow up email was sent on 8 December, and advised principals that data collection had been extended to 24 December 2014. Follow-up phone calls to those schools that had not provided OTJs, or an alternate date for OTJs, began on 9 December.

2.3.1 School documentation

Eighty-nine schools provided copies of their 2014 student achievement targets in relation to the National Standards and their 2013 analysis of variance report. This is a response rate of 92% from the 97 schools in the sample mid-year.[2] Four researchers with expertise in the National Standards, literacy, numeracy and assessment carried out the analysis. Four sets of documents were analysed collaboratively to establish consistency of coding, with the remainder of the documents coded independently by one of the researchers.

The performance criteria were developed in 2011 to address the statement of intent from the methodology and align with the Ministry of Education's requirements[3] and quality indicators for targets in relation to the National Standards. In particular, the School Sample criteria included five of the six SMACAT criteria (specific, measurable, achievable, challenging, and appropriate) used by the Ministry. In accordance with Ministry requirements the criteria also included a focus on the differentiation of targets to accelerate progress and achievement for specific groups of students, and the use of data from analysis of variance reports. The criteria were revised in 2012 to accommodate advice from the Ministry to schools late 2011 and early 2012.[4] A copy of the criteria is included as Appendix A.

2.3.2 Overall teacher judgments (student data)

Seventy-two schools provided OTJs in reading, writing, and mathematics for all students in their school. This is a response rate of 76% of the 95 schools that were in the sample at the end of the year. In total there were 15,937 students for whom at least one OTJ was collected. Tables 5 to 7 provide the demographic data for these students, along with national data for comparison.[5]

Table 5: Students for whom OTJs were provided, by year level and gender

Year level	Student gender			
	National (%)		Sample (%)	
	Male	Female	Male	Female
Year 1	51.7	48.3	53.0	47.0
Year 2	51.3	48.7	52.5	47.5
Year 3	51.4	48.6	51.3	48.7
Year 4	50.9	49.1	51.5	48.5
Year 5	51.4	48.6	50.5	49.5
Year 6	51.2	48.8	50.5	49.5
Year 7	51.6	48.4	48.8	51.2
Year 8	51.1	48.9	48.4	51.6
All years (%)	51.3	48.7	50.4	49.6
All years (n)	248,371	235,472	8,029	7,908

[2] The sample for the mid-year data collection was slightly larger than that for the end of the year data collection because two schools withdrew from the project during the end of year data collection.

[3] As outlined in the compliance rubric which is included in the *National Standards Guidance Pack* used by Ministry of Education staff when responding to school charters in 2011.

[4] *Strengthening Targets: Resource for Boards*, October 2011; *Annual Reports: Guidance for Reporting on Student Progress and Achievement*, October 2011; *Annual Reporting e-Update: March 2012*.

[5] National data obtained from www.educationcounts.govt.nz/

Table 6: Students for whom OTJs were provided, by year level and ethnicity

Year level	Student Ethnicity									
	National[6] (%)					Sample (%)				
	NZE	Māori	Pasifika	Asian	Other	NZE	Māori	Pasifika	Asian	Other
Year 1	50.4	25.7	10.3	10.7	2.8	49.7	21.1	13.9	8.7	6.6
Year 2	51.5	25.3	10.1	10.4	2.7	52.0	19.2	13.1	8.9	6.8
Year 3	52.3	25.0	9.9	10.2	2.6	53.5	20.5	10.7	8.8	6.5
Year 4	52.5	25.0	10.0	9.9	2.7	53.5	18.3	12.3	9.0	6.8
Year 5	53.3	24.3	9.8	10.2	2.5	51.7	17.9	12.5	10.1	7.8
Year 6	53.4	23.8	10.1	9.9	2.7	52.4	17.2	11.0	10.9	8.5
Year 7	54.0	23.5	10.0	9.7	2.8	57.0	20.3	9.2	6.1	7.3
Year 8	54.5	23.4	10.1	9.0	3.0	58.9	19.6	8.9	5.0	7.6
All years (%)	52.7	24.5	10.0	10.0	2.7	54.4	19.4	11.0	7.9	7.3
All years (n)[7]	255,125	118,503	48,562	48,432	13,221	9,999	3,568	2,031	1,458	1,339

Table 7: Students for whom OTJs were provided, by year level and school decile

Year level	School decile					
	National[8] (%)			Sample (%)		
	Decile 1-3	Decile 4-7	Decile 8-10	Decile 1-3	Decile 4-7	Decile 8-10
Year 1	26.6	35.0	38.4	28.0	42.6	29.3
Year 2	26.1	35.0	38.8	25.1	44.8	30.1
Year 3	25.9	34.3	39.8	26.0	42.9	31.0
Year 4	25.5	34.2	40.2	26.2	41.3	32.4
Year 5	25.5	34.0	40.5	24.9	43.9	31.2
Year 6	25.2	33.6	41.1	22.1	43.9	34.0
Year 7	20.9	39.2	39.8	9.7	68.3	22.0
Year 8	20.9	40.6	38.4	10.0	66.3	23.7
All years (%)	24.6	35.8	39.6	19.2	52.9	28.0
All years (n)	118,410	172,455	190,897	3,056	8,425	4,456

Tables 5 to 7 show there are some differences between the demographic characteristics of the sample and the national population. For example, students in medium decile schools are over-represented, particularly at Years 7 and 8, with a corresponding under-representation of students in high decile schools. Māori students in Years 1 to 6 are slightly under-represented. Despite these differences, the sample can be considered to be generally representative of the national population.

2.3.3 End-of-year student reports

Seventy-three schools provided copies of students' end-of-year reports to parents, a response rate of 77%. A total of 429 reports were received. Table 8 shows the year levels of the reports collected.

6 Excluding full-fee paying students

7 *n* denotes the total numbers of ethnic classifications. These are larger than the total numbers of students because some students are classified as more than one ethnicity.

8 2,081 students were recorded as "decile not applicable or unknown" on www.educationcounts.govt.nz/

Table 8: End-of-year reports

Year Level	Number of reports	%
1	60	14%
2	58	14%
3	55	13%
4	52	12%
5	56	13%
6	54	13%
7	46	11%
8	48	11%
Total	429	100%

As seen in Table 8 the sample of end-of-year reports has a reasonably even spread across year levels.

The criteria for report analysis were the same as those used in previous years and are included as Appendix B. Two raters coded the 429 reports. Because these two raters had worked together on all four previous data sets with a high inter-rater reliability,[9] small samples of reports were coded independently to ensure reliability remained high. Eighteen reports were initially coded, with a consistency of 81% between the two raters. A discussion took place to clarify coding procedures, and a second sample of 18 reports was coded independently with a consistency of 97%. This indicated consistency was high so the remainder of the analysis was carried out.

2.3.4 Online principal survey

An online survey for principals was developed and administered using Survey Monkey. Copies are included as Appendix D. Analysis involved data collation and the identification of common themes. Those themes identified by 5% or more of participants have been reported. Findings have been compared to results from previous years where possible, and trends are reported.

Seventy-six principals responded to the survey, a response rate of 80%. Seventy-three respondents answered all questions in the survey, a completion rate of 96%.

[9] See Appendix C for full inter-rater reliability statistics.

3. Moderating OTJs

Moderation processes are aimed at improving the consistency of OTJs to ensure that assessment decisions are comparable when made by different teachers, and at different times. Clearly, moderation processes have a vital role to play in ensuring the quality of National Standards data. In order to moderate OTJs teachers participate in professional discussions amongst staff within a school and, where appropriate, across a cluster of schools. Teachers can justify their OTJ in terms of the range and quality of the evidence and the process used to determine the OTJ.[10]

This chapter uses evidence from an online survey of principals to describe and evaluate the way OTJs were moderated in 2014. Previous findings from the project suggest that increasing proportions of schools moderated OTJs from 2010 to 2013, and that the use of formal moderation processes became more widespread in this period. In general, the quality of schools' processes for moderating OTJs also improved in this time. Table 9 provides the monitoring and evaluation question and performance criteria that are used in this chapter.

Table 9: Monitoring and evaluation questions and criteria

Intended outcome: Teachers make defensible, trustworthy judgments against the National Standards.		
Monitoring and Evaluation Questions	Performance criteria	Sources of evidence
What processes are used to moderate OTJs?	Schools use processes and systems to ensure OTJs are consistent.	Principal surveys
	Moderation processes are effective and efficient.	

3.1 Evaluative criteria

3.1.1 Schools use processes and systems to ensure OTJs are consistent

Principals were asked to identify the nature of the discussions that teachers at their school were involved in to moderate OTJs in 2014. Table 10 summarises these results.

Table 10: Percentages of principals that report teachers being involved in moderation discussions in 2014

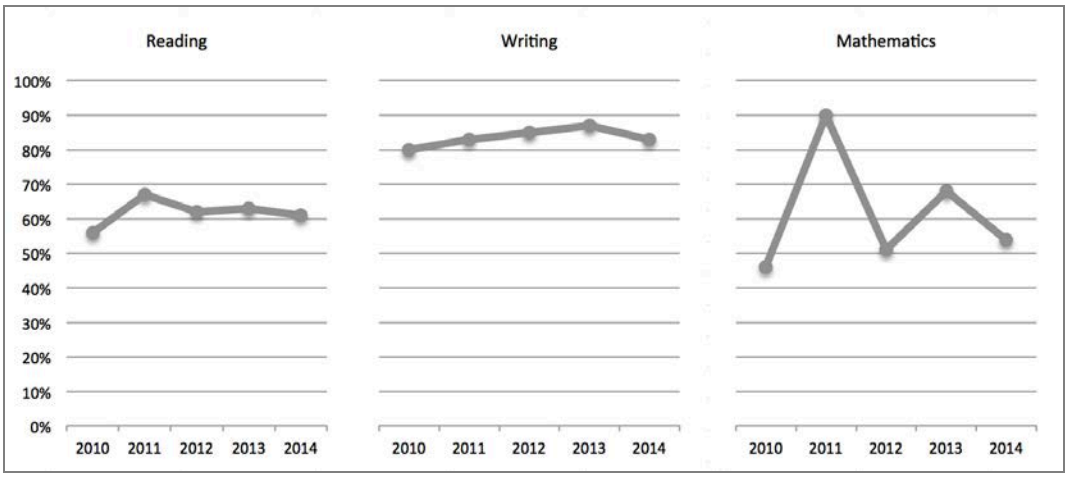
Learning Area	Systematic processes and informal discussions	Systematic processes only	Informal discussions only	No moderation	Unsure
Reading	27%	34%	23%	14%	1%
Writing	34%	49%	16%	0%	1%
Mathematics	20%	34%	26%	17%	3%

Results indicate that in 2014 the majority of schools used systematic processes to moderate reading (61% of schools), writing (83% of schools), and mathematics OTJs (54% of schools). Informal moderation discussions were also common, with 50% of schools moderating reading and writing OTJs informally, and 46% of schools moderating mathematics OTJs informally. Small proportions of schools did not carry out any moderation in reading (14%) and mathematics (17%).

The findings from 2014 are very similar to those from previous years. Figure 2 shows the proportion of schools moderating OTJs in each area from 2010 to 2014.

[10] See for example, National Standards Fact sheet 5: Moderation. Accessed from http://nzcurriculum.tki.org.nz/National-Standards/Key-information/Fact-sheets/Moderation, 5 May 2015.

Figure 2: Proportion of schools using processes and systems to ensure OTJs are consistent, 2010 - 2014



There were small overall increases in the proportions of schools using formal processes to moderate OTJs over the first five years of implementation. The proportion of schools using formal processes to moderate reading OTJs rose 5% from 2010 to 2014, and similar sized increases were seen in writing (3% increase) and mathematics (8% increase) in this period.

Generally, moderation was more common in writing, than in reading or mathematics. Over 80% of schools used formal processes to moderate writing OTJs from 2010 to 2014, while, with the exception of one instance, less than 70% of schools used formal processes to moderate reading and mathematics OTJs in this period.

There was considerable variation in the proportion of schools using formal processes to moderate mathematics OTJs from 2010 to 2014. For example, 46% of schools formally moderated mathematics OTJs in 2010 and this increased sharply to 90% in 2011. This suggests schools chose to moderate mathematics OTJs in some years but not in others, although reasons for this are unknown.

3.1.2 Moderation processes are effective and efficient

Principals were asked to describe the way in which OTJs were selected for moderation in reading, writing and mathematics. Some of these methods can be considered more effective than others. For the purposes of this evaluation, focusing moderation discussion on the OTJs near the boundaries between the levels of the standards is considered effective as it focuses teachers' attention on the OTJs that are likely to involve the most difficult decisions. Table 11 contains these results. Note that responses in each area sum to more than 100, as some schools use more than one criterion to select OTJs for moderation.

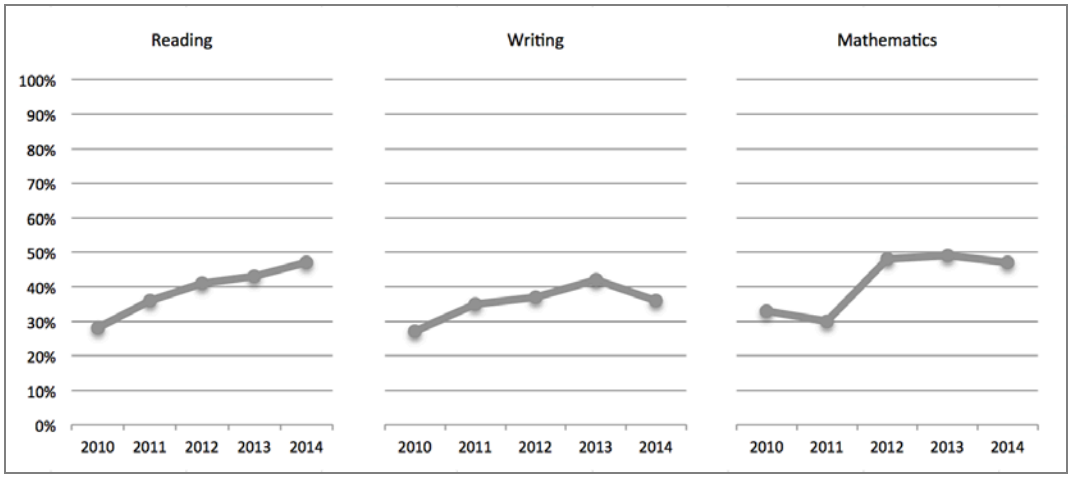
Table 11: Processes used by schools to select OTJs for moderation in 2014

Selection criteria	Reading	Writing	Mathematics
OTJs near the boundaries between the levels of the standards	47%	36%	47%
The OTJs with inconsistent assessment evidence	25%	14%	27%
A random selection of OTJs	35%	41%	31%
All OTJs	9%	16%	10%
Other	4%	3%	6%

Results suggest that approximately one-third to one-half of schools focused on the OTJs near the boundaries between the levels of the standards in moderation discussions. Forty-seven percent of schools used this process in reading and mathematics, while 36% report using this process in writing.

Figure 3 shows the 2014 results for this criterion alongside those from previous years.

Figure 3: Moderation processes are effective[11], 2010 - 2014



In general, there was an increase in the proportion of schools that focused moderation discussions on the OTJs near the boundaries from 2010 to 2014. For example there was a 19% increase in the proportion of school using this process to select reading OTJs for moderation from 2010 to 2014 with smaller increases in writing (9% increase) and mathematics (14% increase) in this period.

In general, the proportion of schools using this effective process was reasonably low throughout the first five years of implementation. Less than 50% of principals noted they used this process for selecting reading, writing, or mathematics OTJs for moderation in any year.

If teachers moderate those judgments that are near the boundaries between the levels of the standards, it is reasonable to expect that a minimum of six judgments per class will be moderated. That is, a teacher could be expected to moderate two students to differentiate between students at each boundary ('above' and 'at', 'at' and 'below', and 'below' and 'well below'). Assuming class sizes that vary from 15 to 30 students, these six OTJs represent 20-39% of the OTJs, so moderating 20-39% can be considered efficient on this basis. Principals were asked to indicate the proportion of OTJs that were moderated and these results are summarised in Table 12.

Table 12: Proportions of OTJs that were moderated in 2014

Percentages of OTJs moderated	Percentages of schools		
	Reading	Writing	Mathematics
0	17%	0%	23%
1 to 19	33%	30%	33%
20 to 39	26%	36%	26%
40 to 99	16%	19%	10%
100	9%	16%	9%

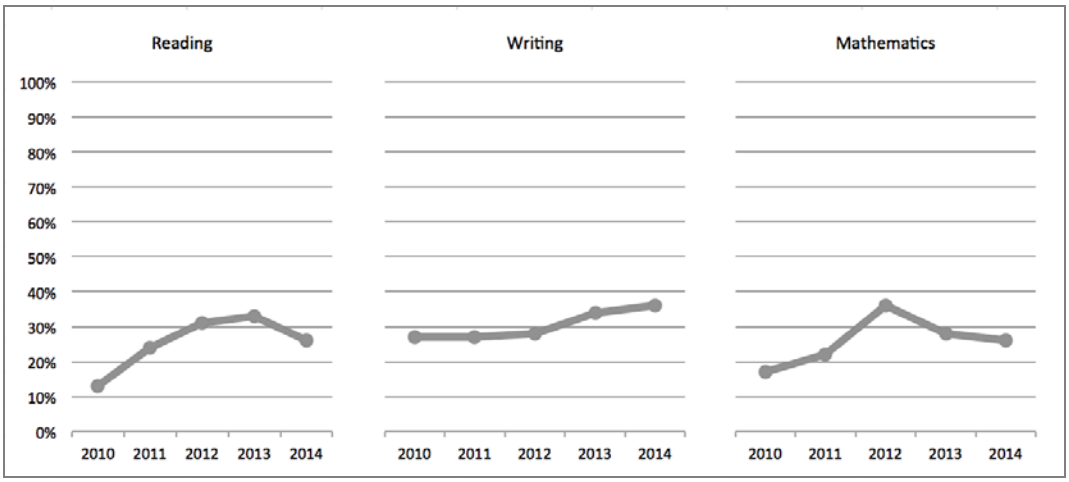
Up to one-third of schools moderated between 20 and 39% of OTJs in 2014, a proportion that was judged to be efficient. Twenty-six percent of schools moderated this proportion of reading and mathematics OTJs, while 36% moderated this proportion of writing OTJs. In general, moderation was more common in writing. Thirty-five percent of

[11] Selecting students near the boundaries between the levels of the standards for moderation.

schools reported moderating at least 40% of writing OTJs, while 25% reported moderating this proportion of reading OTJs and 19% of schools reported moderating this proportion of mathematics OTJs.

Figure 4 shows results for this criterion from 2010 to 2014.

Figure 4: Moderation processes are efficient, 2010 - 2014[12]



Over the first five years of implementation the proportion of schools that moderated a proportion of OTJs that were judged to be efficient was reasonably low. No greater than 40% of schools moderated this proportion of reading, writing, or mathematics OTJs in any year. There were small increases in these proportions however, with the proportion of schools that moderated a proportion of reading OTJs that were judged efficient rising 13% in this period. The equivalent increases in writing and mathematics were both 9%.

3.2 Descriptive information

The principal survey asked respondents whether the focus of moderation discussions was the OTJ as a whole, or aspects of the standards that comprise an OTJ. Sixty-three percent of principals indicated that moderation discussions in 2014 were focused on the OTJ as a whole, while 37% indicated the focus was on aspects of the standards. This represents a 9% increase from 2013. Principals were invited to comment on this focus and responses contained one common theme. Six percent of respondents commented on the role that standardised assessment results play in moderating OTJs.

> *Teachers met to look at the grading of e-asTTLe assessments as a guide to curriculum levels and National Standards.*
>
> *We use standardised tests calibrated into respective OTJ levels to ascertain standard. Principal also moderates OTJs randomly.*

Principals were asked to identify the ways in which student capability was described in moderation discussions. Almost all principals reported the use of student work samples (100%), standardised assessment results such PAT or e-asTTle (93%), and teachers' observations of student capability (99%) at their school in 2014. These results are very similar to those from 2013.

All principals indicated that the National Standards were used as reference points for student achievement in moderation discussions in 2014. This was an increase from 2013 when 98% of principals indicated this was the case, and the first year that all principals noted that the standards were used in this way. Results suggest most schools used

[12] 20% to 39% of OTJs moderated in each area.

both the National Standards books and the National Standards illustrations (71%), while some schools used just the National Standards books (26%), and a minority of schools used just the illustrations (3%). Most principals also reported learning progressions such as the Literacy Learning Progressions or the Number Framework (86%) and the New Zealand Curriculum (70%) being used as reference points for student achievement in moderation discussions in 2014. Just over half the principals surveyed (51%) indicated school-developed resources such as descriptions of performance or annotated work samples were used.

> *[We use] our own exemplars that we have made up to meet the NS criteria. As we are an area school we know what work at Level 6 looks like and we work down from there.*
>
> *[We use] school-developed matrices.*

This is unchanged from the previous year's results, when 51% of principals reported the use of school-developed resources in moderation discussions. The substantial proportion of schools using school-developed resources to moderate OTJs may be of concern. Research indicates that the reliability of standards-referenced assessments is maximised where clearly defined and disseminated frames of reference are used to make the required judgments[13]. The extent to which these school-developed resources accurately describe student capability in relation to the National Standards is unknown. It is possible that the variation in criteria developed by different schools may contribute to inconsistencies in the judgments being made between schools.

Principals were asked to describe the content of moderation discussions at their school in 2014. Forty-one percent of principals explained moderation as an evaluation discussion among teachers, informed by assessment evidence. This is an increase from 2013, when 30% of principals provided such a description.

> *Each teacher brings samples of student work which they think are just within each category. Pair off to discuss where each person would put them. Combine group together again to discuss differences in judgements.*
>
> *Teacher presents OTJ and evidence and then discussion held. At times more evidence is asked for.*
>
> *From each year level we look at children's results that we are not sure of. Each class provides three or four students' work to moderate against standards, literacy progressions, NZC etc. We do this as a whole school activity as there are only three teachers.*

When describing the content of moderation discussion in 2014, 21% of principals focused exclusively on sources of assessment information, and didn't include the notion of comparing this assessment information to the National Standards in order to make a judgment. This is a decrease from 2013 when 30% of principals' descriptions were of this nature.

> *Analysis of work samples; classroom observations; student comments.*
>
> *e-asTTle is usually the starting point and then work samples and teacher observations added. In reading the ability to read at that level across the curriculum and writing senior students' blogs also included.*

Other common themes in principals' descriptions of 2014 moderation discussions were the structure of discussions within the school (17% of respondents), and the selection of OTJs for moderation (9% of respondents).

> *Student samples of work/recordings of reading. Teachers first moderate individually, then in syndicates and thereafter whole staff.*

---

[13] Wyatt-Smith, C., & Gunn, S. (2009). Towards Theorising Assessment as Critical Inquiry. In C. Wyatt-Smith, & J. Joy Cumming (Eds.), *Educational Assessment in the 21st Century: Connecting Theory and Practice.* Dordrecht, The Netherlands: Springer International.

Ongoing throughout the year, discussing students who are close year/level boundary changes and those near the top/bottom.

The survey asked principals to identify the ways in which teachers were grouped for moderation discussions. Table 13 summarises responses. Note that some schools grouped teachers in more than one way so columns sum to more than 100%.

Table 13: Teacher groupings for 2014 moderation discussions

Grouping	Reading	Writing	Mathematics
All teachers in the school	35%	57%	29%
Small groups of teachers	72%	70%	94%
Other	7%	3%	10%

Results suggest that the majority of schools placed teachers in small groups for moderation discussions in reading (72%), writing (70%), and mathematics (94%) in 2014. The majority of schools also moderated writing OTJs as a whole staff (57%), with whole school moderation less common in reading (35%) and mathematics (29%). Small proportions of schools noted that other formats were used for moderation. These included school leadership playing a role in moderation and cross-moderation between syndicates.

Findings indicate that grouping teachers for moderation discussions was more common in larger schools than in smaller schools in 2014. For example, 39% of schools with fewer than 150 students on the roll conducted reading moderation in small groups, while 77% of schools with more than 150 students on the roll did so. This is consistent with results from previous years.

Thirty-one percent of principals noted that teachers at their school had met with teachers from another school to moderate OTJs in at least one area in 2014. Moderation between schools was more common in writing (31% of schools) than in reading or mathematics (both 11% of schools). These results are very consistent with those from previous years.

Principals were invited to comment on the moderation of OTJs. The one common theme in these responses was that moderation is essential to ensure OTJs are consistent (7% of respondents).

Consistency and systematic process are vital.

Moderating is important for consistency … as a small school, we do also moderate 'up and down' levels so this also helps us.

Moderation between schools is extremely important.

4. The dependability of OTJs

The OTJ is central to the National Standards initiative. It is OTJs that are reported to parents and Boards of Trustees, and it is on the basis of OTJs that students' achievement in relation to National Standards is tracked and students are identified for additional teaching support.[14] "As our National Standards system relies on OTJs it is critical that these are dependable."[15]

A dependable assessment is defined as one that has both high validity and high reliability.[16] Validity concerns whether assessment results can be used for their intended purpose; the extent to which the assessment measures what it is intended to measure. Reliability concerns the consistency of an assessment; the "extent to which the results from the same assessment can be repeated across time and situations."[17]

This chapter builds on previous evidence concerning the dependability of OTJs. Earlier reports from the project have raised concerns about OTJ dependability[18], drawing on several sources of information. Three sources of evidence are described here, all of which have been previously reported: a comparison of the OTJs of Year 7 and 8 students in full primary and intermediate schools, the consistency of students' OTJs over time, and principals' perspectives on the consistency of OTJs. The chapter concludes with a brief summary of all the project's evidence sources concerning the dependability of OTJs.

Table 14 outlines the monitoring and evaluation question and performance criterion addressed.

Table 14: Monitoring and evaluation questions and criterion

Intended outcome: Teachers make defensible, trustworthy judgments against the National Standards.		
Monitoring and Evaluation Question	Performance criterion	Sources of evidence
How dependable and consistent are teachers' overall judgments?	Teachers make dependable OTJs.	OTJ data Principal survey

4.1 Evidence from OTJ data

4.1.1 OTJs for students at Years 7 and 8

One source of information about the consistency of teachers' OTJs comes from examining ratings for students of the same year level, in different types of schools. Note that when students are described as 'rated' this refers to their teachers' overall judgments of their achievement in relation to the National Standards. For example, where students have been described as rated 'at' the standard, this indicates their teacher has given them an OTJ of 'at' that standard. Tables 15 to 17 show the 2014 OTJs for all Year 7 and 8 students in the sample, differentiated by school type. Note that school type "Year 1-8" includes both full primary schools and composite schools with students in years 1 to 15, and the school type "Year 7-8" includes both intermediate schools and secondary schools with students in years 7 to 15. For

[14] Principal survey responses indicate that 89% of schools used National Standards data to inform the provision of targeted teaching interventions in 2014. Section 7.1 provides further information.

[15] http://assessment.tki.org.nz/Progress-and-Consistency-Tool/PaCT-the-big-picture/Dependable-judgments. Retrieved 7 May 2015.

[16] National Standards Fact sheet 7: Overall teacher judgment. Accessed from http://nzcurriculum.tki.org.nz/National-Standards/Key-information/Fact-sheets/Overall-teacher-judgment, 11 May 2015.

[17] http://assessment.tki.org.nz/Glossary. Retrieved 14 May 2015.

[18] See for example Chapter 4, Ward and Thomas (2015). *National Standards: School Sample Monitoring and Evaluation Project, 2010-2013,* Chapter 3, Ward and Thomas (2013). *National Standards: School Sample Monitoring and Evaluation Project, 2010-2012,* and Chapter 5, Ward and Thomas (2012). *National Standards: School Sample Monitoring and Evaluation Project, 2011.* Reports available from http://www.educationcounts.govt.nz/.

convenience these categories are referred to in the text as full primary and intermediate schools respectively. Because the sample is representative it contains smaller numbers of students in years 7 and 8 in full primary schools, than in intermediate schools.

Table 15: 2014 reading OTJs for Year 7 and 8 students, differentiated by school type

Year Level	School type	n	Percentages of students rated			
			Well Below	Below	At	Above
7	Year 1-8	584	4.5	14.7	47.6	33.2
	Year 7-8	2,596	8.6	18.8	40.2	32.5
8	Year 1-8	542	3.7	11.6	53.1	31.5
	Year 7-8	2,643	6.5	15.5	45.2	32.8

Table 16: 2014 writing OTJs for Year 7 and 8 students, differentiated by school type

Year Level	School type	n	Percentages of students rated			
			Well Below	Below	At	Above
7	Year 1-8	583	6.9	22.3	49.6	21.3
	Year 7-8	2,597	10.9	28.1	44.1	16.9
8	Year 1-8	543	5.7	18.4	53.6	22.3
	Year 7-8	2,642	9.1	25.1	45.7	20.1

Table 17: 2014 mathematics OTJs for Year 7 and 8 students, differentiated by school type

Year Level	School type	n	Percentages of students rated			
			Well Below	Below	At	Above
7	Year 1-8	583	6.0	22.5	46.8	24.7
	Year 7-8	2,597	10.8	27.0	40.4	21.9
8	Year 1-8	543	4.8	15.8	56.5	22.8
	Year 7-8	2,642	7.7	25.8	43.1	23.4

The data in Tables 15 to 17 show that there is a marked difference between teachers' ratings of Year 7 and 8 students at full primary schools and those at intermediate schools. Higher proportions of Year 7 and 8 students in full primary schools were rated as 'at' or 'above' the standards than Year 7 and 8 students in intermediate schools. For example, in reading 81% of Year 7 students in full primary schools were rated 'at' or 'above' the standards, compared with 73% of Year 7 students in intermediate schools. Similarly, 76% of Year 8 students at full primary schools were rated 'at' or 'above' the standards in writing, compared with 66% of Year 8 students in intermediate schools.

Interestingly, the majority of these differences can be attributed to the achievement categories of 'at' and 'below'. There was a difference of up to 13 percentage points by school type in the 'at' category, and a corresponding difference of up to ten percentage points in the 'below' category. In comparison, there was up to five percentage points difference in the 'well below' category, and up to four percentage points difference in the 'above' category.

One explanation for these differences might be that Year 7 and 8 students in full primary schools achieve more highly than Year 7 and 8 students in intermediate schools. However, this is highly unlikely, especially given that there is no substantial difference between the decile distributions of the full primary and intermediate schools in the sample, and

that other large-scale studies show no difference in achievement by school type.[19] Another explanation, and a more likely one, is that teachers at intermediate schools and teachers at full primary schools do not judge consistently with one another. A possible reason for this is that full-primary and intermediate teachers' expectations of Year 7 and 8 students are different. The judgments of teachers at full primary schools may be more likely to be influenced by the earlier achievement and progress of students, whereas the judgments of intermediate teachers may be more likely to be anticipating the demands of secondary schooling.

The differences in the OTJs of Year 7 and 8 students at full primary and intermediate schools were observed in all three National Standards areas, and in all five years from 2010 to 2014. Figures 5 to 7 summarise the proportion of students rated 'at' or 'above' the reading, writing, and mathematics standards in each school type, over time.

Figure 5: Proportion of students rated 'at' or 'above' the reading standards in full primary and intermediate schools, 2010 - 2014

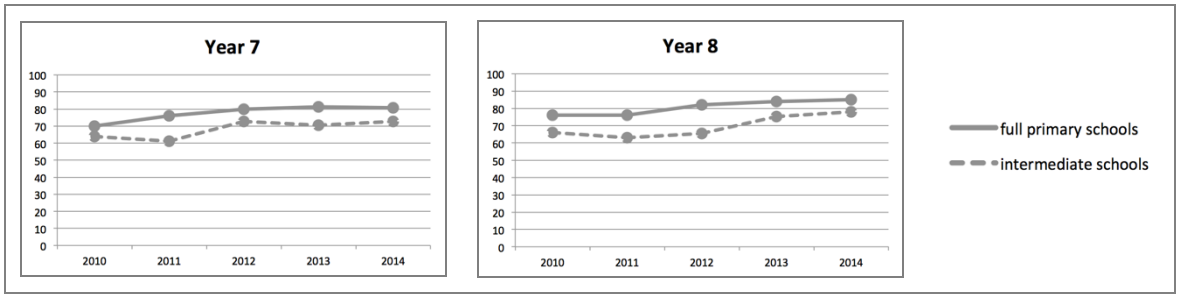


Figure 6: Proportion of students rated 'at' or 'above' the writing standards in full primary and intermediate schools, 2010 - 2014

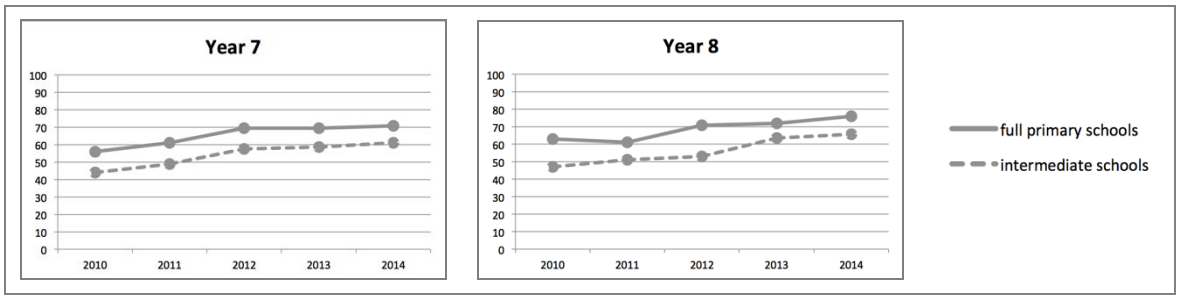
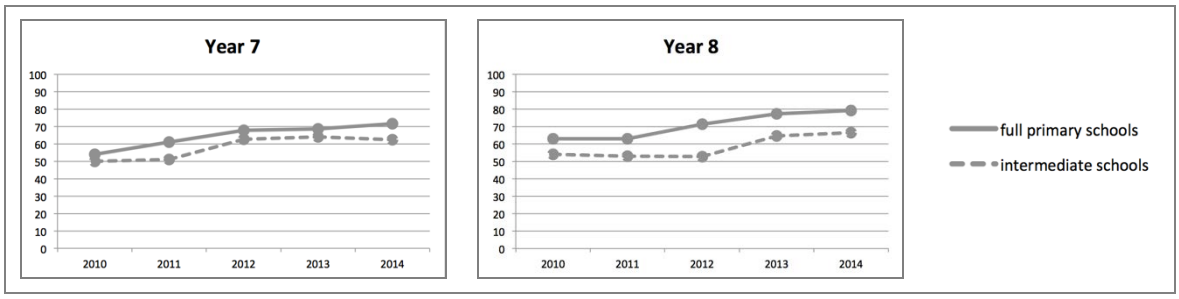


Figure 7: Proportion of students rated 'at' or 'above' the mathematics standards in full primary and intermediate schools, 2010 - 2014



[19] See for example: National Monitoring Study of Student Achievement (2013). *National Monitoring Study of Student Achievement, English: Writing 2012*. Wellington: Ministry of Education.
Crooks, T., Smith, J., & Flockton, L. (2010). *Mathematics Assessment Results 2009, National Education Monitoring Project* (Report No. 52). Wellington: Ministry of Education
Crooks, T., Smith, J., & Flockton, L. (2009). *Reading and Speaking Assessment Results 2008, National Education Monitoring Project* (Report No. 49). Wellington: Ministry of Education
Crooks, T., Flockton, L., & White, J. (2007). *Writing Assessment Results 2006, National Education Monitoring Project* (Report No. 41). Wellington: Ministry of Education

In every instance a greater proportion of Year 7 and 8 students in full primary schools were rated ‘at’ or ‘above’ each of the standards than Year 7 and 8 students in intermediate schools. For example, in relation to the Year 8 mathematics standard, these differences ranged from 9% (2010) to 19% (2012) over the first five years of implementation.

The proportions of students rated ‘at’ or ‘above’ the standards increased from 2010 to 2014, in both full primary and intermediate schools and in all three National Standards areas. While the magnitude of the increases was reasonably consistent across all areas and both school types (between 9% and 19%), there is a systematic difference by school type in the way these increases were staged across years. At full primary schools there tended to be an incremental increase in the proportions of students rated ‘at’ or ‘above’ the standards over time. For example, in none of the years 2011 to 2014 did the proportion of students rated ‘at’ or ‘above’ the end of Year 7 reading standard increase by more than 6% on the previous year. In comparison, the majority of the increase in intermediate schools was observed between 2011 and 2012 in Year 7, and between 2012 and 2013 in Year 8. For example, the proportion of students rated ‘at’ or ‘above the end of Year 8 reading standard increased by 12% from 2010 to 2014, and 10% of this increase was observed from 2012 to 2013. This pattern was consistent over all three National Standards areas.

There was a substantial increase in teachers’ ratings of student achievement in reading, writing, and mathematics in intermediate schools in Year 7 from 2011 to 2012, and Year 8 from 2012 to 2013. While several possible reasons for these increases were investigated including the recalibration of e-asTTle writing and the introduction of the requirement to report National Standards data, it was not possible to identify a single reasonable explanation. It is likely that they are the result of a combination of effects. Given that it is very unlikely there was a substantial increase in student achievement in reading, writing, and mathematics in intermediate schools from 2011 to 2012, and in Year 8 from 2012 to 2013, these data add to the evidence that OTJs may lack dependability.

4.1.2 Consistency of students’ OTJs over time

Examining distributions of OTJs over time provides a window on the consistency of teachers’ judgments over time. End of year OTJs in reading, writing, and mathematics have been collected for students in sample schools from 2010. This data contains a longitudinal sample of 716 students, for whom OTJs have been collected in all five years: 2010, 2011, 2012, 2013, and 2014. Note that the year level distribution of the sample changes over time due to the longitudinal nature of the sample.

Tables 18 to 20 show the 2014 reading, writing, and mathematics OTJs for students in the longitudinal sample, disaggregated by their 2010 OTJs. Note that *n* denotes the numbers of students rated in each category in 2010, and the proportions in bold represent the students who were rated in the same achievement category in both years.

Table 18: Longitudinal sample students 2014 reading OTJs disaggregated by their 2010 OTJs

2014 OTJ		2010 OTJ			
		Well Below	Below	At	Above
Reading	Well Below	**15.4**	9.5	1.4	0.4
	Below	13.5	**23.8**	13.1	3.3
	At	59.6	54.0	**62.8**	34.7
	Above	11.5	12.7	22.8	**61.6**
	n	52	126	290	245

Table 19: Longitudinal sample students 2014 writing OTJs disaggregated by their 2010 OTJs

2014 OTJ		2010 OTJ			
		Well Below	Below	At	Above
Writing	Well Below	**5.6**	14.0	4.9	0
	Below	25.0	**44.0**	22.0	6.7
	At	58.3	39.0	**57.5**	47.0
	Above	11.1	3.0	15.5	**46.3**
	n	36	100	431	149

Table 20: Longitudinal sample students 2014 mathematics OTJs disaggregated by their 2010 OTJs

2014 OTJ		2010 OTJ			
		Well Below	Below	At	Above
Mathematics	Well Below	**8.5**	15.2	4.6	0
	Below	29.8	**42.4**	23.7	1.3
	At	48.9	35.4	**56.3**	38.6
	Above	12.8	7.1	15.4	**60.1**
	n	47	99	410	158

In all three areas, substantial proportions of students rated 'above' the National Standards in 2010, were given the same rating in 2014. For example, 62% of students that were rated 'above' the relevant reading standard in 2010 were also rated 'above' in 2014. Similarly, 63% of students that were rated 'at' the reading standards in 2010 were also rated this way in 2014, while the corresponding proportions in writing (58%) and mathematics (56%) were somewhat lower.

While the majority of students rated 'at' or 'above' the standards maintained their position from 2010 to 2014, substantial proportions of students rated 'below' or 'well below' improved their position in this period. Forty-two to 67% of students rated 'below' the standards in 2010 were given an improved rating of 'at' or 'above' in 2014 (67% in reading, 42% in writing, and 43% in mathematics). Similarly, over 85% of the students rated 'well below' in 2010 received the improved rating of 'below', 'at', or 'above' the standards in 2014 (85% in reading, 94% in writing, and 92% in mathematics).

Given that large proportions of students rated 'below' and 'well below' in 2010 were rated more highly in 2014, it might be expected that the overall proportions of students meeting the standards would increase in this timeframe. However, this was not the case. While the proportions of students in the longitudinal sample rated 'at' or 'above' the reading standard rose from 75% in 2010 to 85% in 2014, the proportions of students rated 'at' or 'above' the writing and mathematics standards declined over this time (from 81% to 73% in writing, and from 80% to 73% in mathematics). This is largely explained by differences in the numbers of students rated in each category. Large proportions of the small numbers of students rated 'below' and 'well below' improved their rating from 2010 to 2014, while smaller proportions of the large numbers of students rated 'at' and 'above' declined their rating in this period. The net effect of students' improvements and declines is small. Table 21 summarises the data for students in the longitudinal sample who were rated in different achievement categories from 2010 to 2014.

Table 21: Percentages of students in longitudinal sample who were rated in different achievement bands from 2010 to 2014

Area	Year	Percentages of students		
		Improved rating from 2010	Declined rating from 2010	Rated differently from 2010
Reading n=713	2011	25	13	38
	2012	24	17	41
	2013	25	19	44
	2014	27	21	48
Writing n=714	2011	19	23	42
	2012	19	27	47
	2013	18	29	47
	2014	20	29	49
Mathematics n=716	2011	22	26	47
	2012	20	26	46
	2013	20	28	48
	2014	21	27	48

As Table 21 shows, large proportions of students received ratings that differed from their 2010 OTJ in subsequent years. For example, in reading 25% of students received an improved rating in 2011 and 13% of students received a poorer rating. This represents a total of 38% of students that have been rated differently in relation to the Reading Standards in 2010 and 2011. Similarly large variations in students' ratings are observed in all three learning areas and between all time points.

A range of factors are likely to be contributing to the variations seen in students' ratings over time. For example, in each area the proportion of students with a rating that differs from their 2010 rating increases over time. For some students this increase is likely to be attributable to students' differing progress rates. Because some students progress faster than others, the spread of students' levels of achievement will increase over time as some students accelerate ahead and others lag behind. In addition, the net declines in performance seen in writing and mathematics for these students are most likely attributable to the increasing year level of this sample over time. This is consistent with cohort data[20] that show the proportions of students meeting the Writing and Mathematics Standards declines as year level increases. Another possibility is that some of this inconsistency may be a result of the relatively broad nature of the National Standards scale. Comparing students' achievement from year to year in this way effectively uses OTJs as a measure of progress. As such, with just one standard for each of eight years of schooling, this leaves scope for the achievement of some students to be underestimated and that of others to be overestimated.

Although there are many factors that may be contributing to the observed variation the most likely explanation is that the OTJs lack consistency over time. The extent of the variability observed year on year for the students in this longitudinal sample seems too large to be the result of changes in student achievement alone, and supports earlier findings that the most likely explanation is an inconsistency in teachers' judgments themselves.

In addition to examining the consistency of teachers' judgments over time for a longitudinal sample of students it is useful to investigate the consistency of judgments for the wider sample. Table 22 summarises the changes in ratings for all students for whom both OTJs were collected, in each of the consecutive two-year periods from 2010 to 2014. Note that the 2012 to 2013 sample is smaller than other samples because 23 schools were new to the sample in 2013.[21] The 2010 to 2011 sample is also smaller, due to lower response rates for OTJs in the first year of the project.

[20] See Tables 54 and 58 in Chapter 8.
[21] See section 2.2 for further details.

Table 22: Percentages of students who were rated in different achievement bands over consecutive years

Area	Period	*n*	Percentages of students		
			Improved rating	Declined rating	Total rated differently
Reading	2010 to 2011	4,126	22	16	38
	2011 to 2012	8.445	21	17	38
	2012 to 2013	6,542	21	16	37
	2013 to 2014	9,306	22	16	36
Writing	2010 to 2011	4,251	22	21	43
	2011 to 2012	8.361	22	19	41
	2012 to 2013	6,621	20	19	39
	2013 to 2014	9,290	21	17	38
Mathematics	2010 to 2011	4,256	19	19	38
	2011 to 2012	8,333	20	20	40
	2012 to 2013	6,564	19	19	38
	2013 to 2014	9,294	19	17	36

As seen in Table 22 the proportions of students rated in different achievement categories in a consecutive two-year period decreases marginally over time in each area. For example, in writing 43% of students received differing ratings in 2010 and 2011, 41% of students received differing ratings in 2011 and 2012, 39% received ratings that differed in 2012 and 2013, and 38% received differing ratings in 2013 and 2014. These changes may be attributable to small increases in the consistency of teachers' judgments over the 2010 to 2014 period. However, there is still a substantial amount of variation present, and as described above this is most likely attributable to teachers' judgments being inconsistent over time.

It is also informative to investigate the proportions of students rated 'at' or 'above' each year level standard across the whole sample, over the first five years of implementation. Figures 8 to 10 show these proportions for each of the three National Standards areas.

Figure 8: Proportion of students rated 'at' or 'above' the reading standards in each year level, 2010 - 2014

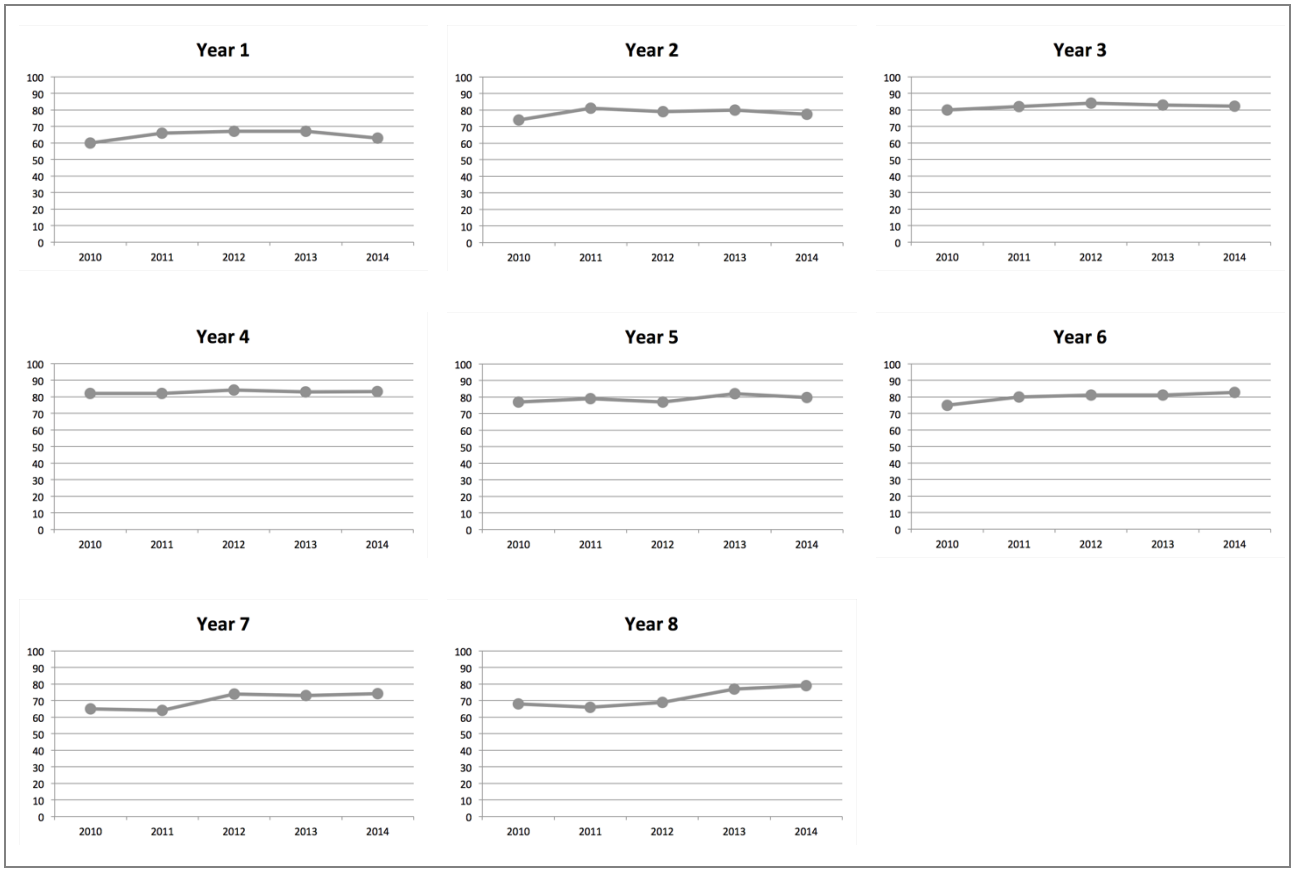


Figure 9: Proportion of students rated 'at' or 'above' the writing standards in each year level, 2010 - 2014

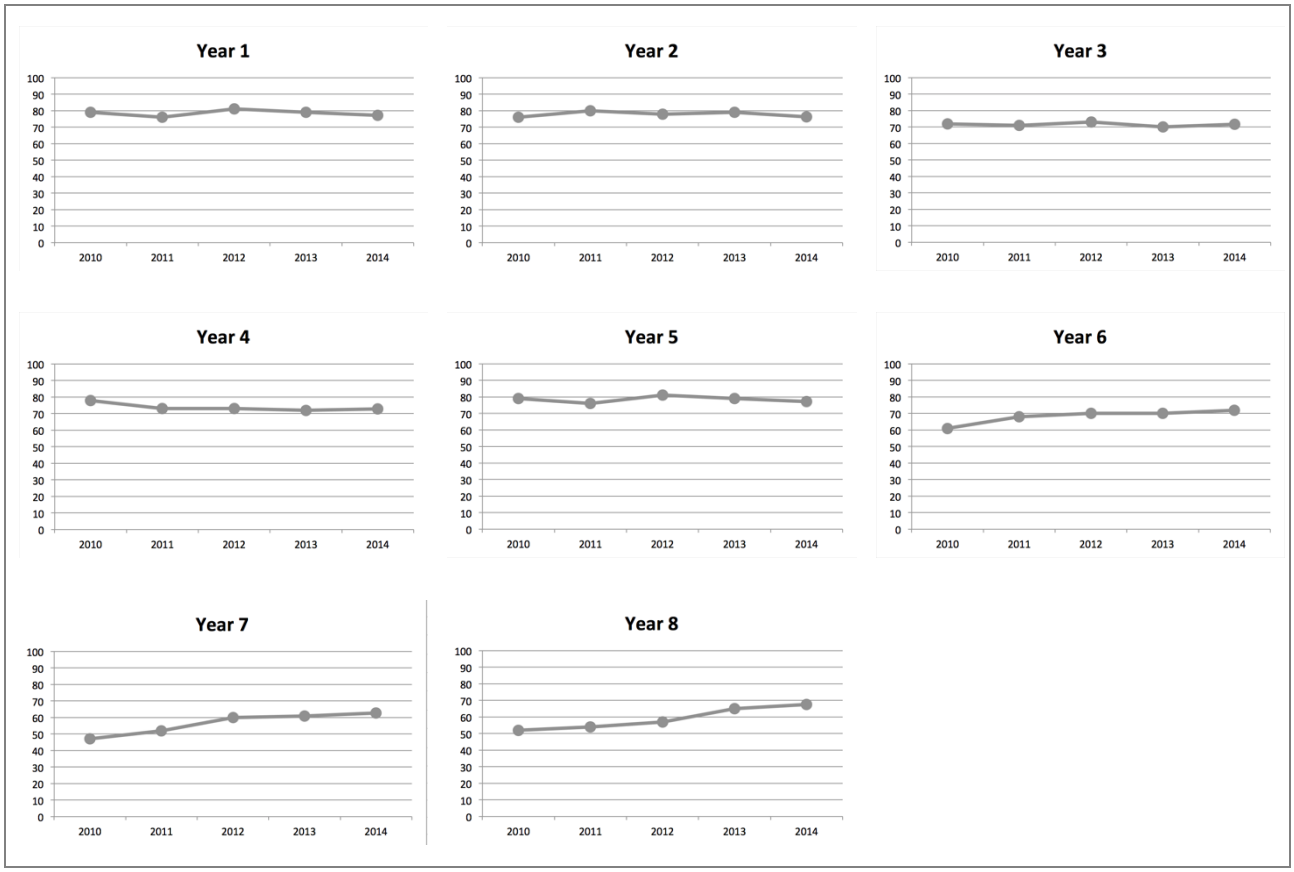
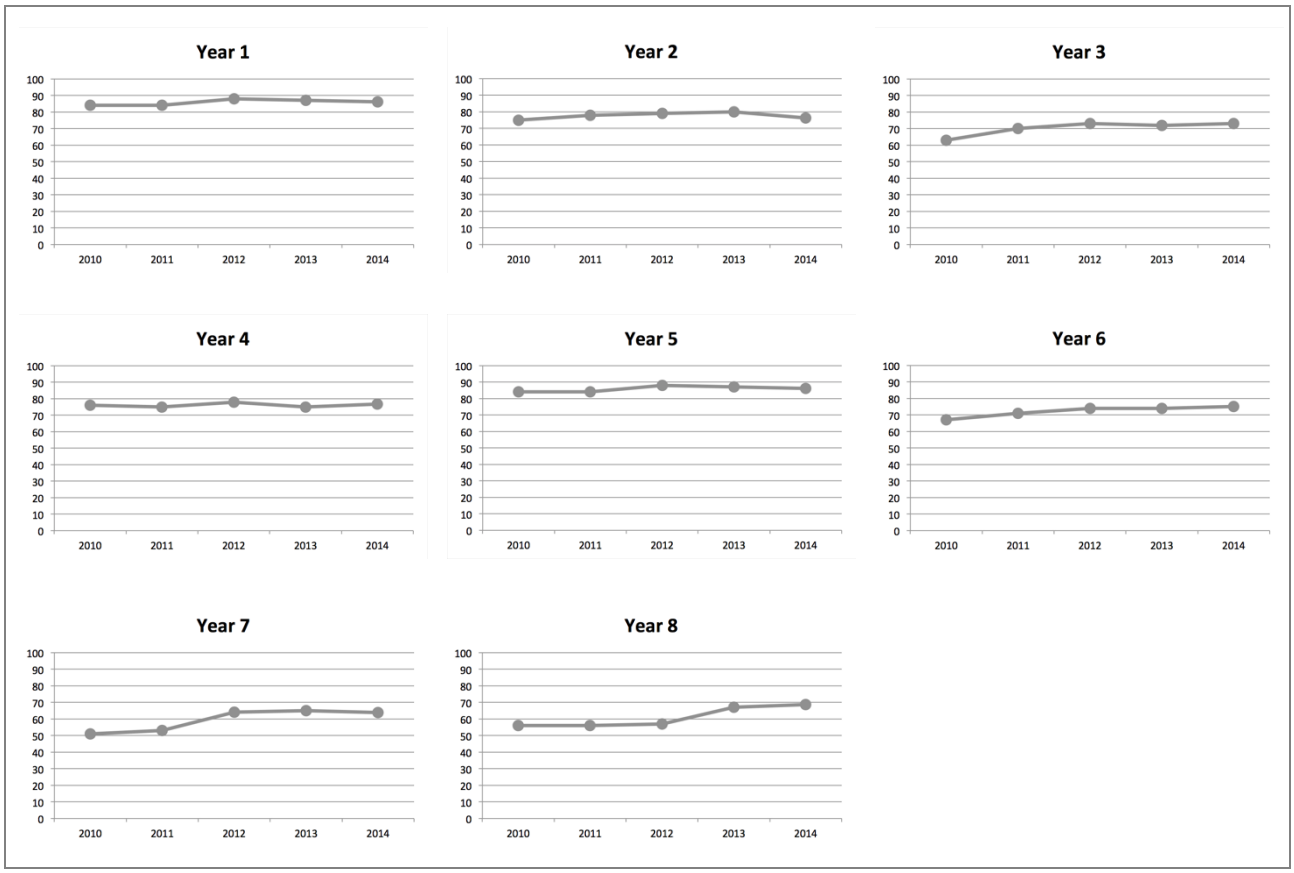


Figure 10: Proportion of students rated 'at' or 'above' the mathematics standards in each year level, 2010 - 2014



The proportions of Year 1 to 6 students rated 'at' or 'above' the standards was reasonably consistent over the first five years of implementation, with less than five percentage points of variation between almost all consecutive years, in all three National Standards areas. In comparison, there were substantial increases in the proportion of Year 7 students rated 'at' or 'above' the standards from 2011 to 2012 (10% in reading, 8% in writing, and 11% in mathematics) and the proportion of Year 8 students rated 'at' or 'above' the standards from 2012 to 2013 (8% in reading and writing, and 10% in mathematics). This is the same pattern that is evident in the data by school type, shown in Figures 5 to 7.

In general, the proportions of students rated 'at' or 'above' the standards were greater in Years 1 to 6, than in Years 7 and 8. While this may, to some extent, have limited the increase in the proportions of Year 1 to 6 students 'at' or 'above the standards from 2010 to 2014, the reasons for the increases in Year 7 results from 2011 to 2012, and Year 8 results from 2012 to 2013 are unknown and are likely due to a combination of factors. As described above, it is it is very unlikely there was a substantial increase in student achievement in reading, writing, and mathematics from 2011 to 2012, and in Year 8 from 2012 to 2013, and consequently these data add to the evidence that OTJs may lack dependability.

4.2 Principals' perspectives

Principals' perspectives on the consistency of OTJs, both within their own school and between schools in New Zealand, were collected through the survey. These perspectives provide another source of information about the dependability of OTJs and are summarised in Table 23.

Table 23: Principals' confidence in the consistency of OTJs, 2014

Area		Level of confidence			
		Not confident	Minimally confident	Very or moderately confident	Not sure
Reading	Within their school	3%	6%	90%	1%
	Between schools in NZ	48%	28%	19%	6%
Writing	Within their school	3%	9%	87%	1%
	Between schools in NZ	54%	29%	12%	6%
Mathematics	Within their school	3%	9%	87%	1%
	Between schools in NZ	49%	26%	19%	6%

Results indicate principals were considerably more confident about the consistency of OTJs within their own school than they were about the consistency of OTJs between schools in New Zealand. For example, 90% of principals described themselves as very confident or moderately confident in the consistency of reading OTJs within their school, while 19% described themselves as very confident or moderately confident in the consistency of reading OTJs between schools. Correspondingly, 3% of principals described themselves as not confident in the consistency of reading OTJs at their own school, while 48% described themselves as not confident in the consistency of reading OTJs between schools in New Zealand. These results are very similar to those from 2013[22].

Principals were invited to comment on their confidence in the consistency of OTJs between schools in New Zealand in 2014. Twenty-nine percent of respondents expressed concerns about the consistency of OTJs between schools. This included principals commenting that the OTJs of students from contributing schools differed from their own school's judgments (10% of respondents) and that different schools interpret the National Standards in different ways (7% of respondents).

> *We have 8 major contributing schools with huge variation of judgement upon entry to our school for students we perceive at similar levels.*
>
> *When we get new students from other schools we always feel that their OTJs are much higher than we would give and wonder how they have been derived.*
>
> *They [OTJs] are subjective and not a standard measure.*
>
> *Results are subject to the level of understanding/content knowledge of teachers making the OTJ's and whether or not they are 'honest' judgments - too much room for 'flexibility' or manipulation of data to tell a story.*

All principals will be familiar with OTJs made in schools other than their own through the achievement levels of transferring students and students from contributing schools. In addition, some principals will have participated in cluster meetings focused on moderation, or been involved in other less formal discussions. Given this, principals' lack of confidence in the consistency of OTJs between schools in New Zealand can be taken as further evidence that teachers' OTJs lack dependability.

[22] Note that from 2010 to 2012 principals were asked about their confidence in the consistency of OTJs within their own school, but not about their confidence in the consistency of OTJs between schools in NZ. The question about between school consistency was added in 2013 and repeated in 2014.

4.3 Summary

In summary, a varied and substantial body of evidence from this project casts doubt on the dependability of OTJs. The strongest evidence is found in the substantial variation by school type of the OTJs of students in Years 7 and 8 (reported in relation to the 2012, 2013, and 2014 data collection). A comparison of the levels of agreement between PaCT trial ratings and school OTJs also provided strong evidence that OTJs lack dependability (2013 data collection). Additionally, considerable variability was observed in both the consistency of students' OTJs over time (2011, 2012, 2013 and 2014 data collection), and the accuracy of teachers' ratings in relation to the writing and mathematics standards in the assessment scenarios (2011 and 2012 data collection). Principals' perceptions (2013 and 2014 data collection) is another source of evidence that casts doubt on the dependability of OTJs.

It should be noted that these concerns do not mean that all OTJs are inaccurate. While the trends described above support the view that OTJs lack dependability, it is unsurprising that these consistency issues are present, given the recentness of the initiative and the ongoing development of tools to support teachers to make judgments in relation to the National Standards.

5. Reporting to parents

Reporting to parents, families and whānau is an important part of the National Standards initiative. Guidelines to schools specify that "Reports should be concise and easily understood, outline a child's progress and achievement, and be free from educational jargon."[23] The intention is that parents, families and whānau will be well informed about their child's learning, and therefore more able to support this in the home.

This chapter uses evidence from an analysis of students' end-of-year reports and the principal survey to describe and evaluate the quality of National Standards reporting to parents. Four hundred and twenty-nine reports from 73 schools were analysed. The monitoring and evaluation question and performance criteria addressed are shown in Table 24.

Table 24: Monitoring and evaluation question and criteria

Intended outcome: Schools use National Standards assessment information to communicate clearly with parents, families, and whānau about their child's achievement and progress.		
Monitoring and Evaluation Question	Performance criteria	Sources of evidence
How do schools use information from National Standards to report to and communicate with parents?	Parents receive a report that describes their child's progress and achievement in relation to the National Standards in reading, writing and mathematics.	End-of-year reports Principal survey
	Parents receive a report that is clear.	
	Parents receive a report that identifies their child's next learning steps, and ways families can help at home.	

5.1 Evaluative criteria

Reports were categorised into three main groups, dependent on the way National Standards had been used for reporting purposes. Table 25 contains these results for the 429 reports in the sample.

Table 25: Use of National Standards in 2014 end-of-year reports

Group	Use of National Standards	No. of reports	% of sample
1	None: reports do not mention National Standards at all	11	3%
2	Insufficient: reports refer to National Standards but do not sufficiently describe achievement against the standards	145	34%
3	Sufficient: reports describe achievement in relation to National Standards	273	64%

In 2014, 3% of the reports analysed made no mention of the National Standards. Of these 11 reports, 7 were judged to have achievement data that would have been sufficient to make an OTJ, while 4 were judged as having insufficient data to make an OTJ. Over time, the proportion of reports that do not mention the National Standards has decreased. Twenty-one percent of 2010 reports made no mention of the standards, and this decreased to 13% in 2011, 9% in 2012, 6% in 2013, and 3% in 2014.

Ninety-seven percent of the reports in the 2014 sample referred directly to the National Standards. Of these 418 reports, 273 were rated as sufficiently describing students' achievement in relation to the National Standards (further details below), and 145 were rated as insufficient in this regard. These groups, groups two and three, are the focus of the remainder of this chapter, as it is these which contain information about the way in which National Standards information is communicated to parents, families and whānau in end-of-year reports.

[23] http://nzcurriculum.tki.org.nz/National-Standards/Key-information/Fact-sheets/Reporting-in-plain-language. Retrieved 12 May 2015.

5.1.1 Parents receive a report that describes their child's progress and achievement in relation to the National Standards in reading, writing and mathematics

In order to be rated as sufficiently describing achievement in relation to the National Standards, an end-of-year report needed to include information about the student's achievement in relation to the standards, and details of something the student could or could not do that was of significance to the standard. In reading, for example, these details could have included information about the student's ability to decode text, or their ability to respond, understand and use what they have read in addition to their OTJ. An OTJ and a reading level or age was not considered sufficient. In writing, a report needed to include information about the student's ability to encode (including planning, revising, or publishing), or their ability to use writing for a variety of purposes across the curriculum, in addition to the OTJ. Information about the student's spelling ability and an OTJ was not considered sufficient. In mathematics, a report needed an OTJ and information about the student's ability in number or other aspects of the mathematics standards such as measurement or geometry. To be rated as sufficiently describing achievement in relation to the National Standards a report needed to fit these criteria for two of the three areas: reading, writing, and mathematics.

Sixty-five percent of the 2014 reports that made direct reference to the National Standards were rated as sufficiently describing student achievement in relation to the National Standards. Figure 11 provides examples of these reports.

Figure 11: Examples of 2014 reports rated as sufficiently describing student achievement against the National Standards

WRITING — **Progress and Achievement in Relation to National Standards**

[redacted] is a confident writer who can now write using the features of a variety of different text types. She can create plans to support her writing and is beginning to use paragraphs to organise her ideas. She uses original ideas and is starting to use more precise vocabulary as her awareness of the audience increases. She can now use a variety of different punctuation marks, such as, speech marks, commas and apostrophes successfully. [redacted] enjoys the whole writing process and is able to edit and improve her work independently.

Above Expectation	
At Expectation	✓
Below Expectation	

The next steps are:-

- Start to make precise adverb and verb choices, such as, 'cautiously observing'.
- Organise her ideas using paragraphs.
- Check that she has always used the correct verb tense when editing her work.

Ways you can help:

Encourage [redacted] to keep a diary or journal of holiday activities. Write thank you letters, postcards, or emails to family members.

READING	Expected National Standard at the end of Year 6		
[redacted] is achieving	BELOW	AT	ABOVE
Current Progress and Achievement [redacted] has consistently demonstrated his ability to flexibly use a range of strategies effectively. He is able to use reading as a tool for developing his learning and he uses skimming and scanning to locate and record information. [redacted] can interpret a range of graphics in text to help him build his knowledge and understanding in topic studies.		**Next Learning Steps** • Fully develop his knowledge of increasingly complex vocabulary.	

Thirty-five percent of reports were rated as insufficiently describing student achievement in relation to the National Standards in 2014. Figure 12 provides examples.

Figure 12: Examples of 2014 reports rated as insufficiently describing student achievement against the National Standards

MATHEMATICS	Personal Effort			Achievement Level		
	Sometimes	Usually	Consistently	Towards Expectation	At Expectation	Above Expectation
Uses appropriate strategies			√		√	
Recalls Basic Facts & Number Knowledge			√		√	
Strand Knowledge: Stage: 6			√		√	

Write here:
[redacted] *has a lot of confidence in working with numbers and she has a range of problem solving strategies. She is learning that solving Maths problems doesn't have to be complicated.*

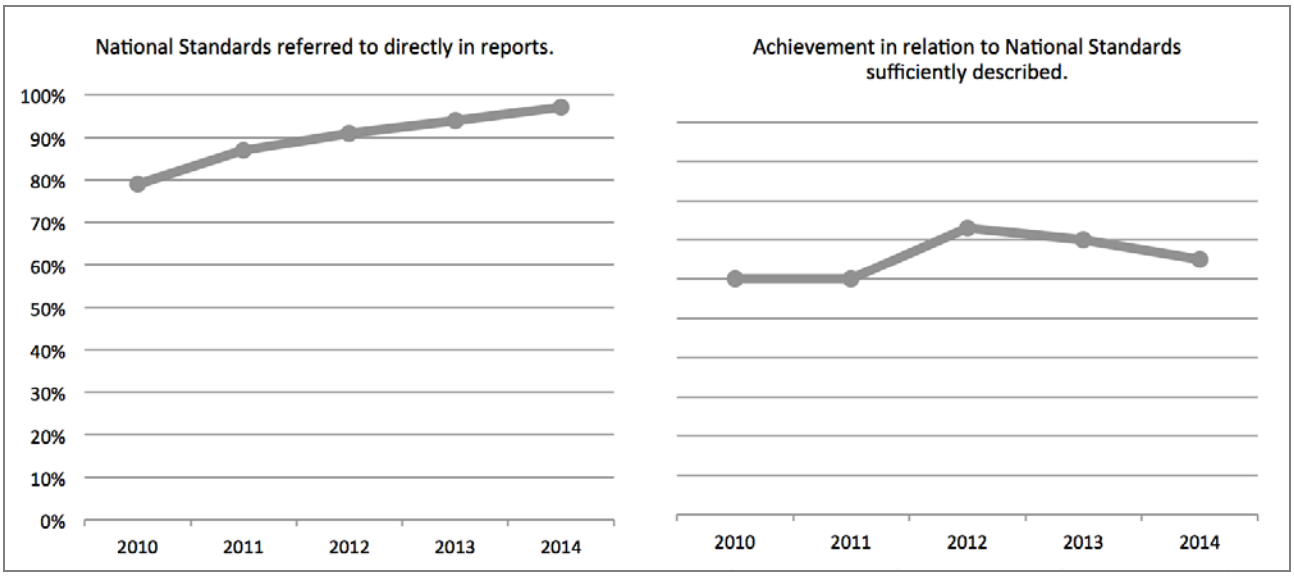
Progress and achievement in relation to National Standards.

Writing: [redacted] has made good progress with her writing. She is writing at the expected level in relation to National Standards. She must work more quickly in order to get more written down! She always speaks well and has good ideas, but she doesn't always manage to transfer this to her written work.

Next Learning Steps:	**How you can help at home:**
To increase her vocabulary	Encourage her conversation and continue to provide her with a wide range of experiences.

Figure 13 shows results for this criteria over the five years of implementation. It includes the proportion of reports that directly referred to the National Standards, as well as the proportion of reports that were rated as sufficiently describing achievement in relation to the National Standards from 2010 to 2014.

Figure 13: Proportion of reports describing achievement in relation to National Standards, 2010 - 2014



The proportion of reports that referred directly to the National Standards increased incrementally over the first five years of implementation, from 79% in 2010 to 97% in 2014. In contrast, the proportion of reports that described achievement in relation to the standards sufficiently rose just 5% over this five year period, experiencing a peak of 73% in 2012 and a subsequent decline in the following two years.

Fourteen percent of the 2014 reports included information about students' progress in relation to the reading, writing, and mathematics standards, as illustrated in Figure 14.

Figure 14: Examples of 2014 reports showing progress in relation to the National Standards

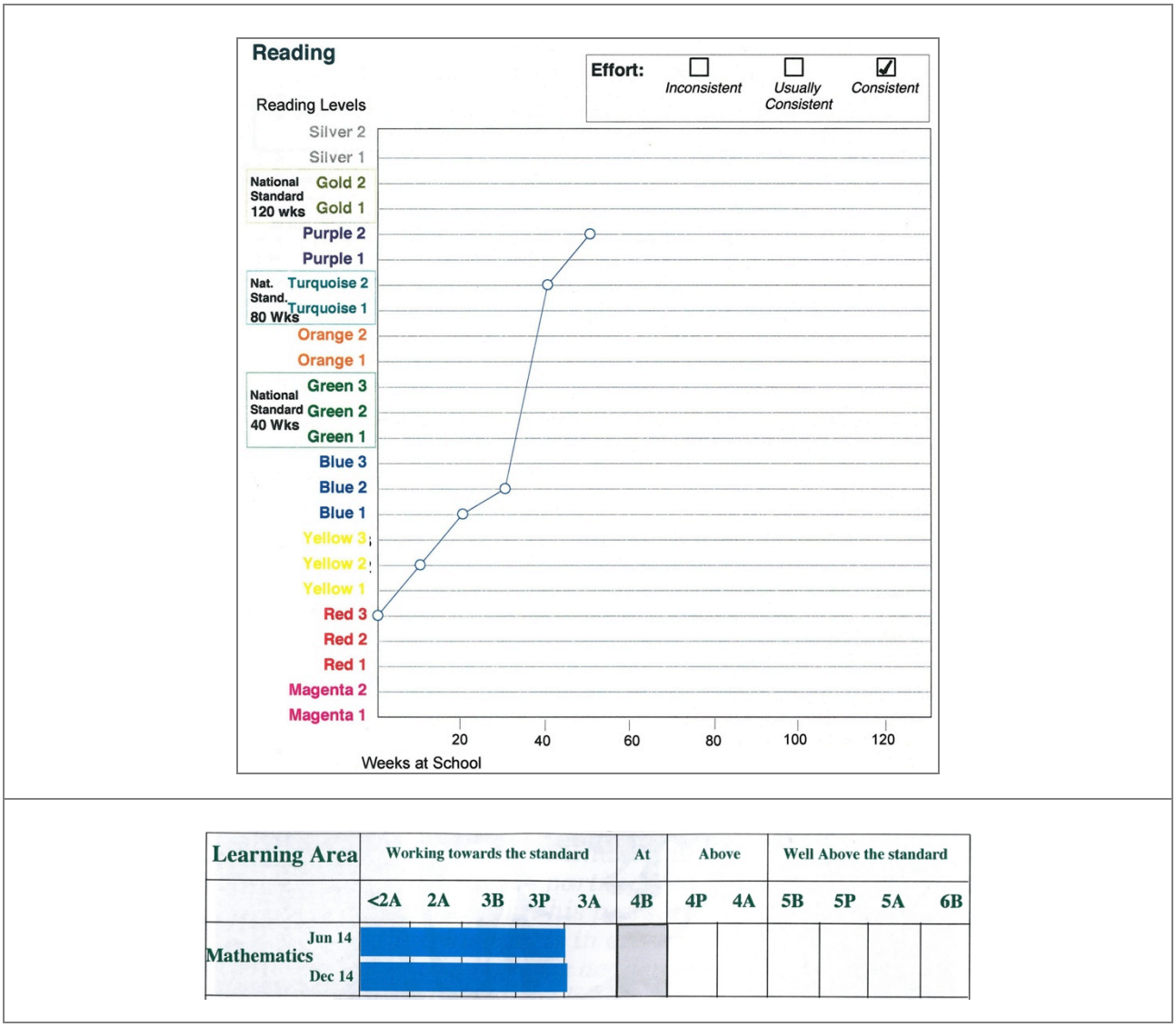
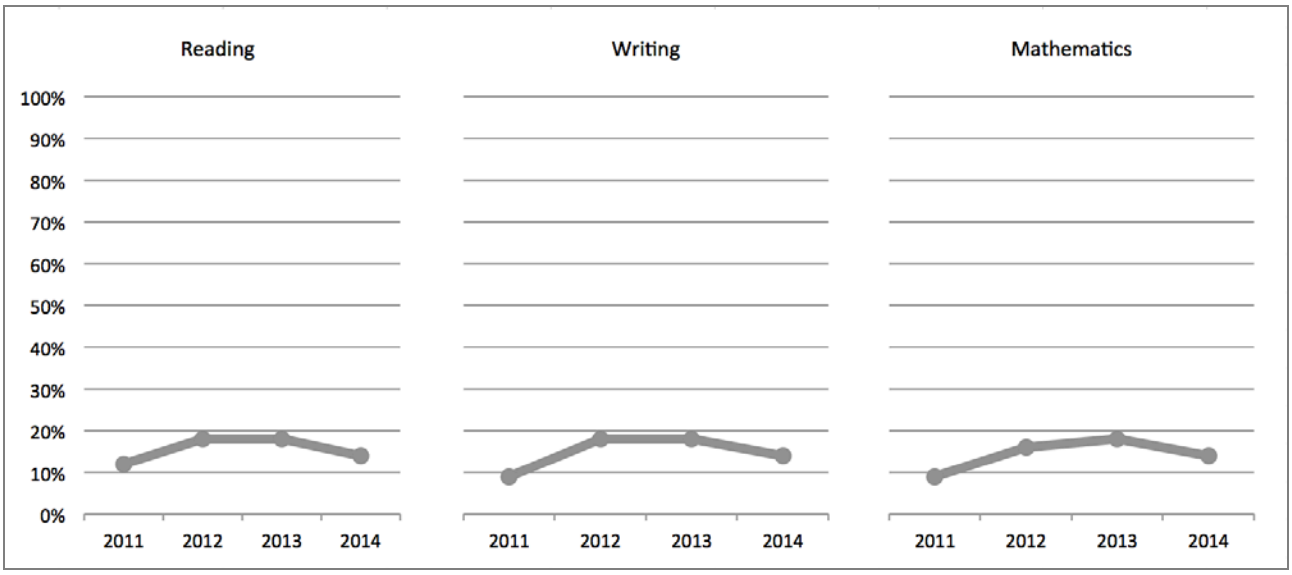


Figure 15 shows the proportion of reports describing students' progress in relation to the National Standards from 2011 to 2014. Note that 2011 was the first year in which it was possible to show progress in relation to the standards. A minority of reports showed progress in relation to the National Standards, with a maximum of 18% of reports including progress information in reading (2012 and 2013), writing (2012 and 2013), or mathematics (2013) in any year. Additionally, there was a decrease in the proportion of reports that included progress information from 2013 to 2014 (from 18% to 14% in all three areas).

Figure 15: Proportion of reports describing progress in relation to National Standards, 2011 - 2014



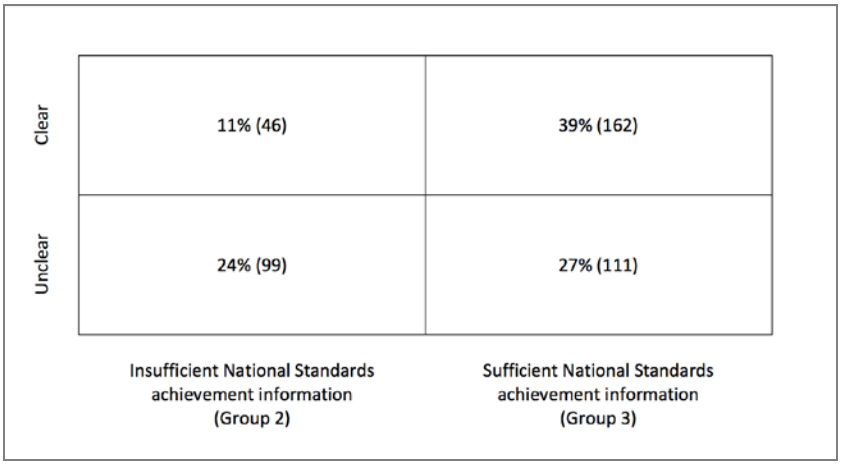
Very similar proportions of reports included progress information in reading, writing and mathematics from 2011 to 2014. This is a reflection of the fact that most schools report National Standards information consistently, generally using the same format to present reading, writing, and mathematics information.

5.1.2 Parents receive a report that is clear

Reports were rated as either clear or unclear. A clear report was one that was considered easy for parents, families and whānau to understand. To achieve this rating the reading, writing, and mathematics information in the report, including text, tables and graphics, needed to be clear, with no unexplained educational jargon. Fifty percent of the 2014 reports were rated as clear, and 50% as unclear.

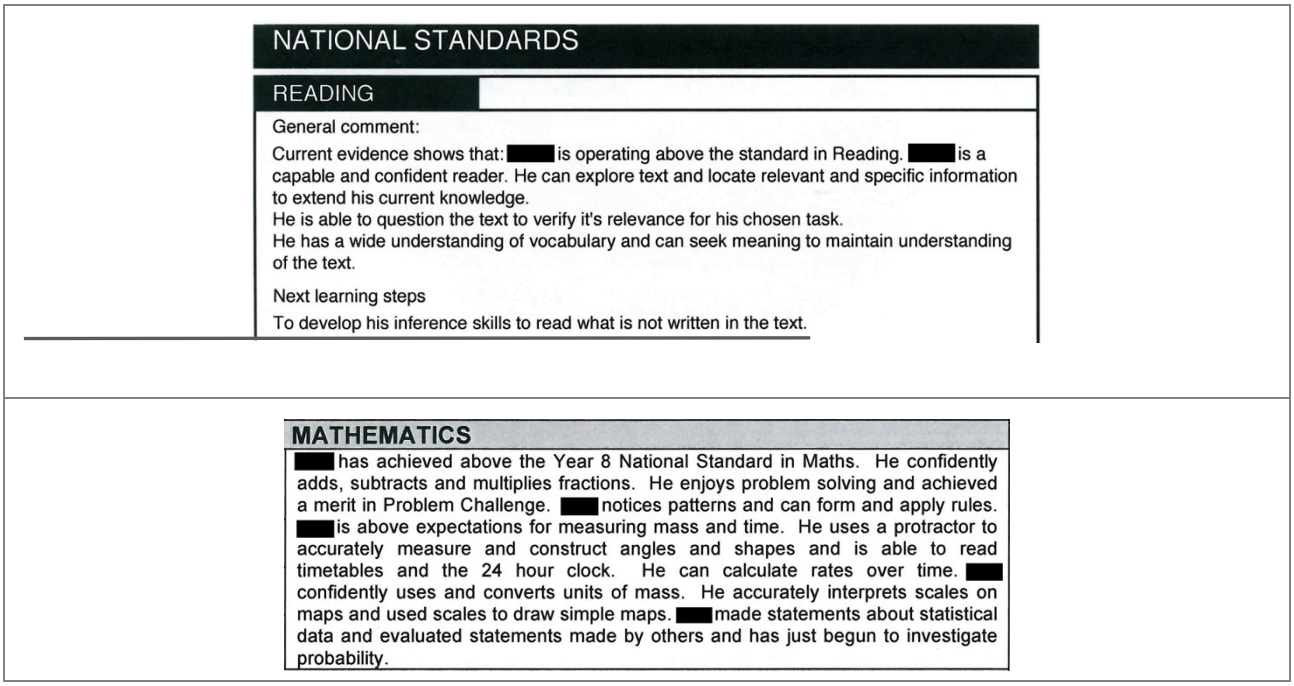
While the proportions of reports rated as clear and sufficiently describing students' achievement in relation to the standards are of interest, the combination of these characteristics is also relevant. Figure 16 summarises the sufficiency and clarity of the sample of 2014 National Standards reports.

Figure 16: The clarity of 2014 reports that did and did not contain sufficient National Standards achievement information



Each of the four categories of reports shown in Figure 16 is illustrated below. Thirty-eight percent of National Standards reports were rated as containing clear and sufficient information about student achievement in relation to the National Standards in 2014. These reports are illustrated in Figure 17.

Figure 17: Examples of 2014 reports that were rated as containing sufficient and clear information about student achievement in relation to the National Standards



NATIONAL STANDARDS

READING

General comment:

Current evidence shows that: [redacted] is operating above the standard in Reading. [redacted] is a capable and confident reader. He can explore text and locate relevant and specific information to extend his current knowledge.
He is able to question the text to verify it's relevance for his chosen task.
He has a wide understanding of vocabulary and can seek meaning to maintain understanding of the text.

Next learning steps

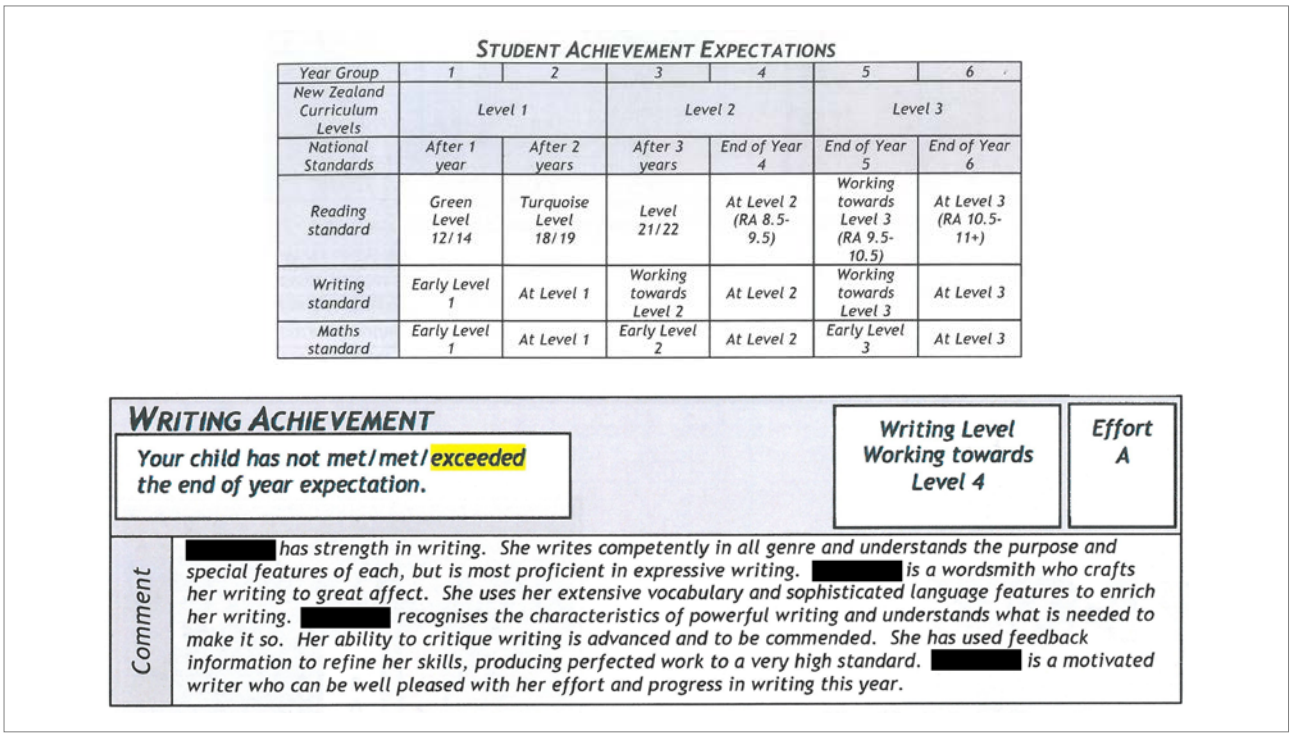
To develop his inference skills to read what is not written in the text.

MATHEMATICS

[redacted] has achieved above the Year 8 National Standard in Maths. He confidently adds, subtracts and multiplies fractions. He enjoys problem solving and achieved a merit in Problem Challenge. [redacted] notices patterns and can form and apply rules. [redacted] is above expectations for measuring mass and time. He uses a protractor to accurately measure and construct angles and shapes and is able to read timetables and the 24 hour clock. He can calculate rates over time. [redacted] confidently uses and converts units of mass. He accurately interprets scales on maps and used scales to draw simple maps. [redacted] made statements about statistical data and evaluated statements made by others and has just begun to investigate probability.

Twenty-seven percent of reports were rated as sufficiently describing students' achievement in relation to the National Standards, but were unclear. These reports contained an OTJ and details of what the student could or could not do that was of significance to the OTJ, but were considered difficult for parents, families and whānau to understand. Features of these reports included the use of technical assessment information and unexplained educational jargon, graphs and tables with complex coding systems, and descriptions of students' abilities that were difficult to understand. Figure 18 provides an example.

Figure 18: Example of a 2014 report that was rated as containing sufficient but unclear information about student achievement in relation to the National Standards



STUDENT ACHIEVEMENT EXPECTATIONS

Year Group	1	2	3	4	5	6
New Zealand Curriculum Levels	Level 1		Level 2		Level 3	
National Standards	After 1 year	After 2 years	After 3 years	End of Year 4	End of Year 5	End of Year 6
Reading standard	Green Level 12/14	Turquoise Level 18/19	Level 21/22	At Level 2 (RA 8.5-9.5)	Working towards Level 3 (RA 9.5-10.5)	At Level 3 (RA 10.5-11+)
Writing standard	Early Level 1	At Level 1	Working towards Level 2	At Level 2	Working towards Level 3	At Level 3
Maths standard	Early Level 1	At Level 1	Early Level 2	At Level 2	Early Level 3	At Level 3

WRITING ACHIEVEMENT

Your child has not met/met/exceeded the end of year expectation.

Writing Level Working towards Level 4

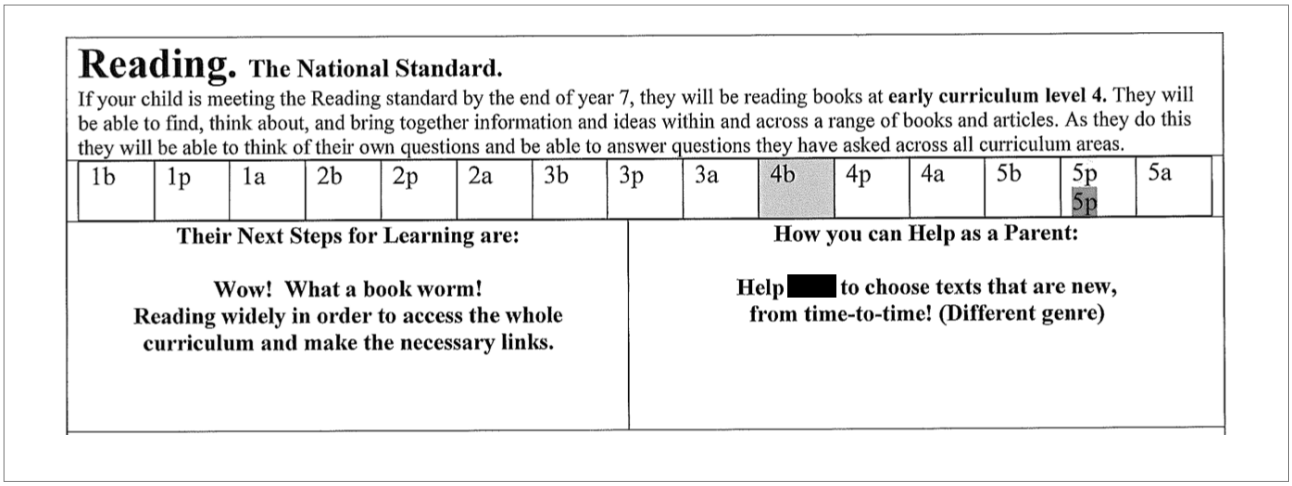
Effort A

Comment

[redacted] has strength in writing. She writes competently in all genre and understands the purpose and special features of each, but is most proficient in expressive writing. [redacted] is a wordsmith who crafts her writing to great affect. She uses her extensive vocabulary and sophisticated language features to enrich her writing. [redacted] recognises the characteristics of powerful writing and understands what is needed to make it so. Her ability to critique writing is advanced and to be commended. She has used feedback information to refine her skills, producing perfected work to a very high standard. [redacted] is a motivated writer who can be well pleased with her effort and progress in writing this year.

Most of the reports that contained insufficient information in relation to the National Standards were rated as unclear (24% of the reports in total), while a small proportion was rated as clear (11% of the reports in total). Figures 19 and 20 provide examples of these types of reports.

Figure 19: Example of an unclear 2014 report that contained insufficient information about student achievement in relation to the National Standards



Reading. The National Standard.

If your child is meeting the Reading standard by the end of year 7, they will be reading books at **early curriculum level 4.** They will be able to find, think about, and bring together information and ideas within and across a range of books and articles. As they do this they will be able to think of their own questions and be able to answer questions they have asked across all curriculum areas.

1b	1p	1a	2b	2p	2a	3b	3p	3a	4b	4p	4a	5b	5p	5a
													5p	

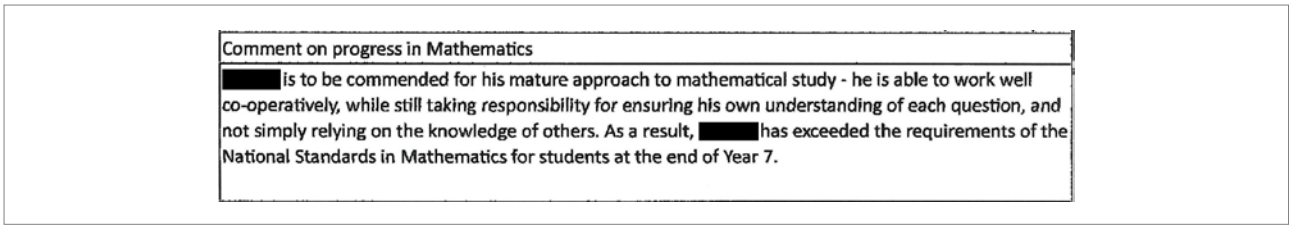
Their Next Steps for Learning are:

Wow! What a book worm!
Reading widely in order to access the whole curriculum and make the necessary links.

How you can Help as a Parent:

Help [redacted] to choose texts that are new, from time-to-time! (Different genre)

Figure 20: Example of a clear 2014 report that contained insufficient information about student achievement in relation to the National Standards



Comment on progress in Mathematics

[redacted] is to be commended for his mature approach to mathematical study - he is able to work well co-operatively, while still taking responsibility for ensuring his own understanding of each question, and not simply relying on the knowledge of others. As a result, [redacted] has exceeded the requirements of the National Standards in Mathematics for students at the end of Year 7.

5.1.3 Parents receive a report that identifies their child's next learning steps, and ways families can help at home

Reports were rated as to whether or not they included students' next learning steps, and the ways families can support this learning at home. For reports to be rated as containing these elements, they needed to include the relevant information in two of the three areas: reading, writing, and mathematics. In 2014, 69% of reports included information about students' next learning steps and 47% of reports included information about ways families can support students' learning at home. Figures 21 and 22 illustrate these elements.

Figure 21: Examples of student's next learning steps in 2014 reports

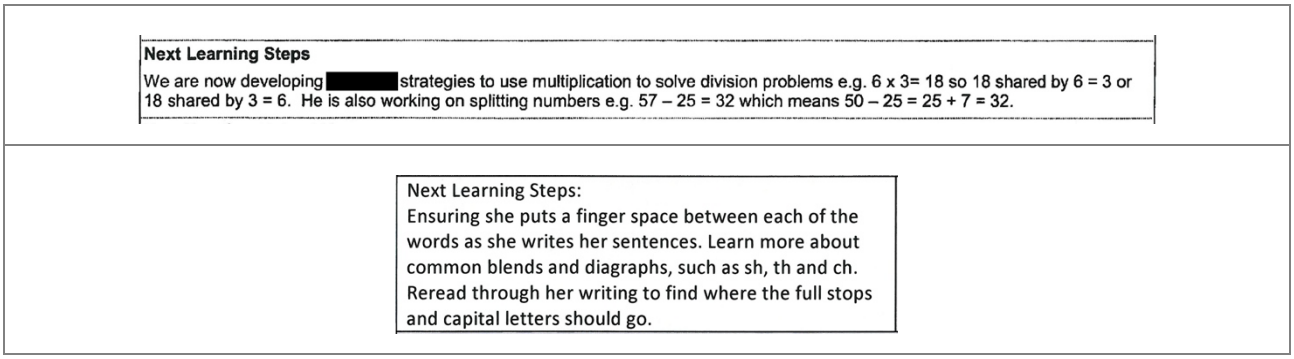


Figure 22: Examples of actions families can take to support student learning in 2014 reports

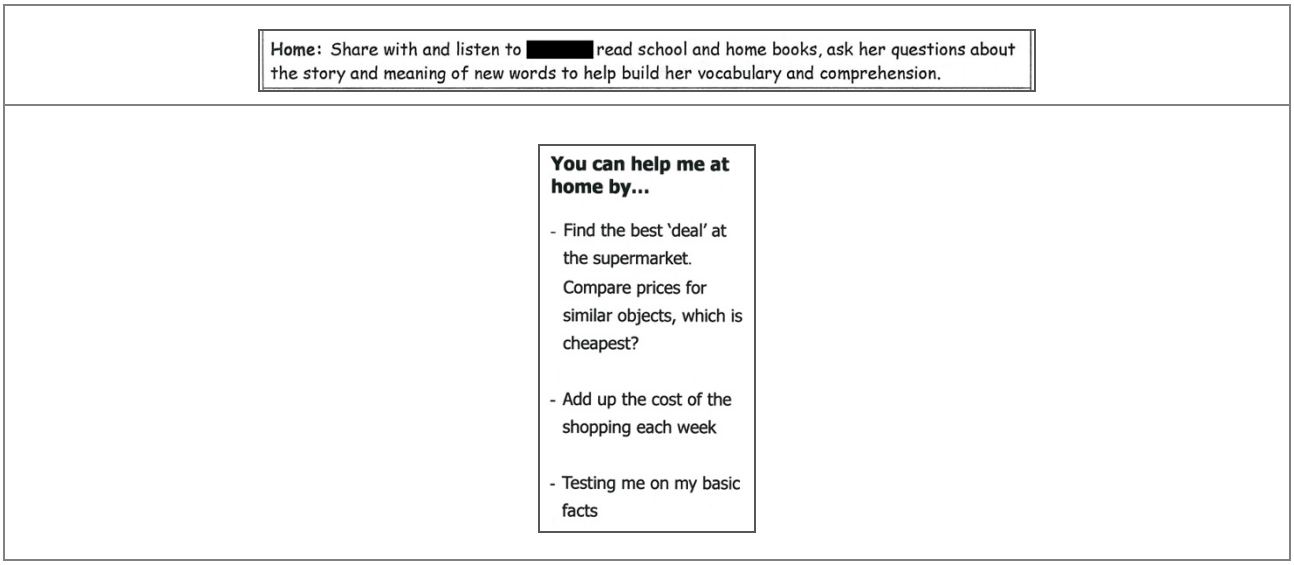
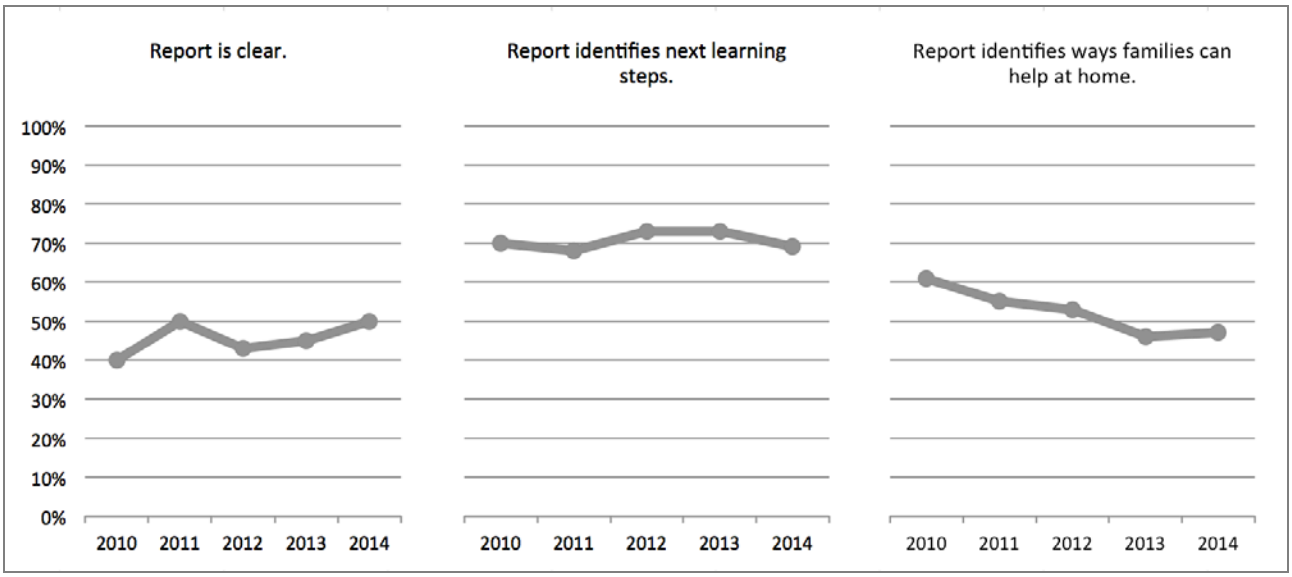


Figure 23 summarises the proportions of reports meeting these National Standards performance criteria from 2010 to 2014.

Figure 23: Proportion of reports meeting reporting performance criteria, 2010 - 2014



Results suggest the clarity of National Standards reports has been reasonably consistent over the first five years of implementation, with 40 to 50% of reports rated as clear from 2010 to 2014. The fact that no more than 50% of reports were rated as clear in any year is concerning.

While approximately 70% of reports included students' next learning steps from 2010 to 2014, the proportion of reports that included ways families can support learning at home declined from 61% in 2010 to 46% in 2014. This is a surprising result, given that information about the National Standards advises families that reports will include information about "what you and your family and whānau can do to support your child's learning."[24]

5.2 Descriptive information

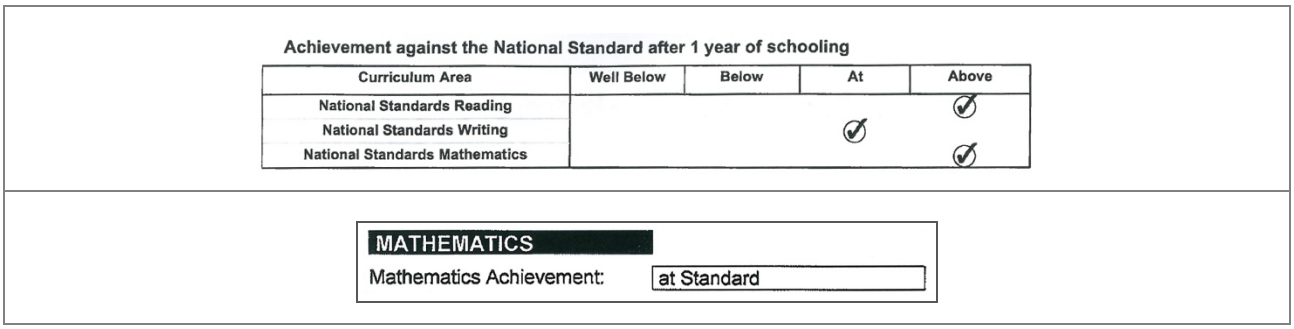
Reports used a variety of other nationally recognised scales, in addition to the National Standards, to describe students' progress over time. In 2014, New Zealand Curriculum levels were used to describe progress in reading (7%), writing (12%), and mathematics (9%), and were usually presented alongside National Standards progress information. Other measures used to describe progress in reading included reading ages (4%), reading recovery levels (6%), and colour wheel colours (5%). Five percent of reports used the number framework as a measure of mathematics progress. Very small proportions of 2014 reports used standardised measures to describe progress, with 1% of reports using the PAT mathematics and reading scales.

Reports described students' achievement in relation to the National Standards in two ways. Seventy-five percent of reports described achievement in relation to their current year level, using a scale such as 'at', 'above', 'below', and 'well below' (see Figure 24). Ten percent of reports identified a best-fit standard[25], and this information was usually presented graphically (see Figure 25). Fourteen percent of reports presented information in both ways. Findings over time indicate that schools' use of these two approaches has been reasonably consistent from 2010 to 2014. For example, the proportion of reports using a scale such as 'at', 'above', 'below', and 'well below' was between 66% and 76% in all five years.

[24] www.minedu.govt.nz/Parents/YourChild/ProgressAndAchievement/NationalStandards/Introduction/FAQsNationalStandards.aspx

[25] A best-fit standard identifies the standard that is the best descriptor of students' achievement, irrespective of year level. For example, a Year 5 student that is performing well may be described as at the Year 6 standard.

Figure 24: Examples of 2014 reports that described achievement using a scale such as 'at', 'above', 'below' or 'well below' the National Standards



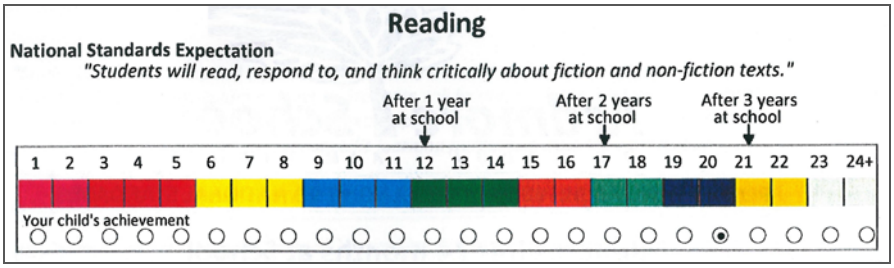
Achievement against the National Standard after 1 year of schooling

Curriculum Area	Well Below	Below	At	Above
National Standards Reading				✓
National Standards Writing			✓	
National Standards Mathematics				✓

MATHEMATICS

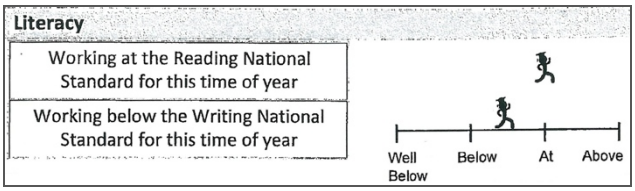
Mathematics Achievement: at Standard

Figure 25: Example of a 2014 report that described achievement using a best fit standard



Reports also presented information about students' achievement in two different ways. Sixty-six percent of reports presented OTJs in diagrams or tables (see Figure 26) only, while 16% described OTJs in text only (see Figure 27). Eighteen percent of reports presented information in both these ways. The way in which National Standards achievement information has been presented in reports has been reasonably consistent from 2010 to 2014.

Figure 26: Examples of 2014 reports that used diagrams to present OTJs



[redacted]'s attainment is	Reading	Writing	Maths
above the National Standards for the end of Year 5			
at the National Standards for the end of Year 5	✓	✓	✓
below the National Standard for the end of Year 5			

Figure 27: Example of a 2014 report that used text to present OTJs

[redacted] has met the Year 6 Writing Standard. It is very pleasing to see how [redacted] has focused on his writing, exploring other genres such as narrative. He brings his in depth knowledge of technology into his writing, incorporating it in some way so that the audience understands his message. [redacted]'s speech on coding using Raspberry Pi is a fine example of this. He brainstormed, researched and presented his information in a way that his audience (and me!) could follow. [redacted] enjoys giving feedback to others and responds to feedback, making changes to his writing that make it better than before. He has also taken on a leadership role within his writing group, helping organise ideas and next steps. [redacted] created and maintained the Outside Learning Environment's blog, adding descriptions to photos and posting some comments. He also assisted the younger students in the group by helping to edit their posts. I have been impressed with how much [redacted] has come into his own.

Principals were asked to rate the usefulness of National Standards progress and achievement information for communicating with families and students in 2014, and results indicate that views vary. Sixty percent of principals rated information from National Standards as very useful or moderately useful for communicating with families, while 33% of principals described this information as minimally useful for this purpose. Similarly, 45% of principals viewed National Standards information as very useful or moderately useful for communicating with students, while 44% believed it was minimally useful for this purpose. These results are very similar to those collected in 2013.

Principals were also questioned about the impact of National Standards reporting on students and families. Table 26 summarises these results for 2014 and compares them to those from the previous year.

Table 26: Principals' perceptions of the impact of National Standards reports on families and students, 2013 - 2014

Statement	Year	Proportion of principals			
		Agree	Neutral	Disagree	Not sure
Families seem more engaged with the reports on their child's progress and achievement than in previous years before the introduction of NS.	2013	22%	28%	48%	3%
	2014	22%	37%	38%	3%
Students who are not achieving well appear less positive about their reports than in previous years before the introduction of NS.	2013	63%	21%	13%	4%
	2014	51%	34%	8%	7%
Students who are achieving well appear more positive about their reports than in previous years before the introduction of NS.	2013	31%	41%	26%	3%
	2014	25%	52%	19%	4%

Results indicate that principals' have varying views about the impact of National Standards reports on students and families. In 2014, 22% of principals agreed that families seem more engaged with their child's reports than in previous years before the introduction of the National Standards, while 38% disagreed that this was the case. Similarly, 25% of principals agree that students who are achieving well appear more positive about their reports than in the years prior to the standards, while 19% disagree that this is the case. Views on the impact of reports on students who are not achieving well appear to be more consistent, with 51% of principals agreeing that students who are not achieving well appear less positive about their reports than in the years before the standards, and 8% disagreeing with this view. Substantial proportions of principals were neutral in their views. Results were similarly varied in 2013, although there was an increase in the proportion of principals describing their views of the impact of National Standards reports as neutral from 2013 to 2014.

6. Student achievement targets

Principals and Boards of Trustees are responsible for prioritising learning needs and allocating resources to improve student achievement. As part of this process Boards of Trustees set annual student achievement targets, which guide decisions about the teaching support individual students receive. Ministry of Education advice to schools emphasises that "Setting targets allows a school to prioritise additional resources and support to where the need is identified."[26]

This chapter uses evidence from schools' student achievement targets and analysis of variance reports to describe and evaluate National Standards student achievement targets. The monitoring and evaluation question and performance criteria that are the focus of this chapter are shown in Table 27.

Table 27: Monitoring and evaluation question and criteria

Intended outcome: National Standards provides clear information about student achievement for Boards of Trustees that can be used in decision-making and resource allocation processes.		
Monitoring and Evaluation Question	Performance criteria	Sources of evidence
In what ways is information from National Standards used by schools to set achievement targets?	Targets in the school's 2014 charter address student achievement in relation to the National Standards.	School documentation: student achievement targets and analysis of variance reports. Principal survey
	National Standards achievement targets are informed by baseline data.	
	National Standards achievement targets address the progress rates of all students.	
	All year levels are considered when National Standards targets are set.	
	National Standards achievement targets focus on students who are 'below' or 'well below' the standards.	
	National Standards achievement targets are differentiated to accelerate progress for specific groups of students.	
	National Standards achievement targets are specific, measurable, challenging, and achievable.	

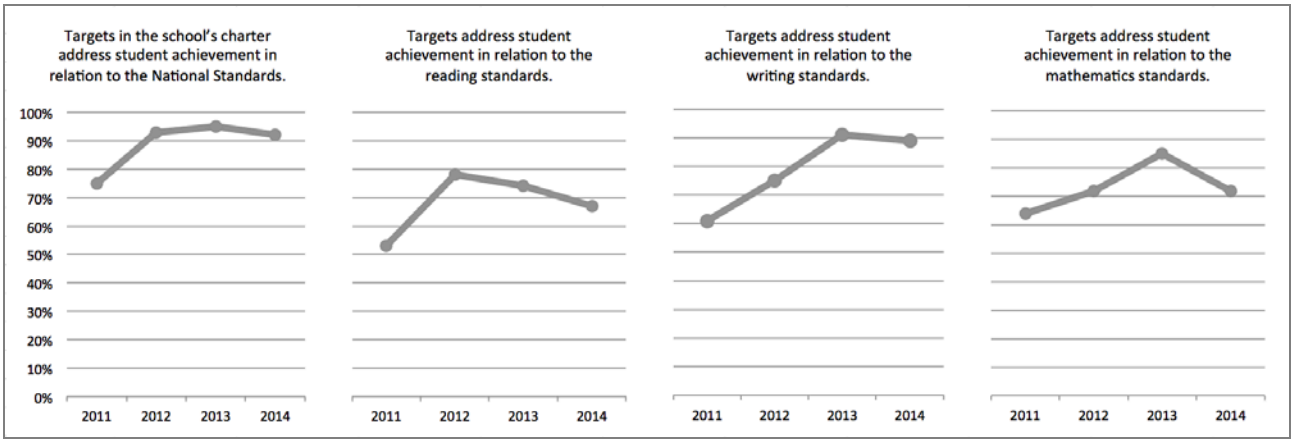
6.1 Evaluative criteria

6.1.1 Targets in the school's 2014 charter address student achievement in relation to the National Standards

Documentation from 89 schools was analysed in 2014. Ninety-two percent (82) of these schools had charters that were rated as including student achievement targets in at least one of the National Standards areas. In relation to each area, 67% of schools (60) had targets that included National Standards reading targets, 89% (79) included targets set in relation to the Writing Standards, and 72% (64) had National Standards mathematics targets. Figure 28 shows these proportions alongside results from previous years.

[26] Ministry of Education, (2014). *Charters, Analysis of Variance and Reporting, Guidance for schools using National Standards*. Available from http://www.minedu.govt.nz/~/media/MinEdu/Files/Boards/PlanningAndReporting/ChartersAndAoVAndReportingNov2014.pdf

Figure 28: Proportions of schools rated as including National Standards achievement targets in school charters, 2011 - 2014



The proportion of schools including student achievement targets in relation to at least one National Standards area increased from 75% in 2011, to 95% in 2013. A small decline (3%) was observed between 2013 and 2014. In relation to each area, the proportion of schools including National Standards reading targets was greatest in 2012 (78%), while the proportion of schools including targets in writing and mathematics peaked in 2013 (91% in writing and 85% in mathematics). From 2011 to 2014 there was a substantial increase in the proportion of schools setting National Standards writing targets (28%), with more modest increases observed in reading (14%) and mathematics (8%).

In 2014, seven of the 89 schools in the sample did not include National Standards targets in their charters. Of these schools, five had set targets in relation to other measures such as number framework stages, reading levels and e-asTTle levels. Two schools did not include any student achievement targets in their 2014 charters. One of these schools identified groups of students to target, but did not specify targeted achievement levels. The other school included a goal to develop targets on the basis of data analysis. These targets that did not address the National Standards were not analysed further, and the discussion that follows in the remainder of this chapter is focused on schools' National Standards targets (60 reading targets, 79 writing targets, and 64 mathematics targets). The general nature of schools' targets in relation to the National Standards is first described, then schools' National Standards targets in reading, writing, and mathematics are investigated more specifically.

6.1.2 National Standards achievement targets are informed by baseline data.

Ninety-six percent of the 82 schools that included National Standards targets in their 2014 charter used baseline data to inform the development of these targets. These schools either described 2013 achievement directly alongside 2014 targets, or referred to 2013 achievement levels in accompanying documentation.

6.1.3 National Standards achievement targets address the progress rates of all students.

Seventeen percent of the schools that included targets in relation to the National Standards in their 2014 charters included a focus on the progress rates of all students. This can be considered desirable as it enables all students to be considered in planning and resource allocation. Examples include:

> *All students will make forward progress in reading, of at least one National Standard benchmark in a 12 month period, through the provision of quality learning programmes, appropriate assessment and reporting systems, and the provision of additional support through the [Name] School Learning Support programmes and resources.*
>
> *All students who are 'below' in writing (27/115) will be achieving 'at' National Standard by the end of the current year. All students who are currently achieving 'at' or 'above the National Standard (89/115) will*

make expected or accelerated progress in relation to the National Standards. All students supported under ORRS will achieve their individual targets, progressing them towards the National Standard expectations by the end of the current year.

6.1.4 All year levels considered when setting National Standards targets.

Seventy percent of the 82 schools with National Standards achievement targets considered students at all year levels when these targets were set. These schools either included all year levels of students in their targets, or targets were set for just those year levels in which students were rated 'below' or 'well below' the standards. Targeted achievement levels were either the same for all year levels, or differed by year level as appropriate. Examples include:

By the end of term 4 2014 the percentage of students working 'at' or 'above' the National Standard in reading will increase from 56% to 85%.

51% (21) of the 41 students who were 'below' the standards will shift to 'at' in Mathematics. These students are in Years 3, 4, 5, 6, 7 and 8.

75% of all students will be 'at' or 'above' the standards in writing.

6.1.5 National Standards achievement targets focus on students who are 'below' or 'well below' the standards.

Ninety-one percent of the 82 schools that included National Standards achievement targets in their 2014 charters included a focus on the groups of students that were rated 'below' or 'well below' the National Standards in 2013. Examples include:

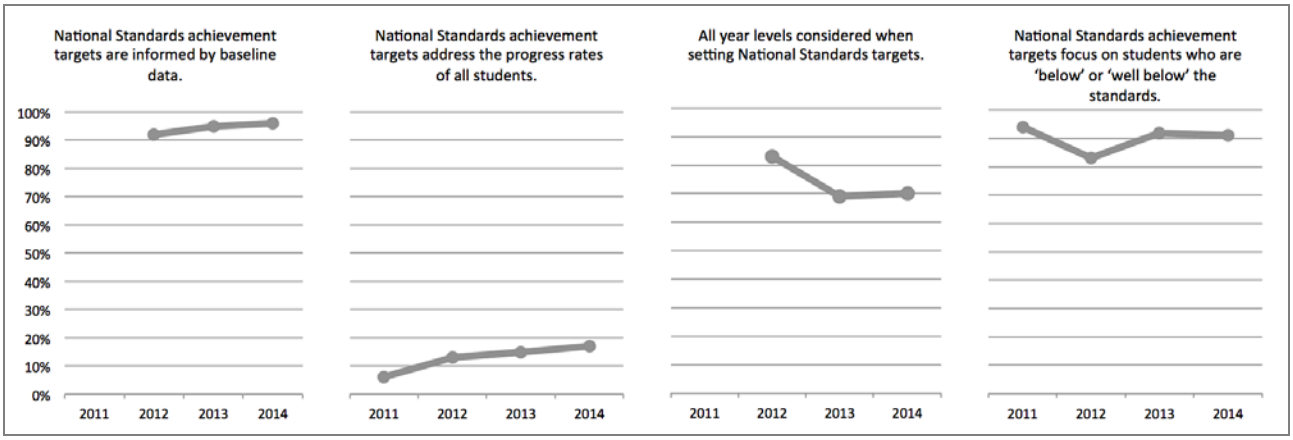
The majority of students achieving 'well below' or 'below' the standard for reading are in the After One Year at school cohort. 29/60 students are not meeting the standard. 19/29 are boys. This group of After One Year at school students identified will be meeting the reading standard for After Two Years at school at their next milestone (After Two Years at school).

To reduce the number of Year 5 children who at the end of 2013 were given a 'below' (20 children) or 'well below' (5 children) OTJ for writing. These children will be in Year 6 in 2014 and we will aim to reduce this number by 25%.

The 42 Māori learners and 6 Pasifika students who are currently 'below' the National Standards in Mathematics will make accelerated progress to be 'at' the standard by the end of 2014 or by their anniversary date.

Figure 29 summarises results from 2011 for the evaluation criteria described in sections 6.1.2 to 6.1.5.

Figure 29: Proportions of schools with National Standards targets meeting performance criteria, 2011 - 2014



Note that two criteria were introduced in 2012, so 2011 data is unavailable for these criteria.

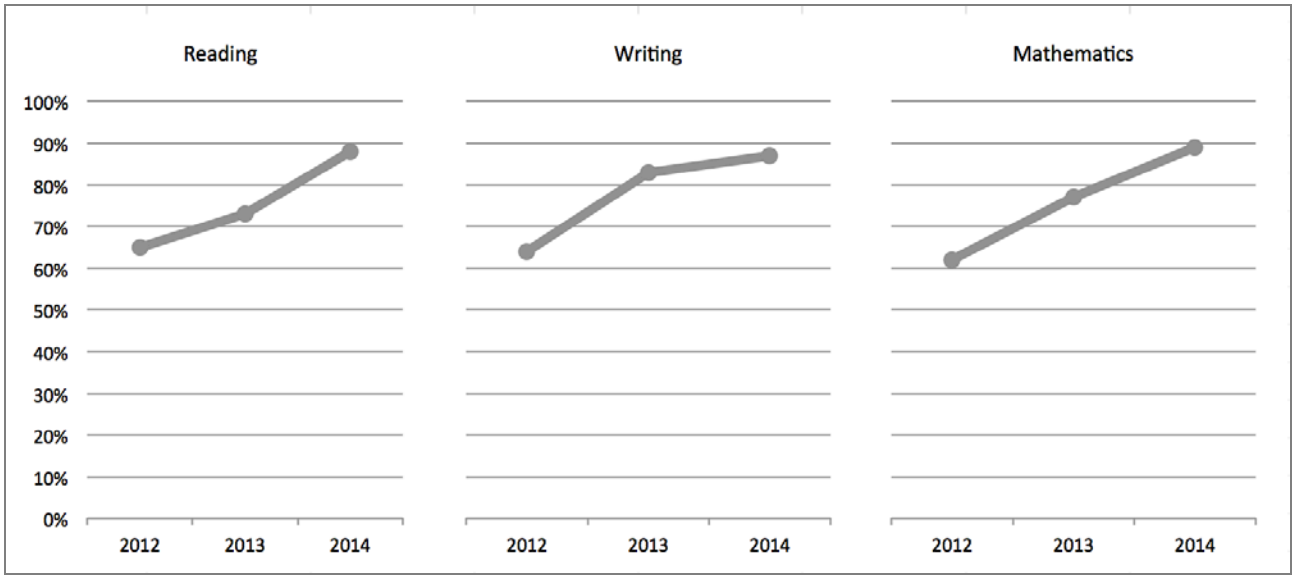
Results suggest nearly all schools used baseline data to inform their National Standards targets from 2012 to 2014. The proportion of schools using data to inform targets also increased slightly in this period, from 92% to 96%. A majority of schools considered all year levels when setting National Standards targets (at least 69% in all years) and focused targets on students who were 'below' or 'well below' the standards (at least 83% in all years), although there was a decrease in the proportion of schools meeting these two criteria over the course of the project. In contrast, a minority of schools addressed the progress rates of all students in their National Standards targets from 2011 to 2014, with a maximum of 17% including progress targets in these years.

The remainder of this chapter focuses on the student achievement targets that were rated as addressing the National Standards in reading, writing and mathematics. That is, 60 reading targets, 79 writing targets, and 64 mathematics targets. The percentages included in the following sections represent the proportions of these targets that were found to have certain features.

6.1.6 National Standards achievement targets are differentiated to accelerate progress for specific groups of students.

The majority of 2014 National Standards targets in reading (88%), writing (87%), and mathematics (89%) were differentiated to accelerate progress for specific groups of students. Figure 30 compares these results to those from previous years.

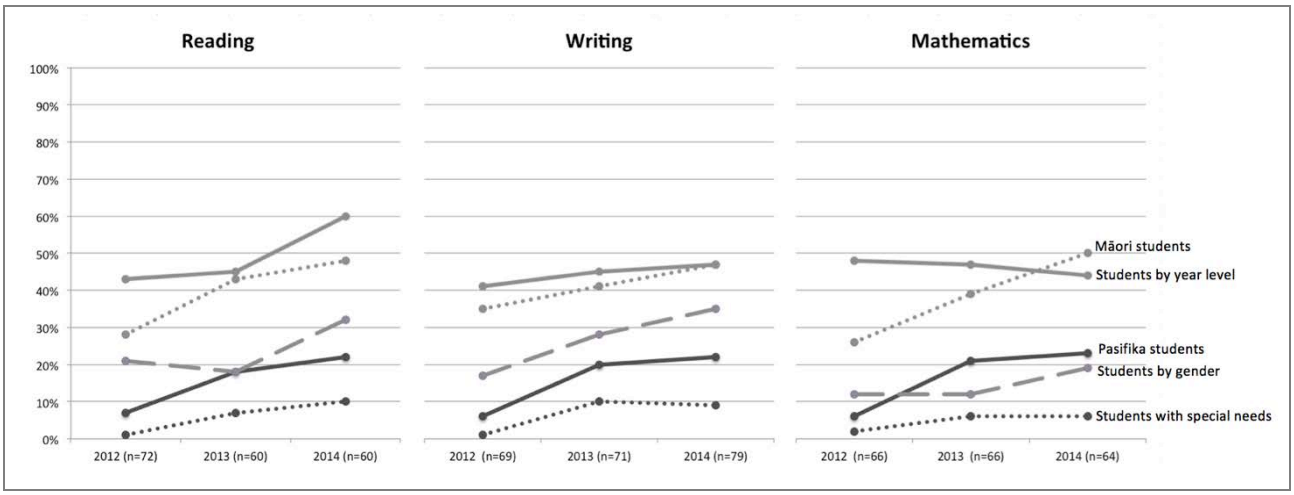
Figure 30: Proportion of National Standards targets differentiated to accelerate progress for specific groups of students, 2012 - 2014



In all areas the proportion of National Standards targets that were differentiated to accelerate progress for specific groups of students increased from 2012 to 2014. In 2012 just over 60% of National Standards targets were differentiated (65% in reading, 64% in writing, 62% in mathematics), and this increased to nearly 90% in 2014 (88% in reading, 87% in writing, 89% in mathematics).

Figure 31 shows the groups of students that were the focus of the differentiated targets in each area in 2014 and compares this to previous results.

Figure 31: Focus of differentiated National Standards targets, 2012 - 2014



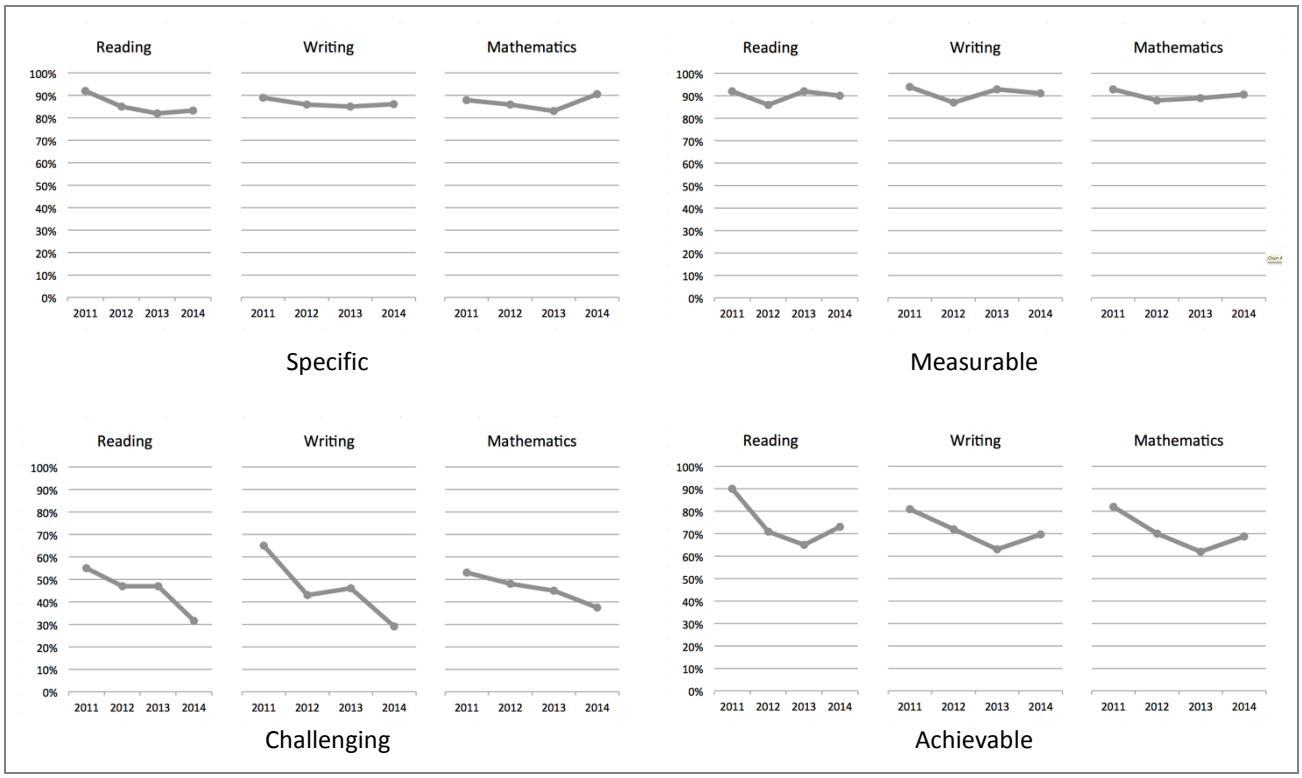
Evidence suggests that National Standards achievement targets were increasingly differentiated to accelerate the progress of specific groups of students from 2012 to 2014. There was an increase in the proportion of targets focused on each of these priority groups in this period. In general, year level was the most common focus for differentiated National Standards targets from 2012 to 2014. Between 43% and 60% of National Standards reading, writing, and mathematics targets were differentiated by year level in this period. A focus on Māori students was also reasonably common, with 26% to 50% of targets differentiated on this basis. Smaller proportions of National Standards targets focused on students by gender (12% to 35%), Pasifika students (6% to 23%), and students with special needs (1% to 10%).

In 2014 up to 35% of National Standards targets were differentiated by gender. In reading and writing these targets were almost exclusively focused on boys, while in mathematics the focus was reasonably evenly spread between boys and girls. For example, 16 of the 19 differentiated National Standards reading targets focused on boys, while none focused on girls. Three focused on both boys and girls. In comparison, five of the 12 differentiated National Standards mathematics targets focused on boys, four focused on girls, and three focused on both boys and girls. This pattern is very similar to that observed in previous years.

6.1.7 National Standards achievement targets are specific, measurable, challenging, and achievable.

Figure 32 shows the proportions of National Standards targets in schools charters that were rated as specific, measurable, challenging, and achievable from 2011 to 2014.

Figure 32: Proportion of National Standards targets meeting performance criteria, 2011 - 2014



From 2011 to 2014 the majority of National Standards achievement targets were rated as specific and measurable. More than 82% of targets were rated as specific, and more than 86% of targets were rated as measurable in all four years. In general, targets that were rated as measurable were also rated as specific. Examples include:

> *Year 1 students (Year 2 2014): The 25 Year 2 students (19 Maori, 6 European)who are achieving below the National Standard in Reading in 2013 (all the girls and 71% of the boys) will make accelerated progress and will be 'at' or 'above' the National Standard by their anniversary, or the end of 2014.*
>
> *To increase the number of boys achieving 'at' or 'above' the relevant National Standard for Mathematics to 85%.*
>
> *30% of students achieving 'below' and 'well below' the expected National Standard will move up one level to 'at' and 'below.' [Reading, writing, and mathematics]*

Results suggest that the level of challenge inherent in student achievement targets may be of concern. Up to 65% of targets were rated as challenging in 2011, and this proportion has decreased over time in all three areas. In 2014, 32% of reading targets, 29% of writing targets, and 38% of mathematics targets were rated as challenging. To be rated as challenging, targets needed to specify moving at least 50% of the students rated 'well below' in one year to 'below' in the following year, and 80% of the students rated 'below' in one year to 'at' in the following year.[27]

[27] Criteria developed for the National Standards: School Sample Monitoring and Evaluation Project. See section 2.3.1 for details.

The possibility of carrying out a secondary analysis of those targets that were not rated as challenging was explored in 2013. This analysis was to investigate two factors that contribute to the level of challenge in student achievement targets: the proportions of students in the 'below' and 'well below' categories, and the year levels of these students. The wide variety of formats schools use when writing student achievement targets meant there was insufficient information for the analysis to be conducted.

6.2 Descriptive information

Principals' views on the usefulness of information from National Standards were obtained through the online survey. In 2014, the majority of principals regarded information from National Standards as moderately or very useful for setting annual school-wide targets for student achievement (86% of principals) and reporting student progress and achievement to Boards of Trustees (81% of principals). Small proportions of principals (up to 5%) rated National Standards information as not useful for these purposes. In general the proportion of principals rating National Standards information as moderately useful, or very useful has increased over time. Table 28 shows these proportions from 2011 to 2014.

Table 28: Principals' perceptions of the usefulness of National Standards information for setting targets and reporting to Boards of Trustees, 2011 - 2014

Purpose of National Standards information	Proportion of principals rating NS information as moderately useful or very useful			
	2011	2012	2013	2014
Setting annual school-wide targets for student achievement.	63%	70%	78%	86%
Reporting student progress and achievement to Boards of Trustees.	64%	68%	71%	81%

The proportion of principals rating National Standards information as moderately useful or very useful for setting annual school-wide targets for student achievement increased from 63% in 2011 to 86% in 2014. Similarly, the proportion of principals rating National Standards information as moderately useful or very useful for reporting student progress to Boards of Trustees increased from 64% in 2011 to 81% in 2014.

7. Teaching interventions

Using National Standards information to inform the provision of teaching interventions is central to the National Standards initiative. For student achievement to improve, quality teaching interventions must be delivered to those students that are currently not meeting the National Standards. Ministry of Education information emphasises that "Timely and targeted interventions will make the difference."[28]

This chapter uses evidence from an online survey of principals to investigate the ways in which National Standards data was used to inform teaching interventions from 2011 to 2014. Table 29 shows the monitoring and evaluation questions and performance criteria that are the focus of this chapter.

Table 29: Monitoring and evaluation questions and criteria

Intended outcome: National Standards achievement information is used by teachers and schools to monitor student progress and achievement against the Curriculum. As a result of this, students requiring teaching interventions will be identified, and interventions will be provided.		
Monitoring and Evaluation Questions	Performance criteria	Sources of evidence
In what ways is information from National Standards used by schools to describe student achievement and progress?	Schools collate National Standards achievement data.	Principal survey
	Schools systematically track the progress of individual students against the National Standards.	
In what ways is information from National Standards used to provide targeted teaching interventions?	Students rated 'below' the standard receive targeted teaching interventions within the classroom programme, and students rated 'well below' the standard receive targeted teaching interventions additional to the classroom programme.	

7.1 Evaluative criteria

7.1.1 Schools collate National Standards achievement data.

The online survey collected information from principals about the extent to which their school collated National Standards achievement data in 2014. Ninety-five percent of principals indicated that they had either collated, or were planning to collate 2014 OTJs, while 5% indicated they had no plans to do so.

Results suggest that most principals collated achievement data for all three National Standards areas. Eighty-nine percent of principals indicated they had collated school-wide reading and writing achievement data, and a further 4% had collated reading and writing achievement data for some students. Similarly, 88% of principals had collated whole-school achievement data in mathematics, while 4% had collated mathematics achievement data for some students.

Slightly smaller proportions of principals had collated or were planning to collate OTJs to describe students' progress in reading, writing, and mathematics. In reading and writing 80% of principals indicated they had collated whole-school progress data, and 9% of principals had collated progress data for some students. In mathematics, 78% of principals noted they had collated whole-school progress data, while 9% had collated progress data for some students.

Ninety percent of principals surveyed in 2014 indicated that collated data provided a useful picture of school-wide achievement in relation to the National Standards. This is similar to results from previous years (92% in 2013 and 84% in 2012). Principals were invited to comment on the usefulness of National Standards data as a picture of school-wide

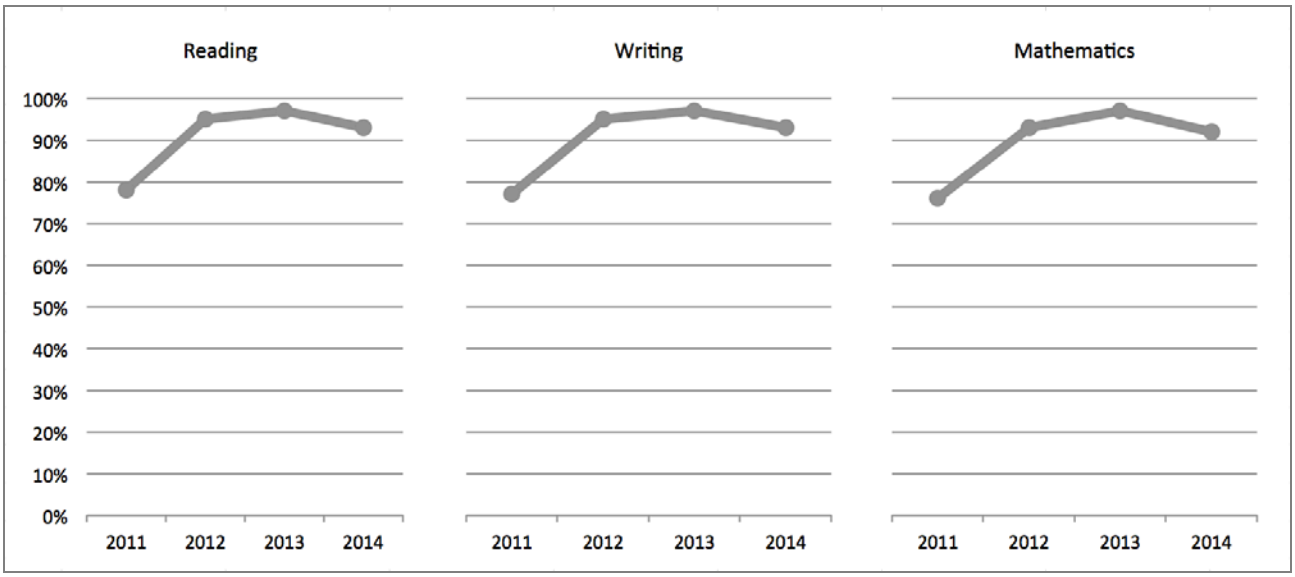
[28] http://nzcurriculum.tki.org.nz/National-Standards/Key-information/Questions-and-answers.

achievement and 31% chose to do so in 2014. The one common theme in 2014 responses was that National Standards data needs to be supplemented with other sources of information on student achievement (10% of respondents).

> *Low level picture - puts students into categories but information needs to be unpacked further to be of any specific use re teaching programmes / target student needs.*
>
> *Sometimes the OTJs are too broad. I prefer to look at specific data e.g. e-asTTLe and compare over years.*

Figure 33 shows the proportions of schools collating National Standards achievement data from 2011 to 2014.

Figure 33: Proportions of schools collating National Standards achievement data, 2011 - 2014



Overall, the proportion of schools that collated National Standards achievement data increased from 2011 to 2013. More specifically, there was a large increase from 2011 to 2012 (17% in reading and mathematics, and 18% in writing), with a smaller increase the following year (2% in reading and writing, and 4% in mathematics). From 2013 to 2014 there was a small decrease in the proportion of schools collating National Standards achievement data (4% in reading and writing, and 5% in mathematics).

7.1.2 Schools systematically track the progress of individual students against the National Standards.

Principals were asked to identify the extent to which teachers at their school used OTJs to systematically track students' progress in reading, writing, and mathematics from the end of 2013 to the end of 2014. Table 30 summarises the responses received and compares them to results from the previous year.

Table 30: Extent of schools' use of OTJs to track progress from 2013 to 2014

Area	Percentages of schools									
	All teachers		Majority of teachers		Minority of teachers		No teachers		Principal unsure	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Reading	65%	58%	17%	16%	10%	16%	5%	4%	4%	5%
Writing	68%	54%	14%	20%	8%	16%	5%	4%	5%	4%
Mathematics	66%	54%	17%	18%	8%	18%	5%	5%	5%	5%

Schools in which all teachers used OTJs to track students' progress, and schools in which the majority of teachers used OTJs for this purpose can be considered to be using data effectively. On this basis, results suggest that approximately three-quarters of schools systematically tracked the progress of individual students in relation to the National Standards

in reading (74%) writing (74%) and mathematics (72%) from the end of 2013 to the end of 2014. Results from the previous year were approximately 10% higher, with 82% of principals indicating their school tracked students' progress in relation to the reading and writing standards, and 83% indicating student progress was tracked in relation to the mathematics standards from 2012 to 2013. Table 31 summarises these results. Note that information in relation to this criterion was collected from teachers rather than principals in 2011 and 2012, so is not directly comparable.

Table 31: Proportion of schools systematically tracking the progress of individual students against the National Standards, 2013 - 2014

Performance criterion	Area	Year	
		2013	2014
Schools systematically track the progress of individual students against the National Standards.	Reading	82%	74%
	Writing	82%	74%
	Mathematics	83%	72%

Principals identified a variety of other measures that were used to track students' progress. In reading these included reading recovery levels (5% of respondents) and e-asTTle levels (5% of respondents). Five percent of principals indicated that results from each of GloSS and IKAN assessments were used to track student progress in mathematics. There were no common measures of progress in writing, other than the National Standards.

In 2014, 80% of principals indicated that their school has a system for tracking students' OTJs from school entry to the time they leave the school. Respondents were invited to describe this system and 64% chose to do so. Thirty-nine percent of principals indicated that the OTJs used to track achievement were stored in their school management system, and 9% of principals reported using school-designed record sheets to track OTJs. These results are very similar to those from 2013.

Sixty-eight percent of principals chose to comment on the way their school used OTJs to track achievement in 2014. These responses were most commonly focused on the way progress information informs decision-making about student learning (20% of respondents). Other themes included the use of OTJs to report to parents (8% of respondents) and Boards of Trustees (8% of respondents).

> *Reporting to the Board of Trustees. We report using data every term, but we specifically use OTJs mid and end of year to report. Teachers use this data to assess how students are tracking and to plan to their specific learning needs or make referrals as appropriate.*
>
> *Decisions regarding resources and students who need accelerated learning are made using the OTJ's. This data is collated and reported to staff, Board of Trustees and parents.*
>
> *To monitor any children who may have slipped from 'above' to 'at' or 'at' to 'below' so can implement appropriate programmes.*
>
> *Report form shows prior and current OTJs as useful guide to progress.*

Eight percent of principals described the timing of OTJs that are used to track achievement, and this was generally end-of-year to end-of-year. Nine percent of principals noted that the student management system at their school stored the OTJs used for tracking achievement.

> *Baseline data collected early in the year. Comparison made at the end of each year.*
>
> *We track year-to-year and mid-year on the SMS, but individually through each student report.*

7.1.3 Students rated 'below' the standard receive targeted teaching interventions within the classroom programme, and students rated 'well below' the standard receive targeted teaching interventions additional to the classroom programme.

Eighty-nine percent of principals noted that they used National Standards data to inform targeted teaching interventions in 2014. This included both targeted instruction within the classroom programme and instruction additional to the classroom programme. The common theme in comments from those principals that didn't use National Standards data to inform targeted teaching interventions was that they used other more specific measures for this purpose (8% of respondents).

> *We find other assessment information more reliable than National Standards data.*
>
> *We use much more robust, detailed and sensitive methods to inform our teaching and learning*

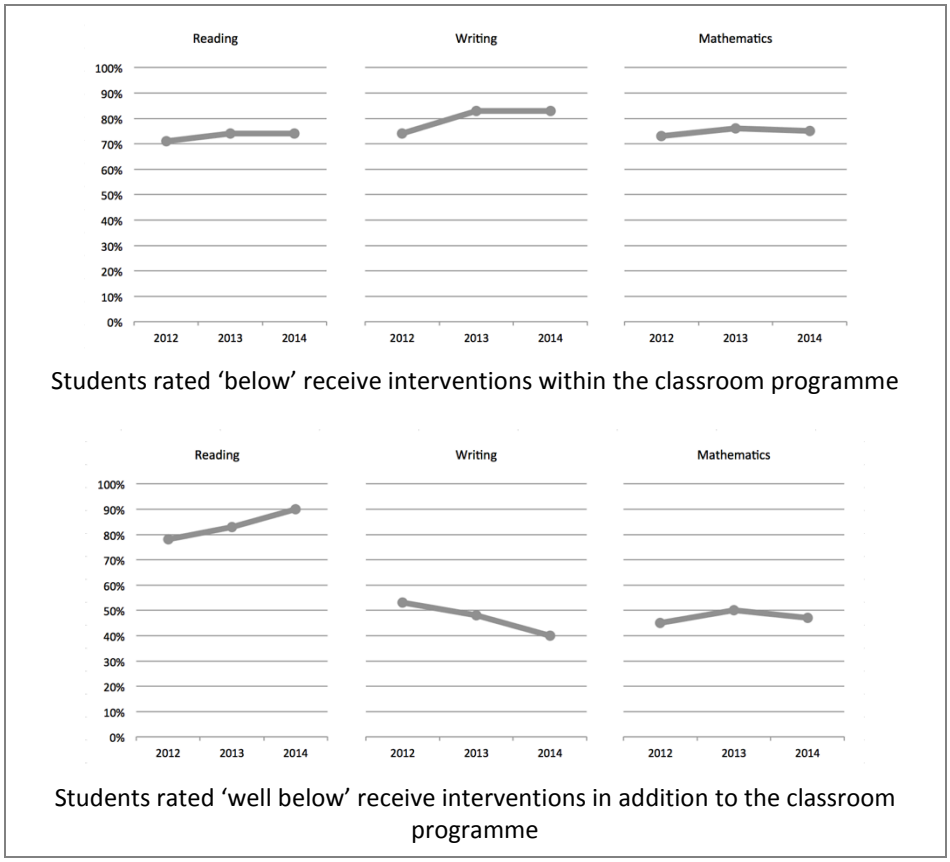
Table 32 summarises the nature of interventions provided for students rated 'below' and 'well below' the standards in reading, writing, and mathematics.

Table 32: Nature of targeted teaching interventions provided in 2014

Area	Students' rating in relation to National Standards	Teaching interventions		
		Within the classroom programme	In addition to the classroom programme	No targeted teaching interventions undertaken for these students
Reading	'Below'	74%	65%	2%
	'Well below'	60%	90%	0%
Writing	'Below'	83%	35%	5%
	'Well below'	75%	40%	6%
Mathematics	'Below'	75%	49%	5%
	'Well below'	75%	47%	7%

Results suggest that most schools provided targeted teaching interventions within the classroom programme for students that were rated 'below' the standards (74% in reading, 83% in writing, and 75% in mathematics). Similarly, most schools (90%) provided teaching interventions in addition to the classroom programme for students that were rated 'well below' the reading standards, while smaller proportions of schools provided targeted teaching interventions in writing (40%), and mathematics (47%) that were additional to the classroom programme. Figure 34 compares these results to those from 2012 to 2014.

Figure 34: Nature of targeted teaching interventions provided, 2012 - 2014



The majority of schools provided interventions to students rated 'below' the standards within the classroom programme from 2012 to 2014. For example, 71 to 74% of schools provided reading interventions within the classroom programme to students rated 'below' the standards in these years.

Similarly, most schools provided reading interventions to students rated 'well below' in addition to the classroom programme. This proportion also increased over time, from 78% in 2012, to 90% in 2014. In contrast, fewer schools provided writing and mathematics interventions additional to the classroom programme to students rated 'well below' the standards. In writing this proportion fell from 53% in 2012, to 40% in 2014. In mathematics it was reasonably consistent over the implementation, with 45 to 50% of schools delivering this type of mathematics intervention in these years.

Principals were asked to describe the nature of the teaching interventions put into place at their school in 2014, and identify those responsible for their delivery. Table 33 summarises these results in reading, writing and mathematics, both for interventions delivered within the classroom programme, and for those that were additional to it.

Table 33: Teaching interventions identified by principals in 2014

Nature of intervention	Percentage of principals					
	Within classroom programme			Additional to classroom programme		
	Reading	Writing	Mathematics	Reading	Writing	Mathematics
Additional teaching from qualified teacher	13%	18%	25%	74%[i]	57%[ii]	61%[iii]
Teacher aide support	42%	31%	30%	41%	29%	32%
Focused in-class support (classroom teacher)	62%	76%	68%	na	na	na
Additional teaching programmes	23%	15%	11%	31%	12%	15%

(i) includes 38% reading recovery and 7% Accelerated Literacy Learning (ALL)
(ii) includes 14% reading recovery and 17% Accelerated Literacy Learning (ALL)
(iii) includes 22% Accelerated Learning in Mathematics (ALiM) and 12% Mathematics Specialist Teachers (MST)

The majority of the principals described teaching interventions that occurred within the classroom programme in reading (62%), writing (76%), and mathematics (68%) as focused support from the students' regular classroom teacher. These principals tended to describe grouping students to enable teachers to meet their needs more effectively, and this included grouping students from different classes together.

> *Differentiated planning to specifically target students at their level with the aim to make accelerated progress [reading].*
>
> *Small group support was provided by additional teachers in the classroom during writing time as well as teachers having target students. Tailoring activities to meet their needs [writing].*
>
> *Mathematics classes are grouped according to ability levels. The class with students needing highest interventions was smaller in size and worked through material at a slower pace and targeted curriculum level.*

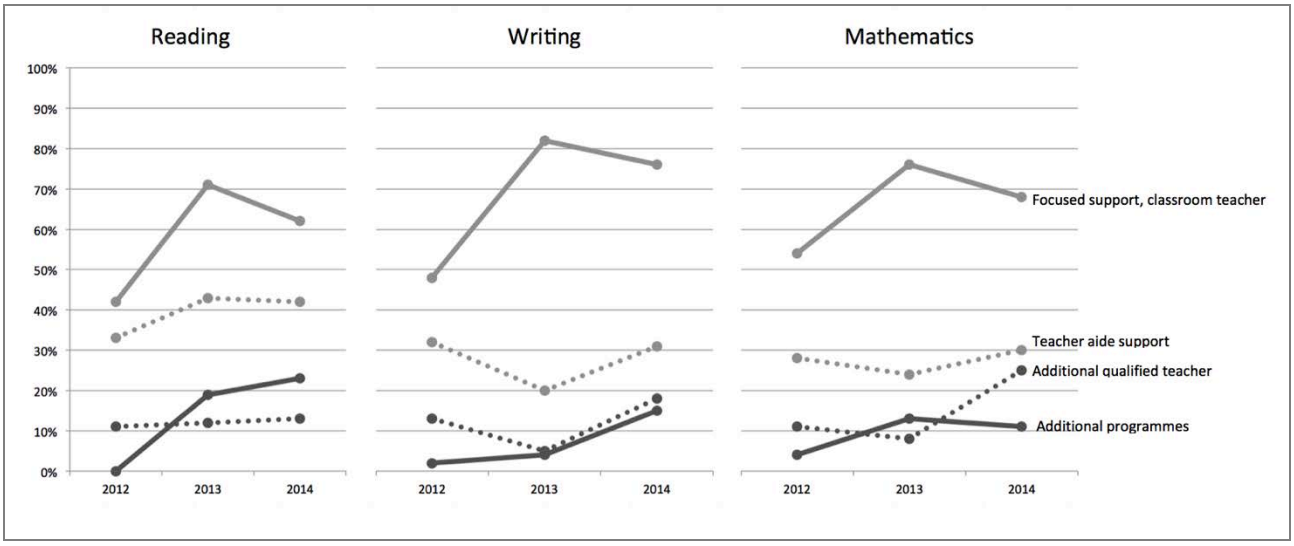
Substantial proportions of schools reported the use of teacher aides to support students within classroom reading (42%), writing (31%), and mathematics programmes (30%). Most of these descriptions focused on teacher aides working directly with students.

> *Blend and word work on individual and small group basis with teacher aides [reading].*
>
> *Students working with teacher aide on Clicker 6 programme to get them writing.*
>
> *Use of e-asTTle data and next steps facilitated by Head of Learning and delivered by teacher aides [mathematics].*

Small proportions of principals reported delivering additional teaching programmes within the classroom context to students rated 'below' the standards. Twenty-three percent of such programmes were delivered in reading and included Reading Eggs, Steps, and Rainbow Reading. Similar programmes were used as interventions in writing, with 15% of principals noting the use of programmes such as Rainbow Reading, Steps and Reading Together. In mathematics, 11% of schools utilised additional programmes such as Mathletics or Spring into Maths within the classroom context.

Figure 35 summarises the nature of teaching interventions that were provided within the classroom programme from 2012 to 2014.

Figure 35: Nature of interventions provided within classroom teaching programmes, 2012 - 2014



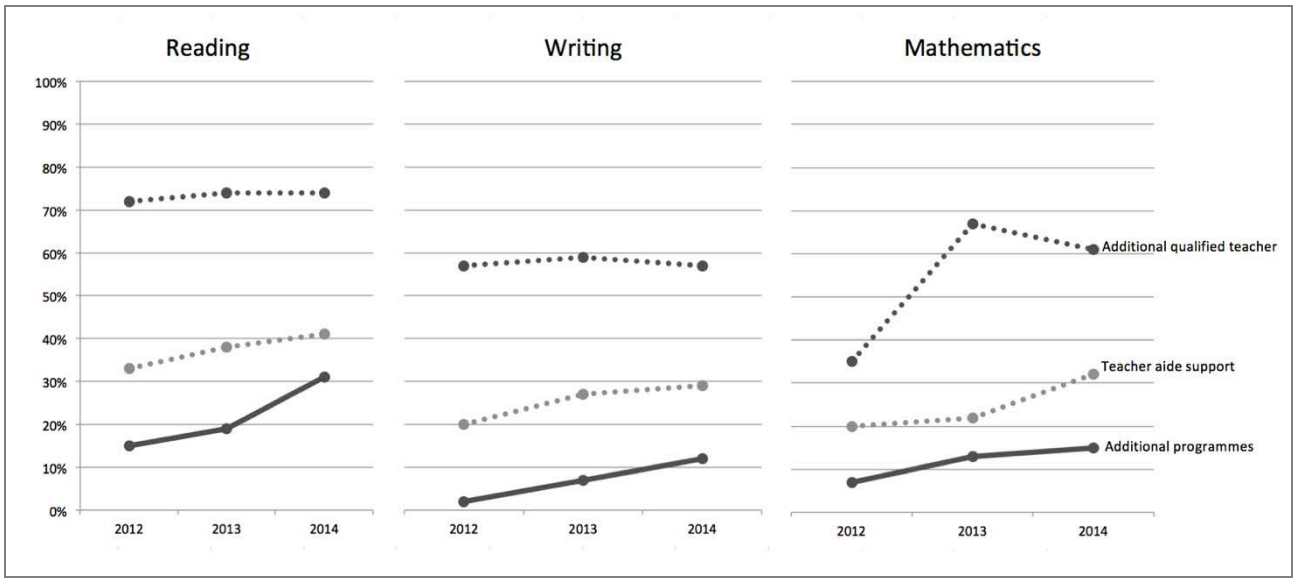
In all years and all areas the most common teaching intervention provided within the classroom context was focused in class support from the classroom teacher. Results suggest approximately 50% of schools provided focused in-class support in 2012 (42% in reading, 48% in writing, 54% in mathematics), and this proportion increased substantially in 2013, before declining to at least 60% in 2014 (62% in reading, 76% in writing, 68% in mathematics) Teacher aide support was the second most common teaching intervention within the classroom programme, with around 30% of schools utilising teacher aide support in reading (33% to 43%), writing (20% to 32%), and Mathematics (24% to 30%) from 2012 to 2014. Smaller proportions of schools provided additional qualified teachers or additional teaching programmes within the classroom context. For example, 11 to 13% of schools provided additional reading teachers, and 2 to 15% of schools provided additional writing programmes within the classroom programme from 2012 to 2014.

Results suggest that teaching interventions that were provided in addition to the classroom programme varied from those that were provided within it . The most common teaching intervention that was provided in addition to the classroom programme in 2014 was support from a qualified teacher (see Table 33). Seventy-four percent of schools noted that students identified as needing additional support were withdrawn from regular programmes to work with a qualified teacher in reading in 2014, while this was the case for 57% of schools in writing and 61% in mathematics. In reading and writing these interventions included: Reading Recovery (38% in reading and 14% in writing), and Accelerated Literacy Learning (7% in reading and 17% in writing). These mathematics interventions included Accelerated Learning in Mathematics (22%) and Mathematics Specialist Teachers (12%). Note that no information was collected about the proportion of students at each school that received support in this way.

> *Reading Recovery trained teacher working with groups of students for a term to give them a boost [reading].*
>
> *Teacher employed who focussed on groups from each class from Year 3 to 8, with targeted group work every day for 10 weeks. Assistant Principal in Juniors, 1 to 1 small group. Teacher Aide in Year 1-2 with Special Needs funding [writing].*
>
> *MST teacher in Year 4 and 6. Extra support for Year 3s at risk given by a released teacher.*

Figure 36 summarises the nature of teaching interventions that were provided in addition to the classroom programme from 2012 to 2014.

Figure 36: Nature of interventions provided additional classroom teaching programmes, 2012 - 2014



In all years from 2012 to 2014, the most common reading, writing, and mathematics teaching interventions provided in addition to the classroom programme involved students working with another qualified teacher. These interventions were most common in reading (72 to 74% of schools), and as described above, a substantial proportion of these interventions were provided through Reading Recovery and ALL.

Approximately 30% of schools provided teacher aide support in addition to the classroom programme, with an increasing proportion of schools providing this from 2012 to 2014. For example, 20% of schools provided teacher aide support focused on mathematics in 2012, and this increased to 32% in 2014. Results indicate that the use of additional teaching programmes was the least common intervention external to the classroom programme. In general additional programmes were more common in reading (15% to 31%), than they were in writing (2% to 12%), or mathematics (7% to 15%).

In order to obtain an indication of the extent of the interventions provided, principals were asked to identify which statement best described the provision of interventions in each of reading, writing and mathematics at their school in 2014. Table 34 summarises their responses.

Table 34: Extent of interventions provided in 2014

Statement	Proportion of principals		
	Reading	Writing	Mathematics
All students that needed teaching interventions received them	32%	35%	26%
Most students that needed teaching interventions received them	49%	34%	48%
Some students that needed teaching interventions received them	19%	26%	20%
None of the students that needed teaching interventions received them	0%	5%	6%

Results suggest that in the majority of schools, all or most of the students that needed reading (81%), writing (69%), or mathematics (74%) teaching interventions in 2014 received them. Approximately 20% of schools reported providing teaching interventions in reading (19%), writing (26%), or mathematics (20%) to some students that needed them. Small proportions of school report that none of the students that needed interventions in writing (5%) or mathematics (6%) in 2014 received them.

7.2 Descriptive information

The online survey asked principals to identify the tools they used to collate National Standards 2014 achievement data. Seventy-nine percent of principals noted that they used their school's student management system (SMS) to collate data, while 54% of principals indicated they used Excel or an alternative spreadsheet programme. Thirty-five percent of principals used both of these tools. Results suggest there has been a small increase in the proportion of principals using their school's SMS to collate National Standards data. Seventy-nine percent indicated this was the case in 2014, while in 2013 and 2012 these proportions were 69% and 68% respectively. Within this period the proportion of principals using a spreadsheet to collate National Standards data has varied a little (54% in 2014, 67% in 2013 and 51% in 2013).

Principals were asked to rate their school's current level of expertise in a variety of areas related to the provision of targeted teaching interventions as very high, high, moderate, low, or very low. Table 35 provides results from 2013 and 2014.

Table 35: Principal's rating of school's current expertise, 2013 - 2014

Area	Very high or high		Moderate		Low or very low	
	2013	2014	2013	2014	2013	2014
Identifying students that need targeted teaching interventions.	87%	83%	13%	17%	0%	0%
Clearly understanding what students need to be achieving in each year level in reading, writing, and mathematics.	72%	77%	25%	20%	1%	3%
Clearly reporting students' progress and achievement, in relation to the National Standards, to parents, families, and whānau.	73%	81%	26%	19%	0%	0%
Setting appropriate National Standards achievement targets for inclusion in the annually updated section of your school charter.	70%	80%	30%	18%	0%	2%
Knowing a variety of effective teaching strategies to use with students requiring intervention.	65%	65%	35%	35%	0%	0%
Systematically collecting evidence of students' progress in order to monitor the effectiveness of targeted teaching interventions.	62%	75%	38%	20%	0%	5%
Deliberately addressing teachers' professional development needs as a result of monitoring information from targeted teaching interventions.	62%	60%	37%	38%	1%	2%
Making accurate OTJs.	61%	68%	38%	28%	1%	5%
Delivering targeted teaching interventions to meet students' learning needs.	61%	61%	38%	39%	0%	0%
Changing teaching approach as a result of monitoring students' progress.	51%	55%	48%	42%	1%	3%
Moderating OTJs to ensure consistency between teachers and over time.	46%	49%	50%	40%	4%	11%

Results from 2013 and 2014 are very similar, and in general principals rated their school's current expertise highly. The majority of principals described their school's expertise as high or very high in nearly all areas and in both years. Results indicate principals are most confident about identifying students that need targeted intervention, clearly understanding what students need to be achieving in reading, writing, and mathematics, clearly reporting to parents, families, and whānau, and setting appropriate National Standards achievement targets. In both years at least 70% of principals rated their school's expertise in these areas as high or very high. In comparison, principals appear least confident about their school's capability to change teaching approach as a result of monitoring information, and moderate OTJs to ensure consistency between teachers and over time. Up to 50% of principals described their 2013 and 2014 expertise in these areas as moderate.

Principals were invited to comment on the expertise at their schools and 17% chose to do so. Two common themes in these comments were identified. These were the need to continually build capacity through ongoing professional development for teachers (5% of respondents) and the use of the teaching as inquiry model as a way to constantly improve practice (5% of respondents).

> *The teachers are continuing to develop strategies to help with targeted children's learning. This will continue next year through our reading PD.*
>
> *Through inquiry teachers are learning to change approaches to help students lift in areas they are experiencing difficulty.*

The survey gathered principals' opinions on the usefulness of National Standards data for identifying students for additional teaching support. Seventy-nine percent of principals described National Standards data as moderately useful or very useful for this purpose in 2014. Table 36 shows these results from 2011 to 2014 and indicates that principals became more positive about using National Standards data for identifying students for targeted support over these years.

Table 36: Principals' perceptions of the usefulness of National Standards information for identifying students for additional teaching support, 2011 - 2014

Purpose of National Standards information	Proportion of principals rating NS information as moderately useful or very useful			
	2011	2012	2013	2014
Identifying students for additional teaching support.	55%	59%	73%	79%

8. National Standards achievement data

If National Standards are operating as intended, OTJs will provide a dependable assessment of student achievement, which can be reported to parents and Boards of Trustees. This student achievement information should, in turn, trigger teaching interventions for those students that are not meeting the standards, with a resultant rise in achievement. Given this, the success of the National Standards initiative can be gauged by the extent to which student achievement increases as the implementation progresses.

This chapter presents OTJ data collected from participating schools over the first five years of implementation, 2010 – 2014. Note that the tables in this chapter include OTJs in relation to the after 1 year, after 2 years, and after 3 years standards for students in years 1 to 3. As a result of schools' practices, some of these judgments will have been made at the end of the school year, and some made on the anniversary of school entry, during the year. For students in years 4 to 8, end-of-year OTJs in relation to the relevant year level standard are reported. The monitoring and evaluation question and performance criteria addressed are shown in Table 37.

Table 37: Monitoring and evaluation question and criteria

Intended outcome: Student achievement will improve		
Monitoring and Evaluation Question	Performance criteria	Sources of evidence
What changes in student achievement in reading, writing, and mathematics, as indicated by OTJs, are observed as National Standards are introduced?	The proportions of students rated as 'at' or 'above' the National Standards increase.	National Standards achievement data
	The proportions of Māori and Pasifika students rated as 'at' or 'above' the National Standards increase.	

It is important to note that it is teachers' ratings of students' achievement levels that are presented in this chapter, the teachers' overall judgement of students' performance relative to the National Standards. Because other evidence has consistently raised concerns over the dependability of OTJs (see Chapter 4), it cannot be assumed that teachers' ratings accurately represent student achievement relative to the standards. Given this, the data must be interpreted with caution.

8.1 OTJs in reading, writing, and mathematics, 2010 to 2014

Tables 38 to 49 summarise teachers' ratings of student achievement in relation to the Reading, Writing, and Mathematics Standards from 2010 to 2014. The total proportions and numbers of students within each category are repeated at the bottom of all tables for convenience. Students' OTJs by ethnicity are given as proportions of the number of students with that ethnicity classification, which is slightly larger than *n* because some students nominate more than one ethnicity.

Table 38: Reading OTJs by year level, 2010 - 2014

Year level	Well Below					Below					At or above				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
1	10	5	4	5	7	30	29	29	28	30	60	66	67	67	63
2	6	5	6	5	6	20	14	16	15	16	74	81	79	80	77
3	6	5	5	4	6	15	13	11	13	12	80	82	84	83	82
4	3	5	5	5	6	15	13	12	12	11	82	82	84	83	83
5	6	5	7	5	7	17	16	16	14	13	77	79	77	82	80
6	8	5	5	7	6	17	16	15	12	12	75	80	81	81	83
7	12	13	7	9	8	23	23	19	18	18	65	64	74	73	74
8	10	14	13	8	6	22	21	18	15	15	68	66	69	77	79
All	8	8	7	7	7	20	18	17	16	16	72	74	76	78	77
n	534	1295	1055	1028	1045	1315	2940	2552	2530	2549	4834	11869	11587	12257	12318

Table 39: Reading OTJs by gender, 2010 - 2014

Gender	Well Below					Below					At or above				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Male	10	10	9	8	8	22	21	20	19	19	69	69	72	73	73
Female	6	6	5	5	5	18	16	14	13	13	76	79	81	82	82
All	8	8	7	7	7	20	18	17	16	16	72	74	76	78	77
n	534	1295	1055	1028	1045	1315	2940	2552	2530	2549	4834	11869	11587	12257	12318

Table 40: Reading OTJs by ethnicity, 2010 - 2014

Ethnicity	Well Below					Below					At or above				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
NZE	6	5	5	4	5	16	15	14	13	13	79	80	81	83	83
NZ Māori	11	13	10	10	10	28	26	24	23	23	61	61	67	67	68
Pasifika	20	16	11	12	12	30	26	25	27	27	50	59	63	61	61
Asian	6	6	5	8	6	15	16	13	15	13	79	78	82	78	81
Other	6	10	8	6	5	20	23	20	12	12	75	67	72	82	83
All	8	8	7	7	7	20	18	17	16	16	72	74	76	78	77
n	534	1295	1055	1028	1045	1315	2940	2552	2530	2549	4834	11869	11587	12257	12318

Table 41: Reading OTJs by school decile, 2010 - 2014

Decile	Well Below					Below					At or above				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
1 to 3	15	13	12	11	11	30	24	24	21	23	55	63	65	69	66
4 to 7	8	10	8	8	7	20	20	18	17	17	72	70	74	75	76
8 to 10	3	3	3	3	3	13	13	10	11	9	85	85	87	86	88
All	8	8	7	7	7	20	18	17	16	16	72	74	76	78	77
n	534	1295	1055	1028	1045	1315	2940	2552	2530	2549	4834	11869	11587	12257	12318

Table 42: Writing OTJs by year level, 2010 - 2014

Year level	Well Below					Below					At or above				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
1	8	2	2	2	2	13	22	18	19	21	79	76	81	79	77
2	3	3	4	3	3	22	17	18	18	21	76	80	78	79	76
3	6	4	4	5	5	22	25	23	26	23	72	71	73	70	72
4	3	7	6	7	8	19	20	21	21	19	78	73	73	72	73
5	10	8	8	7	9	25	29	27	26	24	66	64	65	67	68
6	13	8	7	8	9	26	25	23	23	20	61	68	70	70	72
7	17	16	10	13	10	36	32	30	26	27	47	52	60	61	63
8	12	16	18	11	9	37	30	25	24	24	52	54	57	65	68
All	10	9	9	8	7	26	26	24	23	23	64	65	68	69	70
n	656	1468	1308	1249	1158	1769	4113	3605	3699	3631	4278	10348	10361	10859	11114

Table 43: Writing OTJs by gender, 2010 - 2014

Gender	Well Below					Below					At or above				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Male	13	12	11	11	10	30	31	28	28	28	57	57	61	61	62
Female	6	6	6	5	5	24	21	19	19	18	71	72	75	77	78
All	10	9	9	8	7	26	26	24	23	23	64	65	68	69	70
n	656	1468	1308	1249	1158	1769	4113	3605	3699	3631	4278	10348	10361	10859	11114

Table 44: Writing OTJs by ethnicity, 2010 - 2014

Ethnicity	Well Below					Below					At or above				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
NZE	9	6	7	6	6	23	23	21	21	20	68	71	72	74	74
NZ Māori	11	14	12	12	11	34	33	30	31	30	55	52	58	57	60
Pasifika	14	16	13	13	11	39	32	30	31	30	48	53	57	55	59
Asian	7	6	5	8	6	19	20	17	19	18	74	74	78	73	76
Other	9	13	9	6	6	28	30	28	20	19	63	58	63	74	76
All	10	9	9	8	7	26	26	24	23	23	64	65	68	69	70
n	656	1468	1308	1249	1158	1769	4113	3605	3699	3631	4278	10348	10361	10859	11114

Table 45: Writing OTJs by school decile, 2010 - 2014

Decile	Well Below					Below					At or above				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
1 to 3	12	13	13	13	11	36	32	30	29	28	52	55	57	59	60
4 to 7	12	12	10	9	8	28	28	24	25	25	60	60	66	67	67
8 to 10	5	4	4	4	4	18	19	19	18	15	77	78	78	78	81
All	10	9	9	8	7	26	26	24	23	23	64	65	68	69	70
n	656	1468	1308	1249	1158	1769	4113	3605	3699	3631	4278	10348	10361	10859	11114

Table 46: Mathematics OTJs by year level, 2010 - 2014

Year level	Well Below					Below					At or above				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
1	7	1	2	2	2	9	14	10	11	12	84	84	88	87	86
2	4	4	3	2	3	22	18	18	18	21	75	78	79	80	76
3	4	4	4	3	3	33	27	23	25	24	63	70	73	72	73
4	5	5	5	4	6	20	20	17	21	18	76	75	78	75	77
5	8	7	7	6	8	21	26	23	21	20	71	67	70	73	72
6	8	6	6	7	7	25	23	20	20	18	67	71	74	74	75
7	12	15	8	11	10	38	32	28	24	26	51	53	64	65	64
8	12	14	18	11	7	33	31	25	22	24	56	56	57	67	69
All	8	8	8	7	6	26	25	21	21	21	66	67	71	72	72
n	535	1310	1183	1060	999	1769	3977	3266	3322	3379	4445	10628	10769	11438	11521

Table 47: Mathematics OTJs by gender, 2010 - 2014

Gender	Well Below					Below					At or above				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Male	9	9	9	8	7	26	24	22	20	21	65	67	69	72	72
Female	7	7	7	6	6	26	26	21	22	21	66	67	72	72	73
All	8	8	8	7	6	26	25	21	21	21	66	67	71	72	72
n	535	1310	1183	1060	999	1769	3977	3266	3322	3379	4445	10628	10769	11438	11521

Table 48: Mathematics OTJs by ethnicity, 2010 - 2014

Ethnicity	Well Below					Below					At or above				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
NZE	7	6	6	5	5	24	23	19	18	18	70	72	75	77	77
NZ Māori	10	13	12	11	10	34	33	28	28	29	56	54	61	61	62
Pasifika	15	15	11	12	10	39	32	30	29	31	46	53	59	60	60
Asian	5	4	3	4	4	13	16	15	16	15	82	81	83	80	82
Other	6	10	9	5	5	26	26	25	19	17	69	65	66	76	78
All	8	8	8	7	6	26	25	21	21	21	66	67	71	72	72
n	535	1310	1183	1060	999	1769	3977	3266	3322	3379	4445	10628	10769	11438	11521

Table 49: Mathematics OTJs by school decile, 2010 - 2014

Decile	Well Below					Below					At or above				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
1 to 3	12	12	12	11	12	37	31	28	28	26	52	57	61	61	62
4 to 7	9	11	9	8	6	29	28	24	22	23	63	62	67	70	71
8 to 10	5	3	3	3	3	16	17	14	15	15	80	80	83	82	83
All	8	8	8	7	6	26	25	21	21	21	66	67	71	72	72
n	535	1310	1183	1060	999	1769	3977	3266	3322	3379	4445	10628	10769	11438	11521

Generally, there were small increases in the proportion of students rated 'at' or 'above' the standards in each area, from year to year. In all but one instance, the proportion of students rated 'at' or 'above' the standard increased by up to four percent in any two consecutive years. These increases are very similar to those observed in the National Standards Public Achievement Information.[29] While the increases observed from year to year are small, over the five years of implementation to date they represent reasonably large shifts in the proportions of students rated 'at' or 'above' the standards.

There have been substantial shifts in the proportions of students rated 'at' or 'above' the standards from 2010 to 2014 for several demographic sub-groups of students. These include Pasifika students in reading, writing, and mathematics, Year 7 and 8 students in mathematics, Year 6 to 8 students in writing, Year 8 students and students at low decile schools in reading. For these groups, the proportion of students rated 'at' or 'above' the standards has increased by more than 10% from 2010 to 2014. For example, the proportion of Pasifika students rated as 'at' or 'above' the Reading Standards increased from 50% in 2010, to 61% in 2014. Similarly, the proportion of students in Year 7 rated 'at' or 'above' the Mathematics Standards rose from 51% in 2010 to 64% in 2014.

While the increases in the proportions of students rated as 'at' or 'above' the standards are substantial, it must be remembered that the data reflect patterns in teachers' ratings of students' achievement. Other evidence from this project has consistently suggested that these ratings may not be dependable (see Chapter 4), and international studies over the previous decade have not found general improvements in student performance over time in New Zealand. For example, the Trends in International Mathematics and Science Study (TIMSS) found New Zealand Year 5 students had significantly lower mathematics achievement on average in 2010/11 than in 2002/03,[30] and the Progress in International Literacy Study (PIRLS) found no change in New Zealand Year 5 students' achievement in either literary reading or informational reading from 2001 to 2010/11.[31] Given the magnitude of the improvements in achievement that are suggested by the OTJ data, the evidence that suggests OTJs lack dependability, and evidence about patterns of student achievement in New Zealand from international studies, the OTJ data cannot be taken as evidence that student achievement is improving over time.

8.2 OTJs in reading, writing, and mathematics in 2014

Students' OTJs were collected for a sample of 15,937 students in 2014.

8.2.1 Reading OTJs in 2014

Tables 50 to 53 show the 2014 reading OTJs of all students in the sample by year level, gender, ethnicity and school decile.

Table 50: 2014 reading OTJs by year level

Year Level	n	Percentages of students rated			
		Well Below	Below	At	Above
1	1,633	7.0	30.1	43.9	19.0
2	1,658	6.2	16.3	39.6	37.8
3	1,424	6.0	11.8	44.2	38.1
4	1,570	6.1	10.8	48.6	34.6
5	1,627	7.0	13.2	45.1	34.7
6	1,635	5.7	11.6	48.1	34.6
7	3,180	7.8	18	41.6	32.6
8	3,185	6.1	14.8	46.5	32.6

[29] https://www.educationcounts.govt.nz/statistics/schooling/national-standards/National_Standards

[30] For more information see http://www.educationcounts.govt.nz/publications/series/2571/114981/timss-201011-year-5-students-mathematics-achievement

[31] For more information see http://www.educationcounts.govt.nz/publications/series/2539/114981/125045

Table 51: 2014 reading OTJs by gender

Gender	n	Percentages of students rated			
		Well Below	Below	At	Above
Male	8,017	8.2	18.7	44.4	28.7
Female	7,895	5.0	13.2	44.7	37.0

Table 52: 2014 reading OTJs by ethnicity

Ethnicity[32]	n	Percentages of ethnic classifications rated			
		Well Below	Below	At	Above
NZ European	8,017	4.6	12.6	45.4	37.4
NZ Māori	7,895	9.8	22.5	47.0	20.7
Pasifika	2,029	12.1	26.7	40.9	20.3
Asian	1,455	5.8	13.3	43.4	37.5
Other	1,337	4.5	12.4	41.1	42.0

Table 53: 2014 reading OTJs by school decile

Decile band	n	Percentages of students rated			
		Well Below	Below	At	Above
1-3	3,051	11.0	22.8	44.3	21.9
4-7	8,409	7.1	17.1	46.3	29.5
8-10	4,452	2.6	9.3	41.5	46.7

Greater proportions of female students (82%) than male students (73%) were rated ‘at’ or ‘above’ the reading standards. In terms of ethnicity, similar proportions of New Zealand European and Asian students were rated ‘at’ or ‘above’ the reading standards (83% and 81% respectively), with smaller proportions of Maori (68%) and Pasifika students (61%) rated this way. Students at high decile schools had the greatest proportion of students rated ‘at’ or ‘above’ the reading standards (88%), followed by students at medium decline schools (76%), then students at low decile schools (66%).

8.2.2 Writing OTJs in 2014

Tables 54 to 57 present students’ 2014 writing OTJs. Summaries are provided by year level, gender, ethnicity and school decile.

Table 54: 2014 writing OTJs by year level

Year Level	n	Percentages of students rated			
		Well Below	Below	At	Above
1	1,633	2.0	20.7	68.2	9.1
2	1,661	3.2	20.5	63.8	12.5
3	1,413	5.4	23.0	56.2	15.4
4	1,569	8.0	19.2	53.4	19.4
5	1,627	8.5	23.7	49.7	18.2
6	1,635	8.5	19.5	53.1	18.8
7	3,180	10.1	27.0	45.1	17.7
8	3,185	8.5	23.9	47.1	20.5

Table 55: 2014 writing OTJs by gender

Gender	n	Percentages of students rated			
		Well Below	Below	At	Above
Male	8,008	9.7	28.1	50.3	11.9
Female	7,895	4.8	17.5	55.6	22.1

[32] Where students were identified with more than one ethnicity, results were included for all of the ethnicities specified.

Table 56: 2014 writing OTJs by ethnicity

Ethnicity[33]	n	Percentages of ethnic classifications rated			
		Well Below	Below	At	Above
NZ European	9,981	5.7	20.2	55.1	19.1
NZ Māori	3,557	10.5	29.8	49.8	9.9
Pasifika	2,026	11.1	29.8	48.4	10.7
Asian	1,453	5.8	18.3	54.5	21.3
Other	1,335	5.5	18.8	52.5	23.2

Table 57: 2014 writing OTJs by school decile

Decile band	n	Percentages of students rated			
		Well Below	Below	At	Above
1-3	3,053	11.3	28.4	51.4	8.9
4-7	8,397	7.8	24.9	52.2	15.1
8-10	4,453	3.6	15.1	55.3	26.0

Overall, the proportions of students rated 'at' or 'above' the standards were greater in earlier years than in later ones. For example, 77% of Year 1 students were rated 'at' or 'above' the standard, and 68% of students were rated 'at' or 'above' the End of Year 8 standard. Larger proportions of female students (78%) were rated 'at' or 'above' the standard than male students (62%). In terms of ethnicity, similar proportions of New Zealand European and Asian students were rated 'at' or 'above' the standards (74% and 76% respectively). The proportions of Māori and Pasifika students rated 'at' or 'above' were also similar (60% and 59% respectively). Larger proportions of students at high decile schools (81%) were rated 'at' or 'above' the standards, than students at medium decile (67%) or low decile schools (60%).

8.2.3 Mathematics OTJs in 2014

Tables 58 to 61 show students' 2014 mathematics OTJs. As in reading and writing, summaries are provided by year level, gender, ethnicity, and school decile.

Table 58: 2014 mathematics OTJs by year level

Year Level	n	Percentages of students rated			
		Well Below	Below	At	Above
1	1,638	1.7	12.2	71.4	14.7
2	1,661	2.8	21.0	58.2	18.1
3	1,406	3.3	23.5	55.8	17.3
4	1,568	5.5	17.7	51.7	25.1
5	1,626	7.9	20.4	47.1	24.5
6	1,635	7.2	17.7	48.4	26.7
7	3,180	9.9	26.2	41.5	22.4
8	3,185	7.2	24.1	45.4	23.3

Table 59: 2014 mathematics OTJs by gender

Gender	n	Percentages of students rated			
		Well Below	Below	At	Above
Male	8,004	6.9	21.4	48.2	23.6
Female	7,895	5.6	21.2	53.2	20.0

[33] Where students were identified with more than one ethnicity, results were included for all of the ethnicities specified.

Table 60: 2014 mathematics OTJs by ethnicity

Ethnicity[34]	n	Percentages of ethnic classifications rated			
		Well Below	Below	At	Above
NZ European	9,980	4.8	18.3	52.4	24.5
NZ Māori	3,556	9.5	28.7	49.7	12.1
Pasifika	2,028	9.9	30.6	48.4	11.1
Asian	1,451	3.6	14.7	47.8	33.8
Other	1,334	4.9	16.9	52.3	25.8

Table 61: 2014 mathematics OTJs by school decile

Decile band	n	Percentages of students rated			
		Well Below	Below	At	Above
1-3	3,055	11.5	26.4	49.7	12.5
4-7	8,392	6.4	22.9	51.3	19.5
8-10	4,452	2.5	14.7	50.2	32.5

Larger proportions of students were rated 'at' or 'above' the mathematics standards in earlier years, than in later ones. For example, 86% of Year 1 students were rated 'at' or 'above' the mathematics standards, and 69% of Year 8 students were rated 'at' or 'above.' Similar proportions of female students and male students were rated 'at' or 'above' the mathematics standards (73% and 72% respectively). With regard to ethnicity, greater proportions of Asian students (82%) were rated 'at' or 'above' than New Zealand European students (77%), Māori students (62%), and Pasifika students (60%). Larger proportions of students at high decile schools (83%) were rated 'at' or 'above' the standards than students at medium decile (71%), or low decile schools (62%).

8.2.4 Comment on students' OTJs in reading, writing, and mathematics

In general the student data collected in 2014 has similar patterns to data collected from 2010 to 2013. This consistency is expected, as any systematic effects are likely to be constant over time, and all four datasets are large enough for random errors to cancel.

As with data from previous years, the 2014 OTJs data reflect the demographic patterns that would be expected given other evidence about student achievement in New Zealand.[35] The achievement of students at high decile schools is rated more highly than the achievement of students at medium decile schools, which is in turn, rated more highly the achievement of students at low decile schools. The achievement of female students tends to be rated more highly than the achievement of male students, particularly in reading and writing. With regard to ethnicity, the achievement of Asian and New Zealand European students is rated more highly than the achievement of either Māori or Pasifika students. While the overall trend is for smaller proportions of students to be rated 'at' or 'above' the standards as students' year level increases, the results in writing and mathematics are more consistent in this regard than those in reading (Tables 50, 54, and 58 contain these comparisons).[36]

Information presented in Chapter 4 raises concerns about the dependability of OTJs and describes a growing body of evidence from this project that strongly suggests OTJs lack dependability. The strongest evidence is found in the substantial variation by school type of the OTJs of students in Years 7 and 8 (reported in relation to the 2012, 2013, and 2014 data collection). A comparison of the levels of agreement between PaCT trial ratings and school OTJs also

[34] Where students were identified with more than one ethnicity, results were included for all of the ethnicities specified.

[35] See for example, the *Achievement Information Kits* that summarise NZ student achievement information in reading, writing, and mathematics. These were published by the Ministry of Education in 2006, and are available from www.educationcounts.govt.nz/topics/research/6858/6578. The *Wānangatia te Putanga Tauira National Monitoring Study of Student Achievement: English: Writing 2012* is also relevant. It was published in 2013 and is available at http://www.educationcounts.govt.nz/publications/series/nmssa/english-writing-2012.

[36] Note that the OTJs of year 7 and 8 students show some variability by school type and this is described in section 4.1.1.

provided strong evidence that OTJs lack dependability (2013 data collection). Additionally, considerable variability was observed in both the consistency of students' OTJs over time (2011, 2012, 2013 and 2014 data collection), and the accuracy of teachers' ratings in relation to the writing and mathematics standards in the assessment scenarios (2011 and 2012 data collection). Principals' perceptions (2013 and 2014 data collection) is another source of evidence that casts doubt on the dependability of OTJs.

Given these concerns over the consistency of OTJs, the OTJ data presented in this chapter must be interpreted with caution. It also needs to be noted that there is a possibility that there is some form of systematic bias in teachers' ratings. For example, if teachers are making OTJs by comparing the achievement of students in their class, then teachers at low decile schools might tend to judge students more generously than teachers at high decile schools. Any systematic biases such as this will remain in aggregated data.

9. Other information

9.1 Timing of OTJs

The online survey collected information from principals about the timing of OTJs at their school. All of the principals surveyed indicated their school made end of year OTJs for students in Years 4 to 8 in 2014, and 76% indicated interim OTJs were made for these students. Interim OTJs for students in Years 4 to 8 were made in two ways. Sixty-four percent of principals indicated they focused on whether students were on track to meet the end of year standard, while 36% indicated that interim OTJs reflected students' achievement at the time judgments were made.

Results suggest that the timing of OTJs for students in Years 1 to 3 vary across schools. Sixty-two percent of principals noted that summative OTJs were made for these students on the anniversary of school entry, 30% noted that OTJs were made at the end of the year, and 22% indicated that no OTJs were made for these students. Note than percentages sum to more than 100% as some schools made OTJs both at the end of the year and on the anniversary of students' entry to school.

Thirty-six percent of principals indicated that interim OTJs for students in Year 1 to 3 were made after students had been at school for 20, 60, and 80 weeks. Forty-two percent of principals indicted that interim OTJs for these students were aligned with the reporting cycle for students in Years 4 to 8 at their school. Twenty-nine percent of principals indicated that no OTJs were made for students in Years 1 to 3. Percentages sum to more than 100% as some schools made interim OTJs for Year 1 to 3 students both after 20, 60, and 80 weeks at school, and aligned with the school's reporting cycle for students in other years levels.

9.2 Support provided

Principals were asked to indicate how well supported by the Ministry of Education they felt in a variety of areas. This included support through advisors, published material, online information and resources. Results from 2014 are shown in Figure 37 along with results from previous years.

Figure 37: Proportions of principals describing themselves as moderately supported or very supported by the Ministry of Education, 2010 - 2014

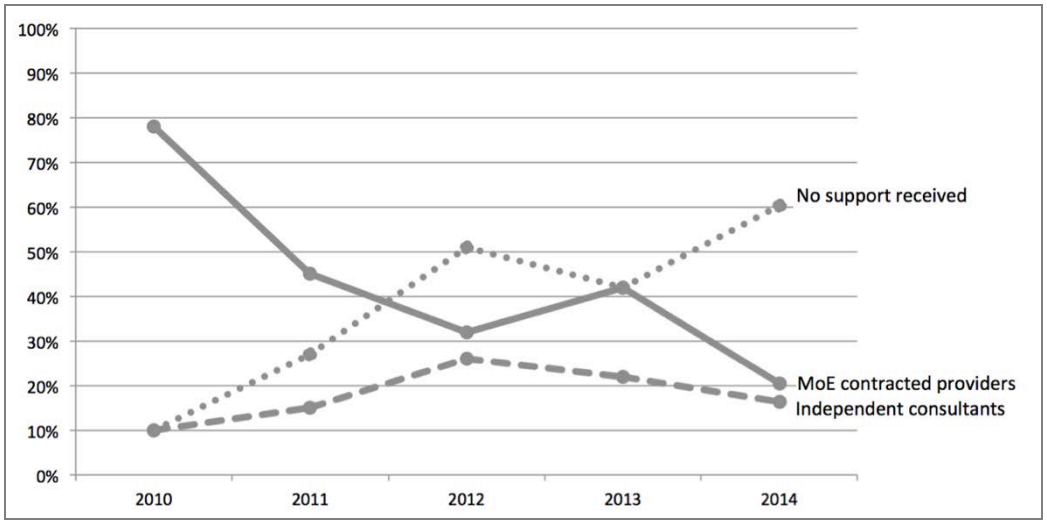
The proportion of principals describing themselves as moderately supported or well supported by the Ministry of Education has increased in every area from 2010 to 2014. The largest increase was seen in relation to reporting National Standards achievement to the Ministry (a 43% increase from 2010 to 2014). There were also large increases in the proportions of principals describing themselves as moderately or well supported to make OTJs (31% increase), and report achievement to Boards of Trustees (31% increase) and students (29% increase).

Despite these increases, 37 to 55% of principals described themselves as minimally supported or unsupported by the Ministry of Education. For example, 55% of principals noted their school was minimally supported or unsupported to moderate students' OTJs in 2014, and 48% described themselves as minimally supported or unsupported to set National Standards achievement targets and use National Standards information to identify students for teaching interventions.

Results suggest principals felt most supported to report to families and whānau and the Ministry of Education, with more than 60% of principals rating themselves as moderately supported or well supported in these areas in 2014. In contrast, principals felt least supported to moderate OTJs with 22% of principals feeling moderately or well supported to moderate OTJs in 2014.

Figure 38 shows the providers that principals report receiving support from to implement the National Standards from 2010 to 2014.

Figure 38: Sources of support for schools to implement the National Standards, 2010 - 2014



Overall, the proportion of schools accessing support from Ministry of Education contracted providers to implement the National Standards decreased from 2010 to 2014. Seventy-eight percent of principals noted that they received support from Ministry contracted providers in 2010, and this proportion fell to 21% in 2014. Results suggest small proportions of schools accessed support from independent consultants to implement the National Standards. Between 10% and 26% of schools noted they had used independent consultants to assist with National Standards implementation from 2010 to 2014.

Principals were invited to comment on the implementation of the National Standards or the support they have received and 10% chose to do so in 2014. These comments were generally negative, and the one common theme was that the lack of consistency in OTJs needs to be addressed (5% of respondents).

> *Huge challenge still to maintain consistency within the school let alone external to it.*
>
> *In my experience there seems to be a huge difference between schools re the data they are entering …and where to go to seek clarity is quite a difficult process!! The MoE site is totally non-user friendly for new players!*
>
> *Support for making National Standards judgements comparable between schools would be good.*

There has been a general decline over time in the proportion of principals commenting negatively about the implementation of National Standards. Thirty-seven percent of principals commented negatively in 2012, and this declined to 15% in 2013, and 10% in 2014.

9.3 Use of the PaCT

The 2014 survey collected information from principals about their plans to use the Progress and Consistency Tool (PaCT). Twenty-one percent of principals indicated their school was planning to use the PaCT to support teachers' OTJs in 2015, and 48% indicated they were not planning to use it. Comments from principals that were not planning to use the PaCT noted that they saw it as time consuming (7% of respondents) and that they did not see the need for it (5% of respondents).

> *I am yet to see the value of it. It appears to be very time consuming for already busy teachers. I would rather they spend their time working with the students.*
>
> *I feel we have effective systems without it.*

Very time consuming for teachers.

Thirty-two percent of principals noted that they were not sure whether teachers at their school would use the PaCT in 2015. The one common theme in comments from these principals was that they needed to investigate this opportunity more thoroughly (10% of respondents).

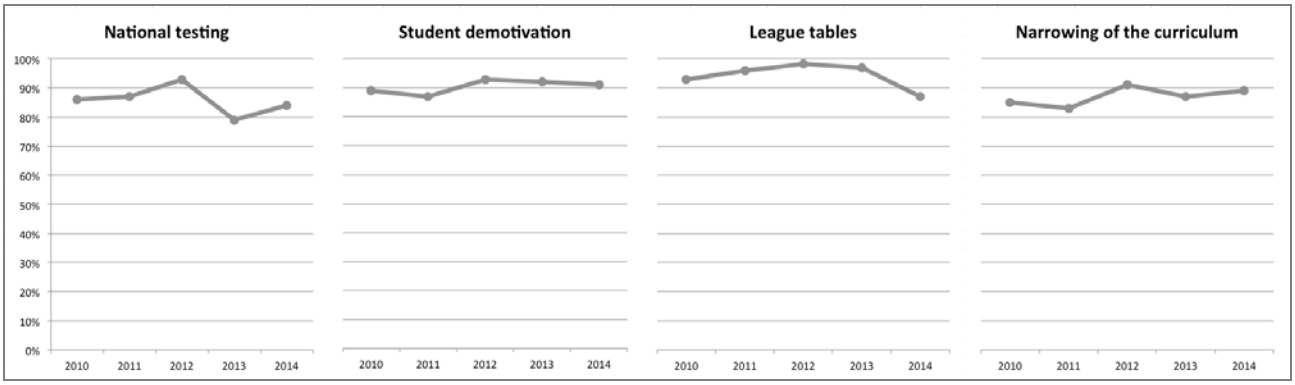
Need to look into it. Where is the PD?

Not sure re its availability - has it been fully trialled and ready for use?

9.4 Unintended consequences

Principals were questioned about their level of concern over four possible unintended consequences of National Standards. Figure 39 summarises these results from 2010 to 2014.

Figure 39: Principals describing themselves as very concerned or moderately concerned about the unintended consequences of National Standards, 2010 - 2014



Principals reported a high level of concern about the unintended consequences of National Standards over the first five years of implementation. At least 79% of principals described themselves as moderately concerned, or very concerned about all four of the unintended consequences from 2010 to 2014.

While there was some variation in principals' levels of concern over the unintended consequences of National Standards in these years, the proportions of principals identifying themselves as very concerned or moderately concerned in 2010 and 2014 were very similar. There were differences of two percentage points with regard to national testing and the demotivation of students, four percentage points in relation to the narrowing of the curriculum, and six percentage points over league tables.

In 2014 principals were also questioned about the likelihood of each of the four unintended consequences. In general, principals regarded these consequences as likely, as well as concerning. At least 82% of principals described each of the four unintended consequences as likely or very likely. Results indicate that principals believe the most likely unintended consequence is league tables, with 73% of principals rating this as very likely to occur. In comparison 58% of principals described the narrowing of the curriculum as very likely, 47% regarded national testing as very likely, and 42% believed the demotivation of students who are consistently below the standards was very likely to occur.

Principals were invited to comment on the unintended consequences of National Standards and 15% chose to do so in 2014. The two common themes in responses were that these consequences were already occurring (8% of respondents) and that the demotivation of students that are consistently 'below' the standards is an issue (5%).

All these things are happening. By the time they realise the detrimental effect of what they are doing it will be too late and students' sense of self-worth will have been diminished.

Our curriculum has already narrowed as a result of our focus on reading, writing and mathematics.

In our school National Standards has had a negative impact on the learning, confidence and attitude of the children it was supposed to be supporting.

Principals were invited to comment on the National Standards in general, and 22% of respondents chose to do so. These comments were very wide ranging, with 8% of respondents commenting negatively on some aspect of the standards and no positive comments received. These proportions are very similar to those collected in 2012 and 2013.

National Standards are a political tool more than an educational one. The concept of an aspirational goal is not necessarily bad but anything done in a hurry, poorly constructed and open to wide interpretation gives very unreliable data.

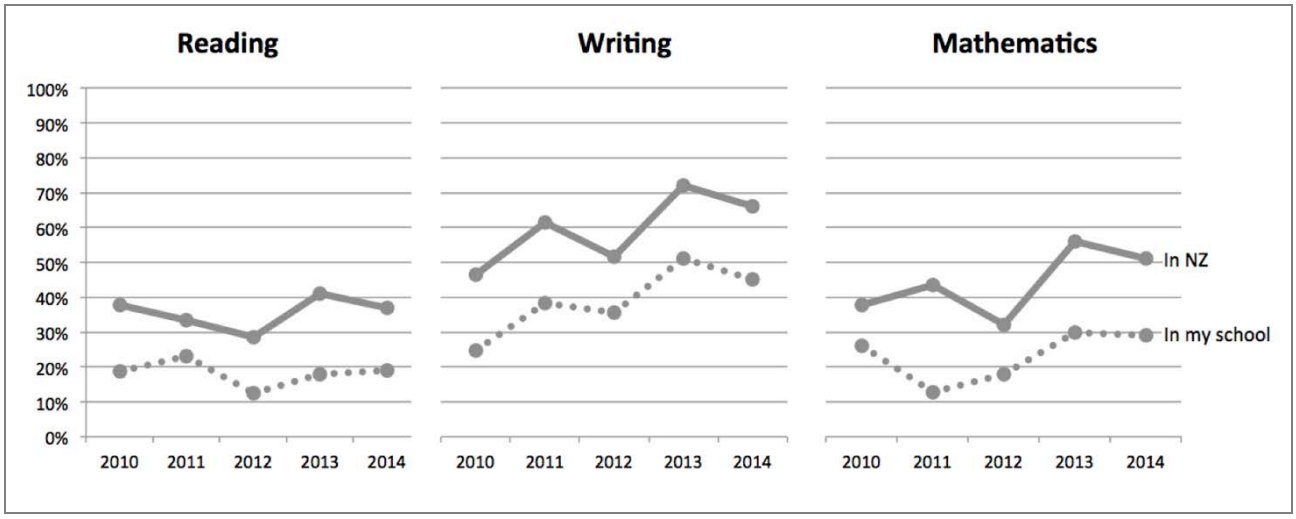
National standards are poorly thought out, they create extra hassle for teachers in the first three years and extra heartache for parents. It is horrible to have to label a five year old as below and this should just not be happening.

Reading, writing, and maths are significant issues because we are compartmentalising our learners into 4 boxes! The real issues of poverty, home support, knowledge etc. are community issues that need addressing before learning will happen.

9.5 Perceived achievement levels

Principals were questioned about the extent to which they thought low achievement was currently an issue, both within their own school and within New Zealand more generally. Figure 40 presents results collected from 2010 to 2014.

Figure 40: Proportion of principals that regard low student achievement as a significant issue, 2010 - 2014



Results suggest principals perceive low student achievement to be more of an issue across the country, than in their own school. In all three National Standards areas, and in all five years, a higher proportion of principals identified low student achievement as a significant issue in New Zealand than in their own school. For example, in 2014, 51% of principals noted that low student achievement in mathematics was a significant issue in New Zealand, while 29% of principals indicated that this the case within their own school.

In general, principals were most concerned over students' writing achievement, while they were less concerned about student achievement in mathematics and reading. For example, in 2013 when levels of concern were at their highest, 72% of principals indicated they were significantly concerned about writing achievement in New Zealand, while 56%

were significantly concerned about mathematics achievement in New Zealand and 41% were concerned about low student achievement in reading across the country.

Over the five years of National Standards implementation to date there was an overall increase in the proportions of principals that were significantly concerned about low student achievement in writing, both in New Zealand (increasing from 46% in 2010 to 66% in 2014) and in their own school (increasing from 25% in 2010 to 45% in 2014). There was also an increase in the proportion of principals that identified student achievement in mathematics as a significant issue within New Zealand (increasing from 38% in 2010 to 51% in 2014). In contrast, principals levels of concern over low student achievement in reading (both in New Zealand and in their own school) and low student achievement in mathematics within their own schools increased marginally (by up to 3%) from 2010 to 2014.

It is interesting to note that in general there was a sharp decrease in principals' levels of concern over achievement, from 2011 to 2012. For example, 62% of principals described low student achievement in writing as a significant issue across the country in 2011 and this dropped to 52% in 2012. While the reasons for this are unknown, the National Standards data was first published online in September 2012 and may have contributed to the observed decline.

10. Appendices

Appendix A: School documentation analysis criteria

Criteria
Includes targets in relation to the National Standards in Reading
National Standards reading targets specific
National Standards reading targets measurable
National Standards reading targets challenging[37]
National Standards reading targets achievable
Sub-group targets in reading focus on Māori students
Sub-group targets in reading focus on Pasifika students
Sub-group targets in reading focus on students with special needs
Sub-group targets in reading focus on students by year level
Sub-group targets in reading focus on students by gender
Sub-group targets in reading focus on other students
Includes targets in relation to the National Standards in Writing
National Standards writing targets specific
National Standards writing targets measurable
National Standards writing targets challenging
National Standards writing targets achievable
National Standards writing targets specify 100% of students to be rated ‘at’ or ‘above’
Sub-group targets in writing focus on Māori students
Sub-group targets in writing focus on Pasifika students
Sub-group targets in writing focus on students with special needs
Sub-group targets in writing focus on students by year level
Sub-group targets in writing focus on students by gender
Sub-group targets in writing focus on other students
Includes targets in relation to the National Standards in Mathematics
National Standards mathematics targets specific
National Standards mathematics targets measurable
National Standards mathematics targets challenging
National Standards mathematics targets achievable
National Standards mathematics targets specify 100% of students to be rated ‘at’ or ‘above’
Sub-group targets in mathematics focus on Māori students
Sub-group targets in mathematics focus on Pasifika students
Sub-group targets in mathematics focus on students with special needs
Sub-group targets in mathematics focus on students by year level
Sub-group targets in mathematics focus on students by gender
Sub-group targets in mathematics focus on other students
National Standards targets have been set taking students of all year levels into consideration
National Standards targets set using baseline data
National Standards targets focus on students who are below or well below the relevant standard
National Standards targets include a focus on progress for ALL students

All criteria were dichotomous and reports were rated as containing or not containing each feature.

[37] To be rated as challenging reading, writing and mathematics targets need to specify moving at least 50% of students rated ‘well below’ in 2013 to a rating of ‘below’ in 2014, and at least 80% of students rated ‘below’ in 2013 to a rating of ‘at” in 2014.

Appendix B: Criteria for end-of-year report analysis

Criteria	Code	Description
Use of NS	1	Report explicitly mentions NS
	2A	Report doesn't mention NS, but includes other achievement data, which is sufficient to make an OTJ. No further analysis required.
	2B	Report doesn't mention NS, but includes other achievement data which is insufficient to make an OTJ. No further analysis required.
	2C	Report doesn't mention NS and has no other achievement data. No further analysis required.

Only those reports in category one above, that is those reports that explicitly mention the National Standards, were analysed in further detail. The further criteria applied were:

Criteria
Achievement in relation to NS is sufficient[38]
Progress over time is shown on a nationally recognised scale.
If yes, which scale(s)?[39]
Progress time points[40]
Clarity[41]
Next learning steps included in at least 2 learning areas
Descriptions of actions families can take to support student learning
Achievement in relation to NS is described using best fit
Achievement in relation to NS is described using a scale
Achievement in relation to NS is shown using diagram / table
Achievement in relation to NS is shown using words

With the exception of the criteria used to describe the way student progress is reported, the criteria are dichotomous and reports were rated as containing or not containing each feature.

[38] Information about where the student sits in relation to NS and details of something of significance to OTJ in terms of what they can/can't do. (Not necessarily narrative, doesn't need to identify which specific standard – assume they have used the appropriate one.) Something of significance to OTJ may include:

- Reading : Something about ability to decode and how they respond, understand, and use what they have read. Reading level/age not enough on it's own.
- Writing : Something about ability to encode (including planning, revising and publishing) and ability to use writing for a variety of purposes across the curriculum. Information about spelling not enough on it's own.
- Mathematics: something about numeracy strategy, ability to solve problems, other aspects of mathematics curriculum. Information about knowledge (eg basic facts) not enough on its own.

[39] NS, curriculum levels, e-Asttle, STAR, PAT, reading colours, reading recovery levels, reading chronological ages, numeracy stages

[40] Mid 2010, end 2010, mid 2011, end 2011, mid 2012, end 2012, mid 2013, end 2013

[41] Information about reading, writing, mathematics is easy to understand: text, tables, and graphs. No unexplained jargon, concise.

Appendix C: Inter-rater reliability information

Criteria	Spearman correlation	Agreement rate
Use of NS	-	1.00
Achievement in relation to NS is sufficient	1.00	1.00
Clarity	0.85	0.94
Next steps / learning goals	0.85	0.94
Descriptions of families' actions	0.92	0.96
Achievement in relation to NS is described using best fit	1.00	1.00
Achievement in relation to NS is described using a scale	1.00	1.00
Achievement in relation to NS shown using diagram/table	1.00	1.00
Achievement in relation to NS shown using words	0.93	0.98

Note that these statistics are based on the independent coding of 50 reports. Where Spearman's rho is not provided, it could not be calculated because one or both of the raters showed no variability. For these criteria the agreement rate was used as a measure of reliability.

Appendix D: Online principal survey

Principal Survey, November 2014

Introduction

Welcome
Thank you for taking the time to participate. We value your responses and understand this is a busy time of the year for you.

The main purpose of this survey is to gather information about the implementation of National Standards at your school, and your perspectives of this. Responses from the 100 schools in the monitoring sample will provide valuable information about the implementation.

***1. What is the name and institution number of your school? (This is only collected to track responses. Individual schools will not be identified in any report.)**

School name:

Institution number:

Making OTJs

***2. Please indicate when OTJs for students in Year 4-8 were made in 2014. Tick all that apply.**

- ☐ End of Year OTJs
- ☐ Interim OTJs
- ☐ No OTJs

***3. Please select the month in which interim OTJs were made at your school for students in Year 4-8.**

○ February	○ June	○ October
○ March	○ July	○ November
○ April	○ August	○ December
○ May	○ September	○ No interim OTJs for these students

***4. Which statement best describes the way interim OTJs are made for students in Year 4-8 at your school?**

- ☐ Our interim OTJ focuses on whether students are on track to meet the end of year standard.
- ☐ Our interim OTJ focuses on students' position in relation to the standards at the time the judgment is made.
- ☐ We don't make interim OTJs for these students.
- ☐ If your situation differs, please describe.

Principal Survey, November 2014

***5. Please indicate when OTJs for students in Year 1-3 were made in 2014. Tick all that apply.**

- ☐ On the anniversary of the student's school entry
- ☐ At the end of the year
- ☐ No OTJs

***6. Please indicate when interim OTJs for students in Year 1-3 were made in 2014. Tick all that apply.**

- ☐ Interim OTJs at 20 weeks, 60 weeks, 100 weeks
- ☐ Interim OTJs aligned with the reporting cycle of Year 4-8 students
- ☐ No interim OTJs

Moderating OTJs

***7. Have teachers met this year to discuss and moderate students' OTJs?**

- ○ Yes
- ○ No

If no, please comment:

Moderating OTJs

***8. Please indicate the areas in which teachers at your school have moderated OTJs, or when you first plan to do this.**

	Happened 2014	Planned for 2015	No plan for this yet
Teachers moderating OTJs in reading	○	○	○
Teachers moderating OTJs in writing	○	○	○
Teachers moderating OTJs in mathematics	○	○	○

Principal Survey, November 2014

***9. How were your teachers grouped for moderation discussions? Tick all that apply.**

	Reading	Writing	Maths
All teachers in the school	☐	☐	☐
All teachers working with a particular year level of students	☐	☐	☐
All teachers working in a syndicate	☐	☐	☐
Small groups of teachers working at the same year level	☐	☐	☐
Doesn't apply as we didn't moderate this area	☐	☐	☐
Other, please specify	☐	☐	☐

Other:

***10. Which statement best describes how OTJs in READING were selected for moderation at your school? Tick all that apply.**

- ☐ A random selection of OTJs were moderated.
- ☐ The OTJs near the boundaries between the levels of the standards were moderated.
- ☐ The OTJs with inconsistent assessment evidence were moderated.
- ☐ All OTJs were moderated.
- ☐ Doesn't apply as we didn't moderate reading OTJs
- ☐ Other, please specify:

***11. Which statement best describes how OTJs in WRITING were selected for moderation at your school? Tick all that apply.**

- ☐ A random selection of OTJs were moderated.
- ☐ The OTJs near the boundaries between the levels of the standards were moderated.
- ☐ The OTJs with inconsistent assessment evidence were moderated.
- ☐ All OTJs were moderated.
- ☐ Doesn't apply as we didn't moderate writing OTJs
- ☐ Other, please specify:

Principal Survey, November 2014

***12. Which statement best describes how OTJs in MATHEMATICS were selected for moderation at your school? Tick all that apply.**

- ☐ A random selection of OTJs were moderated.
- ☐ The OTJs near the boundaries between the levels of the standards were moderated.
- ☐ The OTJs with inconsistent assessment evidence were moderated.
- ☐ All OTJs were moderated.
- ☐ Doesn't apply as we didn't moderate mathematics OTJs
- ☐ Other, please specify:

***13. Which type of discussions were teachers at your school involved in to moderate OTJs? Tick all that apply.**

	Working with other teachers informally	Systematic discussions within/across year levels	None	I'm not sure
Reading	☐	☐	☐	☐
Writing	☐	☐	☐	☐
Mathematics	☐	☐	☐	☐

***14. Which of these form the focus of moderation discussions at your school?**

- ○ Focus on OTJs as a whole
- ○ Focus on aspects of the standards that comprise an OTJ

Please comment

***15. Which of these are used to describe student capability in moderation discussions at your school? Tick all that apply.**

- ☐ Students' work samples
- ☐ Standardised assessment results, e.g. PAT or AsTTle
- ☐ Teachers observations of students' capability
- ☐ Other (please specify)

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***16. Which of these are used as reference points for student achievement in moderation discussions at your school? Tick all that apply.**

- ☐ The National Standards
- ☐ The National Standards illustrations
- ☐ The New Zealand Curriculum
- ☐ Learning progressions such as the Literacy Learning Progressions or the Number Framework
- ☐ School developed National Standards resources such as descriptions of performance or annotated work samples
- ☐ Other (please specify)

***17. Please describe the content of moderation discussions at your school.**

***18. What proportion of OTJs were moderated? Please provide an approximate percentage (from 0% to 100%).**

Reading
Writing
Mathematics

***19. Has your school engaged in any moderation processes with other school(s) this year?**

	Yes	No	Doesn't apply as we didn't moderate this area
Reading	○	○	○
Writing	○	○	○
Mathematics	○	○	○

If yes, please describe:

***20. Please rate your level of confidence in the accuracy of OTJs made by teachers at your school.**

	Very confident	Moderately confident	Minimally confident	Not confident	Haven't made OTJs	Not sure
Reading	○	○	○	○	○	○
Writing	○	○	○	○	○	○
Mathematics	○	○	○	○	○	○

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***21. Please rate your level of confidence in the consistency of OTJs within your school.**

	Very confident	Moderately confident	Minimally confident	Not confident	Haven't made OTJs	Not sure
Reading	○	○	○	○	○	○
Writing	○	○	○	○	○	○
Mathematics	○	○	○	○	○	○

***22. Please rate your level of confidence in the consistency of OTJs between schools in New Zealand.**

	Very confident	Moderately confident	Minimally confident	Not confident	Haven't made OTJs	Not sure
Reading	○	○	○	○	○	○
Writing	○	○	○	○	○	○
Mathematics	○	○	○	○	○	○

Please comment

23. If you'd like to make any comments about moderating OTJs please note them here.

National Standards data

***24. Please indicate whether you have you collated, or are you planning to collate, students' OTJs?**

- ○ I have collated students' 2014 OTJs
- ○ I am planning to collate students' 2014 OTJs
- ○ I am planning to collate students' 2015 OTJs
- ○ I have no plans to collate students' OTJs

National Standards data

***25. Please indicate the tools you used, or are planning to use to collate National Standards data (students' OTJs). Tick all that apply.**

- ☐ Student Management System
- ☐ Spreadsheet, for example Excel
- ☐ Other (please specify)

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***26. For each area please indicate the extent of the National Standards data you have collated, or are planning to collate to describe ACHIEVEMENT levels.**

	School-wide data collated	Some data collated	No data collated
Reading	○	○	○
Writing	○	○	○
Maths	○	○	○

Where some data has been collated please describe:

***27. Did collated data provide a useful picture of school-wide student achievement in relation to the National Standards?**

- ○ Yes
- ○ No

Please comment.

***28. For each area please indicate the extent of the National Standards data you have collated, or are planning to collate to describe students' PROGRESS.**

	School-wide data collated	Some data collated	No data collated
Reading	○	○	○
Writing	○	○	○
Maths	○	○	○

Where some data has been collated please describe:

Tracking students' progress

***29. To what extent did teachers at your school use OTJs to systematically track students' progress in reading from the end of 2013 to the end of 2014?**

- ○ All teachers
- ○ Majority of teachers
- ○ Minority of teachers
- ○ No teachers
- ○ I don't know

Please list any other measures used to track students' progress in reading.

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***30. To what extent did teachers at your school use OTJs to systematically track students' progress in writing from the end of 2013 to the end of 2014?**

- ○ All teachers
- ○ Majority of teachers
- ○ Minority of teachers
- ○ No teachers
- ○ I don't know

Please list any other measures used to track students' progress in writing.

***31. To what extent did teachers at your school use OTJs to systematically track students' progress in mathematics from the end of 2013 to the end of 2014?**

- ○ All teachers
- ○ Majority of teachers
- ○ Minority of teachers
- ○ No teachers
- ○ I don't know

Please list any other measures used to track students' progress in mathematics.

***32. Does your school have a system for tracking students' OTJs from school entry to the time they leave your school?**

- ○ Yes
- ○ No

If yes, please describe.

33. Please comment on the way your school uses OTJs to track student achievement.

Targeted teaching interventions

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***34. Did your school use National Standards information to provide targeted teaching interventions in 2014? This includes both targeted instruction within the classroom programme and instruction that is in addition to the regular classroom programme.**

- ○ Yes
- ○ No

If no, please comment.

Targeted teaching interventions

This section asks you to describe the targeted teaching interventions undertaken at your school in 2014. For the purposes of this survey the term 'targeted teaching interventions' refers both to targeted instruction that is within the classroom programme and to instruction that is in addition to the regular classroom programme.

***35. Which statement best describes the provision of READING interventions at your school in 2014?**

- ○ All students that needed teaching interventions received them
- ○ Most students that needed teaching interventions received them
- ○ Some students that needed teaching interventions received them
- ○ None of the students that needed teaching interventions received them

***36. Please identify whether the targeted teaching interventions in READING in 2014 were provided within the classroom programme or in addition to this.**

	Within the classroom programme	In addition to the classroom programme	No targeted teaching interventions undertaken for these students	Doesn't apply as no students rated this way
Students rated below the standards	☐	☐	☐	☐
Students rated well below the standards	☐	☐	☐	☐

The next two questions ask about the teaching interventions in reading that were implemented at your school in 2014. These may include focused in-class support from the classroom teacher, additional teaching from teacher aides or qualified teachers, or additional teaching programmes such as Reading Recovery, Accelerated Literacy Learning (ALL), Rainbow Reading, and Lexia.

37. If teachers at your school provided targeted teaching interventions in READING <u>within the classroom programme</u> please describe the nature of the intervention(s) and who implemented it.

38. If teachers at your school provided targeted teaching interventions in READING <u>in addition to the classroom programme</u> please describe the nature of the intervention(s) and who implemented it.

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***39. Which statement best describes the provision of WRITING interventions at your school in 2014?**

- ○ All students that needed teaching interventions received them
- ○ Most students that needed teaching interventions received them
- ○ Some students that needed teaching interventions received them
- ○ None of the students that needed teaching interventions received them

***40. Please identify whether the targeted teaching interventions in WRITING in 2014 were provided within the classroom programme or in addition to this.**

	Within the classroom programme	In addition to the classroom programme	No targeted teaching interventions undertaken for these students	Doesn't apply as no students rated this way
Students rated below the standards	☐	☐	☐	☐
Students rated well below the standards	☐	☐	☐	☐

The next two questions ask about the teaching interventions in writing that were implemented at your school in 2014. These may include focused in-class support from the classroom teacher, additional teaching from teacher aides or qualified teachers, or additional teaching programmes such as Reading Recovery, Accelerated Literacy Learning (ALL), and Quick 60.

41. If teachers at your school provided targeted teaching interventions in WRITING within the classroom programme please describe the nature of the intervention(s) and who implemented it.

42. If teachers at your school provided targeted teaching interventions in WRITING in addition to the classroom programme please describe the nature of the intervention(s) and who implemented it.

***43. Which statement best describes the provision of MATHEMATICS interventions at your school in 2014?**

- ○ All students that needed teaching interventions received them
- ○ Most students that needed teaching interventions received them
- ○ Some students that needed teaching interventions received them
- ○ None of the students that needed teaching interventions received them

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***44. Please identify whether the targeted teaching interventions in MATHEMATICS in 2014 were provided within the classroom programme or in addition to this.**

	Within the classroom programme	In addition to the classroom programme	No targeted teaching interventions undertaken for these students	Doesn't apply as no students rated this way
Students rated below the standards	☐	☐	☐	☐
Students rated well below the standards	☐	☐	☐	☐

The next two questions ask about the teaching interventions in mathematics that were implemented at your school in 2014. These may include focused in-class support from the classroom teacher, additional teaching from teacher aides or qualified teachers such as Maths Specialist Teachers (MSTs), or additional teaching programmes such as Accelerated Learning in Mathematics (ALiM), Coddsbrics and Spring Maths.

45. If teachers at your school provided targeted teaching interventions in MATHEMATICS within the classroom programme please describe the nature of the intervention(s) and who implemented it.

46. If teachers at your school provided targeted teaching interventions in MATHEMATICS in addition to the classroom programme please describe the nature of the intervention(s) and who implemented it.

***47. Please rate your school's current level of expertise in these areas.**

	Very high	High	Moderate	Low	Very low
Making accurate OTJs.	○	○	○	○	○
Moderating OTJs to ensure consistency between teachers and over time.	○	○	○	○	○
Clearly understanding what students need to be achieving in each year level in reading, writing, and mathematics.	○	○	○	○	○
Clearly reporting students' progress and achievement, in relation to the National Standards, to parents, families, and whānau.	○	○	○	○	○
Setting appropriate National Standards achievement targets for inclusion in the annually updated section of your school charter.	○	○	○	○	○
Identifying students that need targeted teaching interventions.	○	○	○	○	○
Knowing a variety of effective teaching strategies to use with students requiring intervention.	○	○	○	○	○
Delivering targeted teaching interventions to meet students' learning needs.	○	○	○	○	○
Systematically collecting evidence of students' progress in order to monitor the effectiveness of targeted teaching interventions.	○	○	○	○	○
Changing teaching approach as a result of monitoring students' progress.	○	○	○	○	○
Deliberately addressing teachers' professional development needs as a result of monitoring information from targeted teaching interventions.	○	○	○	○	○

Please comment

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48. If you'd like to make any comments about using National Standards data to provide targeted teaching interventions please note them here.

Implementation and support

***49. How well supported do you feel by the Ministry of Education in the areas listed (including support through advisors, published material, online information and resources).**

	Well supported	Moderately supported	Minimally supported	Unsupported
Making OTJs	○	○	○	○
Moderating OTJs	○	○	○	○
Reporting to families / whānau	○	○	○	○
Reporting to students	○	○	○	○
Setting student achievement targets relative to National Standards	○	○	○	○
Reporting National Standards achievement to the Board	○	○	○	○
Reporting National Standards achievement to the Ministry	○	○	○	○
Using information from National Standards to identify students for targeted teaching interventions	○	○	○	○
Using information from National Standards to identify teachers' professional development needs	○	○	○	○

Please comment.

***50. Who did your school receive support from this year to implement the National Standards? Tick all that apply.**

- ☐ Ministry of Education contracted PLD providers, e.g. School Support Services, Learning Media Limited, Evaluation Associates
- ☐ Student Achievement Function (SAF) practitioners from the Ministry of Education
- ☐ Other Ministry of Education regional staff e.g. Education, Curriculum and Performance (ECP) Senior Advisors
- ☐ Independent/private consultants
- ☐ None
- ☐ Other, please specify:

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51. If you would you like to make any other comments on the implementation of National Standards or the support you have received please note them here.

Understandings and opinions

***52. How useful have you found National Standards data for each of the following in 2014?**

	Very useful	Moderately useful	Minimally useful	Not useful	Doesn't apply
Setting annual school-wide targets for student achievement	○	○	○	○	○
Reporting student progress and achievement to Boards of Trustees	○	○	○	○	○
Identifying students for additional teaching support	○	○	○	○	○
Communicating with students	○	○	○	○	○
Communicating with families	○	○	○	○	○

***53. Please indicate your level of agreement with the following statements about the impact of National Standards on students and families.**

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Not sure
Families seem more engaged with the reports on their child's progress and achievement than in previous years before the introduction of National Standards.	○	○	○	○	○	○
Students who are not achieving well appear less positive about their reports than in previous years before the introduction of National Standards.	○	○	○	○	○	○
Students who are achieving well appear more positive about their reports than in previous years before the introduction of National Standards.	○	○	○	○	○	○

***54. Did you use the Progress and Consistency Tool (PaCT) to make mathematics OTJs at the end of 2014?**

○ Yes

○ No

If yes, please comment:

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***55. Are you planning to use the Progress and Consistency Tool (PaCT) to support teachers' OTJs in 2015?**

- ○ Yes
- ○ No
- ○ Not sure

Why? / Why not?

***56. A range of possible unintended consequences of National Standards have been identified. In your view, how likely are these consequences, and if they occurred how concerned would you be?**

	Likelihood	How concerning
Narrowing of the curriculum		
League tables		
The demotivation of students who are consistently below the standards		
National testing		

Please comment:

***57. Please indicate the extent to which you think low student achievement is currently an issue in each area.**

	In your school	In New Zealand
Reading		
Writing		
Mathematics		

***58. When did your school last participate in in-depth school-based support in these areas?**

	Last in-depth PD at this school
Assessment	
Literacy	
Numeracy	

59. If you would you like to make any other comments about National Standards please note them here.