

A new feature in National Monitoring in 1999 was the commitment to look directly at the achievement of Pacific Island students in New Zealand primary and intermediate schools. These students have been among the samples in NEMP assessments between 1995 and 1998, but not in sufficient numbers to allow their results to be reported separately. At the request of the Ministry of Education, NEMP has selected special additional samples of 120 year 4 students and 120 year 8 students to allow the achievement of Pacific Island students to be assessed and reported. The augmented sample was too small, however, to allow separate reporting on students from different Pacific Island nations (such as Samoa, Tonga, and Fiji).

All schools in the main NEMP year 8 sample that had 10 percent or more Pacific Island students (as classified in school records) were selected. All other schools nationally with at least 12 year 8 students and at least 20 percent Pacific Island students in their total roll were identified, and an additional random sample of 10 schools drawn from this list. A similar procedure was followed at year 4 level, except that schools already chosen at year 8 level were excluded from the sampling list. From each specially sampled school, 12 students (in 3 groups of 4) were sampled, confirmed and assessed using exactly the same procedures as in the main sample. The students' performances were also scored in the same manner as the performances of students in the main sample.

The results for Pacific Island, Māori, and other students in the schools with more than 10 percent Pacific Island students were then compared. Because all of the schools chosen for these analyses have at least 10 percent Pacific Island students, the results only apply to students at schools like these.

Differences among the three ethnic groups of students were checked for statistical significance using one way analysis of variance on the overall scores for each task.

Each analysis compared the performance of about 50 Pacific Island students, 25 Māori students and 45 other students. The critical level for statistical significance was set at  $p = .05$  (so that differences this large or larger among the subgroups would not be expected by chance in more than five percent of cases). Where statistical significance occurred, Tukey tests were used to identify which groups differed significantly.

The mean scores for each group on each task are presented in the tables below, together with the standard deviations for all students in this sample. Where statistically significant differences were found, the mean for a significantly lower group is shown in red italics and the mean for a significantly higher group is red.

For year 4 students, there were statistically significant differences in performance among the three groups on 20 of the 33 tasks. On 2 tasks the Pacific Island students scored significantly lower than the Māori students, and on 19 tasks the Pacific Island students scored significantly lower than the "other" students.

For year 8 students, there were statistically significant differences in performance among the three groups on 21 of the 38 tasks. On 2 tasks the Pacific Island students scored significantly lower than the Māori students, and on 20 tasks the Pacific Island students scored significantly lower than the "other" students. On 1 task the Pacific Island students scored significantly higher than the Māori students.

## YEAR 4

Average (mean) marks for year 4 students classified as Pacific Island students, Māori students or other students attending schools with at least 10 percent Pacific Island students.

	<i>Pacif.Is. Mean</i>	<i>Māori Mean</i>	<i>Other Mean</i>	<i>Overall Std.Dev.</i>
Tryathlon	<b>2.04</b>	2.79	<b>2.80</b>	1.10
Tim's Budget	<b>2.40</b>	2.83	<b>3.38</b>	1.15
Treats for Toni	<b>1.30</b>	1.60	<b>2.21</b>	1.46
Rangi	<b>3.43</b>	4.05	<b>4.02</b>	1.13
Swimming Pool Timetable	<b>1.20</b>	1.70	<b>1.95</b>	1.00
Maria's Day	<b>0.63</b>	0.72	<b>1.15</b>	0.74
Bay Express	2.40	2.42	3.11	1.66
Sleeping	1.07	1.17	1.37	0.68
Holiday Drive	1.26	2.15	1.56	1.64
Pirate Treasure	<b>4.88</b>	6.72	<b>6.93</b>	3.75
Camp Map	<b>2.16</b>	<b>3.00</b>	2.65	1.08
Houses	<b>0.41</b>	<b>1.16</b>	<b>0.80</b>	0.72
Travel Times	<b>2.75</b>	2.58	<b>3.61</b>	1.65
Birthdays	<b>5.14</b>	5.32	<b>5.93</b>	1.34
Ani's Place	1.29	1.28	1.72	1.34
Link task 1	1.90	2.28	2.67	1.60
Link task 2	1.32	1.55	1.79	0.99
Link task 3	<b>4.13</b>	5.25	<b>5.43</b>	1.94
Link task 4	2.00	2.30	2.39	1.19
Link task 5	4.21	3.94	4.72	1.62
Link task 6	<b>2.36</b>	3.28	<b>4.05</b>	2.05
Link task 7	<b>1.84</b>	2.60	<b>2.54</b>	1.34
Link task 8	<b>3.64</b>	<b>3.39</b>	<b>4.38</b>	1.57
Subject Pie	<b>3.00</b>	3.09	<b>3.72</b>	1.31
Fruit Pictures	1.81	1.84	1.95	0.50
Ana's Savings	2.02	2.26	2.64	1.62
Pocket Money	2.40	2.74	2.79	1.53
Down at the Sea	<b>5.33</b>	6.20	<b>8.97</b>	4.59
Smarties	<b>5.92</b>	6.26	<b>6.93</b>	1.73
Map Key	<b>3.16</b>	3.75	<b>5.78</b>	3.92
Link task 14	1.71	2.05	2.00	1.39
Link task 15	3.55	3.95	4.00	1.31
Link task 16	<b>1.06</b>	1.50	<b>1.73</b>	1.32

Statistically significant ( $p < .05$ ) differences among the means are shown thus: significantly **lower** or **higher**.

## YEAR 8

Average (mean) marks for year 8 students classified as Pacific Island students, Māori students or other students attending schools with at least 10 percent Pacific Island students.

	Pacif.Is.	Māori	Other	Overall
	Mean	Mean	Mean	Std.Dev.
Tryathlon	<b>2.67</b>	<b>3.00</b>	<b>2.97</b>	0.60
Tim's Budget	3.40	3.46	3.71	0.80
Treats for Toni	3.02	2.56	3.09	1.27
Rangi	4.50	4.61	4.67	1.02
Weekend Trip	<b>1.70</b>	<b>1.55</b>	<b>2.62</b>	1.65
School Picnic	<b>6.49</b>	7.21	<b>8.43</b>	3.26
Best Value	2.52	2.86	3.00	1.14
Major NZ Exports	3.02	2.96	3.34	1.21
Bay Express	<b>3.49</b>	4.21	<b>5.07</b>	2.09
Sleeping	<b>1.15</b>	1.50	<b>1.60</b>	0.65
Holiday Drive	<b>3.14</b>	3.85	<b>4.34</b>	2.07
Pirate Treasure	9.20	9.12	9.77	2.63
Camp Map	4.21	4.10	4.51	1.48
Houses	<b>1.05</b>	1.09	<b>1.44</b>	0.74
Instant Desserts	<b>6.30</b>	<b>5.38</b>	<b>7.84</b>	2.57
Choosing a Garment	<b>0.91</b>	<b>0.83</b>	<b>1.64</b>	1.00
What's Happening	<b>5.06</b>	5.33	<b>6.39</b>	2.21
N. Island – S. Island	<b>3.69</b>	<b>3.85</b>	<b>5.80</b>	2.19
Mexico	<b>3.00</b>	4.08	<b>4.27</b>	2.27
Link task 1	<b>4.10</b>	<b>3.90</b>	<b>5.03</b>	1.63
Link task 2	<b>3.40</b>	3.46	<b>3.71</b>	1.02
Link task 3	<b>5.74</b>	<b>5.67</b>	<b>6.66</b>	1.68
Link task 4	2.91	3.07	3.33	0.96
Link task 5	<b>5.64</b>	5.80	<b>6.32</b>	1.27
Link task 9	5.09	5.36	5.73	1.65
Link task 10	<b>4.56</b>	<b>6.00</b>	<b>6.98</b>	2.42
Link task 11	<b>3.40</b>	3.95	<b>4.76</b>	2.04
Link task 12	2.57	3.15	3.31	1.8
Link task 13	6.06	6.30	6.41	1.59
Subject Pie	3.87	3.39	3.76	0.82
Jo's Savings	<b>4.50</b>	3.25	<b>4.62</b>	1.39
Pocket Money	3.67	3.90	3.91	0.77
Down at the Sea	<b>12.22</b>	<b>11.58</b>	<b>14.65</b>	3.94
Eye Colours	2.69	2.20	2.52	2.42
Link task 14	3.87	3.42	3.93	1.42
Link task 15	<b>4.37</b>	4.73	<b>5.22</b>	1.13
Link task 17	6.58	6.64	7.14	2.68
Link task 18	7.52	8.00	8.07	4.94

Statistically significant ( $p < .05$ ) differences among the means are shown thus: significantly **lower** or **higher**.