The 1999 National Monitoring assessments were, to our knowledge, the first assessments conducted at national level in Te Reo Māori using tasks originally developed to be administered nationally in English. Predictably, under these circumstances, some significant difficulties were experienced in this first year. These have been carefully evaluated and substantial improvements in the sampling, translation and assessment procedures are being implemented for the assessments in 2000.

This chapter explains the main difficulties experienced in 1999 and why the student performance information presented in this report should be viewed very cautiously. Changes in procedures for the 2000 assessments are also briefly explained.

Development and selection of tasks

About 10 percent of the assessment tasks used with the Māori immersion students were developed from ideas put forward at a task development hui of Māori immersion teachers. These were tasks believed to be particularly appropriate for students learning in Māori immersion settings, but they were also used nationally in the assessments conducted in English.

The remaining 90 percent of tasks were proposed by NEMP staff members, by members of the NEMP national advisory panels for science or art, or by task development sub-contractors. Their initial ideas were developed and tried out by NEMP staff, and then subjected to careful scrutiny by the advisory panel for that curriculum area (which included at least one Māori immersion educator). All tasks were then checked for their suitability for Māori students by those attending a combined meeting of the NEMP Māori Immersion Education Advisory Committee and the NEMP Māori Reference Group (the latter focuses on the interests of Māori students who will be assessed in English).

The sets of tasks resulting from these procedures have been accepted as relevant to all categories of students, including Māori immersion students. Nevertheless, given the imbalance in the sources of the tasks, the total collection of tasks probably somewhat favours students learning in English from the mainstream curriculum rather than students learning in Māori from the Māori curriculum. For future assessments, greater involvement of Māori immersion teachers in task development is be pursued vigorously, with the help of Te Rūnanga Nui o ngā Kura Kaupapa Māori o Aotearoa.

Translation from English to Māori

After tasks had been tried out in English and final adjustments made to the task instructions, materials, and questions, they were translated into Māori. A quite elaborate process was followed. Initially, each task (and associated materials) was sent by mail or fax to a translator. The four translators were fluent in te reo Māori and two were native speakers. The translator receiving the task translated the English into Māori, and sent their translation back to the NEMP office where it was typed. The typed translation was then sent to another translator, who translated it back into English (this process is called back translation) and then opened an envelope containing the original English version of the tasks. Where the original English and the back translation differed significantly, the two translators who had worked on the task would discuss the discrepancies and revise the Māori version so that it was as consistent as possible with the English version. After checking and re-typing by NEMP staff, the English and Māori versions were sent to Te Taura Whiri (The Māori Language Commission) for checking and guidance on further improvements.

One concern with this process was the use of technical terms, particularly in science, which did not have well-established Māori equivalents. While the curriculum documents in Māori had introduced new Māori versions for technical terms, these were often not widely used in schools or in the community, so it was unclear whether students could fairly be expected to know them. A second concern was a tendency for the Māori version to use language more appropriate to adults than to children. A third concern arose from the fact that the English version was final, so the option of making some changes in the English version to improve the equivalence of English and Māori versions was not available. As a result, the Māori versions often tended to use more words and to be linguistically more complex.

In a few instances, it became evident that the students responding to the Māori version were very significantly impeded by translation difficulties. This undermined their performance on one or more components of a task. Where this happened, the task was not included in this report or the translation difficulties are clearly described in the task commentary.

Major changes have been made to the translation processes for the assessments in 2000. Six translators, working in two teams of three, were brought together in Dunedin for two one-week periods. This allowed considerable consultation within teams, and then consultation between teams after back translation had occurred. Three of the translators had administered the assessment tasks in 1999, and were more aware of the language capabilities of year 8 students and the difficulties that had been experienced in 1999. After translation, all tasks were tried out in Kura Kaupapa Māori, and further adjustments made. Finally, all of the tasks were reviewed by two experienced immersion teachers not previously involved in the translation work, who looked specifically at the appropriateness of task language for year 8 students.

Student sample and task administration

The sample of schools and students for the 1999 assessments reflected the national population of year 8 students. Half of the 120 selected students were in immersion schools (predominantly Kura Kaupapa), while the other half were in immersion classes (80 to 100 percent of instruction in Māori) at mainstream schools.

The intention was that all of these students would be assessed in Māori. Teachers administering NEMP tasks are trained to offer students help with language so that language difficulties are less likely to undermine students' performances in other curriculum areas. For instance, limited reading or writing capabilities should not be allowed to prevent students from showing what they can do in science or art. For this reason, the teachers administering the tasks in 1999 were permitted to explain instructions in English if students appeared to understand better in English than in Māori. Because of school policies, however, this was not usually appropriate in immersion schools — only in immersion classes. The teachers rated each student on their apparent capabilities in Māori.

Limited understanding of te reo Māori was a significant concern in administering tasks to at least 30 percent of the students. Most of these students had only modest experience in Māori immersion settings. Some students in immersion schools would almost certainly have performed better if assessed in English, while many students in immersion classes required part or all of their assessment in English. The written materials available to them were in Māori, so the teacher often had to provide a translation into English. The extent to which language difficulties associated with the use of Māori affected performance is hard to estimate, but evidence suggests that it was substantial.

An indirect effect of the difficulties many of the 1999 students had with assessments in Māori was that the tasks took longer than expected to complete, tiring both teachers and students and disrupting the planned assessment schedules. As a result, substantial proportions of students did not reach some of the later tasks in each set of tasks. This raised doubts about the extent to which the results for students who did attempt these tasks were truly indicative of what the whole sample of students would have managed if they had all attempted the tasks. A decision was taken that results would not be reported if less than 70 percent of the students attempted a task. As a result of this decision, results for 5 of the 9 art tasks and 15 of the 33 science tasks were excluded and are not reported here.For the assessments in 2000, account has been taken of international research suggesting that at least five years of immersion in a language is required before

performance on assessments in that language is not significantly undermined by language difficulties. Only students with five or more years in Māori immersion education will be included in the 2000 assessments. This will allow all assessments to be conducted in te reo Māori, and should alleviate the problems experienced with task completion in 1999. The improved translation procedures will also help students to attempt all tasks.

Interpretation of results

This report compares the results achieved by Māori students in Māori immersion settings with the results achieved by Māori students in general education (English language) settings.

Readers should be very cautious, however, in drawing any conclusions about the relative merits of Māori immersion and English language education from these results. The issues already raised in this chapter indicate that students in the Māori immersion sample faced substantial linguistic challenges unrelated to their abilities in science, art, or the use of graphs, tables and maps. Accordingly, it is very likely that their achievements in these areas are not adequately represented in the results presented here. Without these special obstacles, they may have been able to achieve distinctly better results.

It should also be remembered that curriculum emphases are different in Māori immersion education and English language education. While all schools must address the essential learning areas and essential skills of the New Zealand curriculum, Māori immersion education places much greater emphasis on Māori language and culture, with correspondingly greatly reduced emphasis on English literacy until the late years of primary education. Also, quite modest differences in emphasis and timing for other curriculum areas could have significantly influenced the comparative results reported here.

A final point is that Māori immersion education is in a quite early stage of development. Many immersion schools and classes have been established only for a few years. Teaching and learning resources in Te Reo Māori are scarce, as are teachers with suitable expertise. High levels of teacher, parent and student commitment help to compensate for these obstacles to successful learning, but further improvement should be achieved as Māori immersion education grows and consolidates.

