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 ten 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 ten 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 three groups of four) 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 ten percent Pacific Island students were then compared. Because all of the schools chosen for these analyses have at least ten 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. Statistically significant differences are clearly indicated.

For year 4 students, there were statistically significant differences in performance among the three groups on 23 of the 50 tasks. The Pacific Island students scored significantly lower than the Māori students on seven tasks and than the "other" students on 20 tasks. The Māori students scored significantly lower than the "other" students on four tasks.

For year 8 students, there were statistically significant differences in performance among the three groups on 19 of the 48 tasks. The Pacific Island students did not score significantly lower than the Māori students on any task, but were lower than the "other" students on 18 tasks. The Māori students scored significantly lower than the "other" students on nine tasks.

YEAR 4

Average (mean) marks for year 4 and year 8 students, attending schools enrolling at least ten percent Pacific Island students, who are classified as Pacific Island students, Māori students or other students.

	Pacif.Is. Mean	Māori Mean	Other Mean	Overall Std.Dev.
Seed to Pine Tree	0.92	0.90	1.00	0.40
Finger Games				
Growing in the Mighty Forest	*1.77*	*2.57*	4.21	2.03
Spiders	6.79	7.58	7.47	2.36
Animal Adaptation – Snail	1.27	1.16	1.62	1.02
Adaptation – Praying Mantis	0.73	0.94	1.25	1.06
Flounder	1.18	1.60	1.66	1.27
Kai Moana	*9.67*	11.74	10.95	3.08
Birds	2.20	3.15	3.11	1.91
Dinosaurs	*2.33*	3.33	3.50	1.33
Link Task 2	*1.78*	2.59	3.89	2.22
Link Task 3	12.93	13.15	14.82	4.14
Link Task 4	*1.27*	1.72	1.80	1.04
Link Task 5	*4.05*	5.52	5.72	2.59
Link Task 6	3.11	3.16	3.88	1.91
Link Task 7	*2.23*	3.21	4.28	2.26
Link Task 8	*5.77*	5.84	6.85	1.94
Dropping Coins	4.23	4.42	4.78	1.27
Mystery Wires	4.25	4.45	5.08	2.25
How Does it Work?	*6.41*	*6.59*	8.69	3.09
Water Mix	2.67	3.08	3.18	1.12
Dead Mouse	0.74	0.79	0.85	0.86
String Ping	4.98	6.12	4.73	2.86
Flowing Electricity	*5.88*	6.63	6.90	1.80
Marbles in Water	*5.38*	*5.83*	6.97	1.80
Wonderful Water				
Travelling Trucks	16.48	16.71	17.16	1.45
Mixing Colours	*6.22*	8.21	7.97	2.80
Link Task 9	3.35	3.47	3.24	1.07
Link Task 10	2.97	4.17	3.78	2.31
Link Task 11	2.46	2.80	3.10	1.60
Link Task 12	*2.08*	3.39	3.03	1.59
Link Task 13	1.94	1.88	1.97	1.11
Link Task 14	2.53	2.40	2.38	1.36
Link Task 15				
Link Task 16				
Candles in Jars	*0.39*	0.63	1.15	0.98
Rods	4.94	5.05	5.13	0.95
Disappearing Water	*1.08*	1.95	2.03	1.28
Chemical Muddle				
Sugar Solutions	1.87	1.80	2.21	1.20
Balancing Balloons	*1.39*	1.65	2.38	1.20
Link Task 17	1.70	2.38	2.33	1.42
Link Task 18	0.95	1.62	1.74	1.05
Link Task 20				
Environmental Issues	1.30	*1.10*	1.62	0.65
Natural Disasters	*0.52*	0.67	1.21	1.14
Vege Peelings	0.69	0.83	0.87	0.92
Rocks	*4.13*	5.37	4.95	1.84
Night Sky				
Changing Faces of the Moon				
Daytime – Night time				
Sand Dunes	1.83	2.13	2.08	1.23
Underground	*5.92*	7.26	7.08	1.86
Space Address	4.82	5.29	5.78	1.91
Link Task 22	0.33	0.53	0.56	0.65
Link Task 23	*5.31*	7.41	8.69	4.35
Link Task 24	*0.70*	1.33	1.54	1.22
Link Task 25	*1.45*	2.28	2.88	1.72
Link Task 26				

YEAR 8

	Pacif.Is. Mean	Māori Mean	Other Mean	Overall Std.Dev.
Seed to Pine Tree	0.92	0.86	1.03	0.60
Finger Games	*1.46*	2.00	2.14	1.08
Growing in the Mighty Forest	*3.43*	*3.81*	5.68	2.42
Spiders	8.33	7.90	8.15	1.85
Animal Adaptation – Snail	1.93	1.88	2.07	1.15
Adaptation – Praying Mantis	*1.29*	1.45	1.97	1.23
Flounder	1.76	1.69	2.40	1.71
Kai Moana	13.13	14.00	13.45	3.17
Birds	*3.28*	*3.75*	5.02	2.26
Dinosaurs				
Link Task 2	4.19	3.77	5.38	2.86
Link Task 3	15.19	14.33	15.45	4.10
Link Task 4	2.66	2.48	2.77	1.24
Link Task 5	*4.83*	*5.82*	7.65	2.68
Link Task 6	5.09	*4.73*	6.16	2.06
Link Task 7	*4.10*	*4.50*	6.03	2.24
Link Task 8				
Dropping Coins	4.36	4.27	4.22	1.59
Mystery Wires	4.13	4.17	5.25	2.24
How Does it Work?	*9.52*	*10.44*	12.99	3.13
Water Mix				
Dead Mouse	*1.00*	1.30	1.78	1.61
String Ping	6.18	6.47	5.93	3.14
Flowing Electricity	*6.52*	7.14	7.72	1.64
Marbles in Water	*5.98*	*6.33*	7.85	2.01
Wonderful Water	0.36	0.29	0.53	0.76
Travelling Trucks				
Mixing Colours				
Link Task 9	*3.73*	*3.70*	4.59	1.40
Link Task 10	5.31	5.61	6.39	2.55
Link Task 11	3.23	3.56	3.89	1.56
Link Task 12	3.33	3.29	3.54	1.69
Link Task 13				
Link Task 14				
Link Task 15	*1.76*	2.15	2.59	1.26
Link Task 16	0.77	0.42	0.56	1.29
Candles in Jars	*1.45*	*1.52*	2.72	1.32
Rods	5.25	5.08	5.48	0.94
Disappearing Water	3.91	4.00	4.67	1.93
Chemical Muddle	1.28	1.50	1.48	1.21
Sugar Solutions	2.83	3.22	3.48	1.23
Balancing Balloons				
Link Task 17	3.13	3.59	3.77	1.62
Link Task 18	2.31	2.42	2.84	1.53
Link Task 20	*2.79*	3.33	4.23	1.71
Environmental Issues	*1.57*	1.86	2.35	0.97
Natural Disasters	*1.37*	1.84	2.73	1.70
Vege Peelings	1.49	1.52	1.66	1.16
Rocks	4.93	4.70	4.85	1.78
Night Sky	2.09	1.81	2.19	1.24
Changing Faces of the Moon	0.93	1.15	1.71	1.71
Daytime – Night time	2.33	2.59	2.94	0.85
Sand Dunes				
Underground				
Space Address				
Link Task 22	0.96	0.81	0.90	1.04
Link Task 23	*8.64*	*9.65*	13.23	5.03
Link Task 24	*1.33*	*0.96*	2.67	1.64
Link Task 25				
Link Task 26	4.87	4.88	5.24	1.81

Note: Statistically significant ($p<.05$) differences are shown: *lower* or higher.