Student Achievement against the National Standards in Reading, Writing and Mathematics 2010

Full-time and fee-paying primary students in years 1-8 enrolled by 31 October 2010

February 2011
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Foreword

National Standards in reading, writing and mathematics for students in years 1-8 were introduced by the government in 2010. This report on the achievement and progress of Te Kura students against these standards provides information on the standards students achieved in 2010 and compares their progress with that reported at mid-year. All students in years 1-8 who were enrolled with Te Kura in 2010 before 31 October are reported on.

The standards describe and exemplify what students are expected to achieve in each year of their schooling. They are aspirational rather than norm-referenced. Students with special needs who have an Individual Education Plan and English language learners who are in their first two to three years of schooling in an English language context are not assessed against these standards.

Teachers are required to make a professional judgement on the standards students are working towards based on assessment results from national tests on reading, writing and maths such as asTTle, Reading Running Records, or NumPA and work completed by the student and assessed by the teacher.

The results in this report show that about two thirds of students were working at or above the standard for their year level in 2010. This percentage goes down as the year level goes up, with the exception of reading. For those working above the standard, the majority were one year above. For those working below, most were one year below but many were two years below their level.

The lower achievement rates of Maori compared to non-Maori students across all the achievement categories are a serious concern. Te Kura’s Maori Responsiveness Strategy includes a literacy framework with the goal of improving the literacy and numeracy of Maori students in their first years of school. This will be a key focus in 2012.

Some caution should be taken when considering the student achievement reported here. The results overall are higher than expected, particularly when considered against other indicators like asTTle. A Ministry of Education report released after these results were collated has shown that teachers across New Zealand may have been too positive in their overall judgements. As part of our professional development programme in 2011, further emphasis has been given to understanding where the standards are and embedding sound moderation practices.

The big driver behind the introduction of National Standards is to improve student achievement. This will be the emphasis at Te Kura as we simultaneously work to embed National Standards and the associated processes and procedures. Ongoing professional development for teachers is a priority and there are implications for the development of teaching materials and access to additional interventions to address moderate learning difficulties. We have developed a literacy and numeracy strategy aimed at lifting the standard of literacy and numeracy among Te Kura students, and this will be implemented during 2012, along with an increased investment in primary-level reading resources.
**Roll data**

832 full-time primary or fee-paying primary students in years 1-8 enrolled at Te Kura in 2010. 659 (79%) were still enrolled when data collection for this report started in early November 2010 (referred to in this report as ‘end of year’ or ‘EOY’). The data below is a headcount with duplicates and one day enrolments (errors) removed.

- The numbers increase in the higher year levels.
- 57% were on the roll for the whole year.
- 24% were Maori and 2% Pasifika.

**EOY No. of students by region**

<table>
<thead>
<tr>
<th>Region</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central North</td>
<td>7</td>
<td>9</td>
<td>12</td>
<td>7</td>
<td>11</td>
<td>26</td>
<td>23</td>
<td>35</td>
<td>130</td>
</tr>
<tr>
<td>Central South</td>
<td>14</td>
<td>12</td>
<td>9</td>
<td>12</td>
<td>14</td>
<td>16</td>
<td>19</td>
<td>24</td>
<td>120</td>
</tr>
<tr>
<td>Northern</td>
<td>20</td>
<td>21</td>
<td>19</td>
<td>29</td>
<td>28</td>
<td>28</td>
<td>34</td>
<td>59</td>
<td>238</td>
</tr>
<tr>
<td>Southern</td>
<td>17</td>
<td>21</td>
<td>12</td>
<td>19</td>
<td>28</td>
<td>22</td>
<td>26</td>
<td>26</td>
<td>171</td>
</tr>
<tr>
<td>Grand Total</td>
<td>58</td>
<td>63</td>
<td>52</td>
<td>67</td>
<td>81</td>
<td>92</td>
<td>102</td>
<td>144</td>
<td>659</td>
</tr>
</tbody>
</table>

**EOY No. of students by time on roll**

<table>
<thead>
<tr>
<th>Time on roll</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole year</td>
<td>24</td>
<td>34</td>
<td>36</td>
<td>43</td>
<td>54</td>
<td>48</td>
<td>56</td>
<td>80</td>
<td>375</td>
</tr>
<tr>
<td>Half a year or more</td>
<td>18</td>
<td>15</td>
<td>11</td>
<td>16</td>
<td>6</td>
<td>24</td>
<td>30</td>
<td>30</td>
<td>150</td>
</tr>
<tr>
<td>Third year</td>
<td>10</td>
<td>8</td>
<td>3</td>
<td>7</td>
<td>15</td>
<td>16</td>
<td>14</td>
<td>27</td>
<td>100</td>
</tr>
<tr>
<td>Fewer than 40 days</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>7</td>
<td>34</td>
</tr>
<tr>
<td>Grand Total</td>
<td>58</td>
<td>63</td>
<td>52</td>
<td>67</td>
<td>81</td>
<td>92</td>
<td>102</td>
<td>144</td>
<td>659</td>
</tr>
</tbody>
</table>

**Ethnicity**

- European/Pakeha 438 (66%)
- NZ Maori 156 (24%)
- Other 23 (3%)
- Not specified 18 (2%)
- Pacific Peoples 10 (2%)
- Asian 14 (2%)

Source: Akona
Results combined for all years

The graph below shows the percentage of students from all years combined who were above, at, below or well below the National Standard for their year level. The students assessed at both mid-year and end of year are included. Some students are not included because they were on the roll at the beginning of the year and not at the end and vice versa.

- Between 67% and 75% of students have been assessed as having achieved at or above the National Standard for their year level.
- Between 24% and 34% of students have been assessed as having achieved below the National Standard.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Above</th>
<th>At</th>
<th>Below</th>
<th>Well below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>49%</td>
<td>26%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Writing</td>
<td>51%</td>
<td>15%</td>
<td>18%</td>
<td>16%</td>
</tr>
<tr>
<td>Maths</td>
<td>47%</td>
<td>17%</td>
<td>16%</td>
<td>20%</td>
</tr>
</tbody>
</table>

NB: Number of students (n) differs slightly, because not all students are assessed in all three categories. For reasons why they are not reported against the National Standards please see the graph further below.
Reading results by year level

Results in years two and three are lower than other years. One factor is the number of students who do start school later than five years of age and take a few years to catch up with their peers.

Due to the small number of students in each year level, percentages in the graphs above should be treated with caution as one student may count for more than one percentage point.
Reading results by gender and ethnicity

- More non-Maori students than Maori achieve at or above the standard, 78% vs 51%. (A statistically significant correlation).
- No correlation exists between gender and reading results.
- The proportion of female non-Maori students above the standard is five times higher than female Maori students.
- Male non-Maori students score above the standard over four times more often than male Maori students.
- 50% of female Maori students and 48% of male Maori students have a reading result below or well below the standard compared to 20% of female non-Maori students and 24% of male non-Maori students.

Due to the small number of Maori students percentages in the graphs above should be treated with caution as one student may count for more than one percentage point.
**Reading change**

Of the 421 students assessed in reading for the mid-year report, 339 students are included in the end of year data collection.

- Of the 339 students: 42 went down, 230 students did not change, 67 improved. 81 are not reported because they were withdrawn, identified as having Special Education needs or did not send back enough work to support a judgement.
- The majority of students that were ‘well below’, ‘at’ or ‘above’ at mid-year’s testing are still at the same level. Students that were ‘below’ saw the most change, only about 25% are still ‘below’, and a third improved.

<table>
<thead>
<tr>
<th>Mid-year result</th>
<th>Mid-year-EOY development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Improvement</td>
</tr>
<tr>
<td>well below</td>
<td>11.8%</td>
</tr>
<tr>
<td>below</td>
<td>33.9%</td>
</tr>
<tr>
<td>at</td>
<td>12.5%</td>
</tr>
<tr>
<td>above</td>
<td>-</td>
</tr>
</tbody>
</table>
Writing results by year level

There is not a clear pattern across the year levels apart from the increase in percentage of students well below the standard.
Writing results by gender and ethnicity

- More non-Maori students than Maori achieve at or above the standard, 70% vs 41%. (A statistically significant correlation).
- 53% of the female Maori students and 64% of the male Maori students have a writing result 'below' or 'well below', compared to 25% for female non-Maori students and 33% for male non-Maori students.
- Only one female Maori student and one male Maori student were above the National Standard in writing.
- 17% of female students have a writing result above the Standard which is about twice as high as males (8%).

![Writing results by Gender/Ethnicity](chart.png)
Writing change

Of the 417 students assessed in writing for the mid-year report, 336 students are included in the end of year data collection.

- Of the 336 students, 46 went down, 225 did not change, 65 improved. 81 are not reported because they were withdrawn, identified as having Special Education needs, or did not send back enough work to support a judgement.
- The majority of students who were well below, at or above at mid-year are still at the same level. Students that were below had the most change; only about a third are still below, 25% of them improved.

<table>
<thead>
<tr>
<th>Mid-year result</th>
<th>Mid-year-EOY development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Improvement</td>
</tr>
<tr>
<td>well below</td>
<td>5.0%</td>
</tr>
<tr>
<td>below</td>
<td>25.7%</td>
</tr>
<tr>
<td>at</td>
<td>13.9%</td>
</tr>
<tr>
<td>above</td>
<td>-</td>
</tr>
</tbody>
</table>
Mathematics results by year level

Achievement against the maths standards is lower in year 8. There is variation in the grades across the years rather than a clear pattern.

![Y1-Y8 Maths outcomes](chart.png)

(Students assessed mid-year + EOY 2010)
Maths results by gender and ethnicity

- More non-Maori than Maori students achieved at or above the standard, 73% vs 33%. (A statistically significant correlation).
- 68% of female Maori students and 66% of male Maori students have a maths result below or well below compared to 29% of female non-Maori students and 26% of male non-Maori students.
- No female Maori students and four male Maori students were above the standard in maths. The proportion of male non-Maori students with the result ‘above’ is over three times higher than for Maori students.
- Male students did slightly better than female students.
Maths change

Of the 403 students assessed in maths at mid-year, 323 students were included in the end of year data.

- Of the 323 students, 56 went down, 200 students did not change, 67 improved. 78 are not reported because they were either withdrawn, identified as having Special Education needs, or did not send back enough work to make a judgement.
- Most students who were well below, at or above at mid-year are still at the same level. Students who were below had the most change; only about a third are still below, 27 % of them improved and 22 % declined.

<table>
<thead>
<tr>
<th>Mid-year result</th>
<th>Mid-year-EOY development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Improvement</td>
</tr>
<tr>
<td>well below</td>
<td>15.0%</td>
</tr>
<tr>
<td>below</td>
<td>27.3%</td>
</tr>
<tr>
<td>at</td>
<td>14.6%</td>
</tr>
<tr>
<td>above</td>
<td>-</td>
</tr>
</tbody>
</table>
Results not reported

While there were 659 students in years 1-8 at the time of data collection at the end of year, not all were assessed against the National Standards. For reading 492 students were assessed, for writing 488 and for mathematics 481. The reasons for not reporting on the other students are given below.
How much above?
The following graphs show for students working above the National Standards how much above they are. The vast majority of students who are working above the National Standards are working one year above their year level.
How much below?
The graphs show for students working below or well below the National Standards how much below they are. The majority of students who are working below are working one year below but significant numbers are two years below their year level.
Teacher feedback
Teachers involved in assessing students’ progress and achievement against the National Standards participated in a self review exercise to give feedback about the first year of implementation. Several consistent themes arose in that feedback. Some examples to represent those themes are presented below.

Positives:

“National Standards have given me permission to clearly state where a child’s work is at and to work with the supervisor to achieve them.”

“They give parents a very clear idea of where their child is at.”

“Good to give clear advice to parents as to how they can help.”

“Realising how low my students really were.”

“Helped me focus on next steps for students’ learning.”

Negatives:

“Disheartening for some parents to have their child labelled ‘below’.”

“When students are very below it is not desirable to tell them in every report.”

“Reports were too long and too time consuming to write.”

“Some of our resources don’t match the requirements of the standards very well.”

“We don’t have access to interventions when students are well below the standard.”

Some of these issues will be addressed again in the next rounds of professional development. The issue of having to tell parents their children are not achieving well is not going to go away. It is a clear intention of this government policy that parents will get honest information in plain language.