

### Sampling general education schools

At year 8 level, 120 schools were selected randomly from national lists of state, integrated and private schools teaching at that level, with their probability of selection proportional to the number of students enrolled in the level. The process used ensured that each region was fairly represented. Schools with fewer than four students enrolled at the given level were excluded from these main samples, as were special schools and Māori immersion schools (such as *Kura Kaupapa Māori*).



### Sampling Māori immersion schools

Ten schools were selected randomly from Māori immersion schools (such as *Kura Kaupapa Māori*) that had at least 4 year 8 students, and from other schools that had at least 4 year 8 students in classes classified as Level 1 immersion (80 to 100 percent of instruction taking place in Māori). Seven of the chosen schools were immersion schools and three were general education schools with immersion classes. These proportions reflected our estimate of the relative numbers of students nationally in the two types of programme who met our requirement of more than four years of Māori immersion education.

### Pairing small schools

Five of the 120 chosen schools in the general education sample had less than 12 year 8 students. For each of these schools, we identified the nearest small school meeting our criteria to be paired with the first school. Wherever possible, schools with 8 to 11 students were paired with schools with 4 to 7 students, and vice versa. However, the travelling distances between the schools were also taken into account. Four of the 10 schools in the Māori immersion sample also needed to be paired with other schools of the same type.

### Contacting schools

In telephone calls with the principals, we briefly explained the purpose of national monitoring, the safeguards for schools and students, and the practical demands that participation would make on schools and students. We informed the principals about the

materials which would be arriving in the school (a copy of a 20 minute NEMP videotape plus copies for all staff and trustees of the general NEMP brochure and the information booklet for sample schools). We asked the principals to consult with their staff and Board of Trustees and confirm their participation. Similar procedures were followed with the principals of the 14 schools in the Māori immersion sample, but for them brochures in both Māori and English were sent.

Three of the originally sampled 120 schools in the general education sample withdrew because of complications at their schools, and were replaced by other schools in their district with similar characteristics. In the Māori immersion sample, one immersion school declined to participate and was replaced by another immersion school from the same region. One of the sampled schools with immersion classes initially agreed to participate but later withdrew after consultation with its whanau, and was replaced by another school with immersion classes from the same region.

### Sampling of students

With their confirmation of participation, each school sent a list of the names of all year 8 students on their roll. Schools in the Māori immersion sample were asked to list only the names of students who were in at least their fifth year of Māori immersion education. Using computer generated random numbers, we randomly selected the required number of students (12, or 4 plus 8 in a pair of small schools), at the same time clustering them into random groups of four students (which would be allocated different sets of assessment tasks).

The schools were then sent lists of their selected students and invited to inform us if special care would be needed in assessing any of those students (e.g. students with disabilities or new immigrants to New Zealand with very limited skills in English). Where necessary, replacement students were chosen, using the same random sampling procedures. Less than 2 percent of students were replaced for reasons other than moving school or planned absence for the full assessment week.



### Communication with parents

Following these discussions with the school, Project staff prepared letters to all of the parents, including a copy of the NEMP brochure, and asked the schools to address the letters and mail them. Parents were told they could obtain further information from Project staff (using an 0800 number) or their school principal, and advised that they had the right to ask that their child be excluded from the assessment. Less than half a percent of the selected students were replaced because they or their parents declined to participate.

### Practical arrangement with schools

On the basis of preferences expressed by the schools, we then allocated each school to one of the five assessment weeks available and gave them contact information for the two teachers who would come to the school for a week to conduct the assessments. We also provided information about the assessment schedule and the space and furniture requirements, offering to pay for hire of a nearby facility if the school was too crowded to accommodate the assessment programme.

### Resulting samples

For the purposes of this report, we were interested in four groups of year 8 students:

- ▶ Māori students in the one third of the general education sample who attempted task set A (a total of 95 students);
- ▶ Māori students in the one third of the general education sample who attempted task set B (a total of 90 students);
- ▶ Māori students in the half of the Māori immersion sample who attempted task set A (a total of 42 students);
- ▶ Māori students in the half of the Māori immersion sample who attempted task set B (a total of 47 students).



The two Māori immersion groups were 20 to 30 percent smaller than intended. At several schools, the numbers of students available with more than four years of immersion education were lower than originally anticipated. It was impractical to approach further schools by the time this became apparent. As a result, one school had one group of four students and one group of three students rather than three groups of four students, two schools had one group of five students rather than two groups of four students, and four groups at other schools contained three rather than four students. This loss of 14 students was increased when 17 of the students either left school after being selected but before the assessments or were absent for all assessments.

For tasks in set A, the performance of students in the first and third groups are compared. For tasks in set B, the performance of students in the second and fourth groups are compared.

