

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 that first year. These were carefully evaluated and substantial improvements in the sampling, translation and assessment procedures were implemented for the assessments in 2000. The improvements addressed concerns about the language capabilities of the sampled students and the appropriateness of the Māori translations, but considerable caution is still required when interpreting the results presented in this report. This chapter explains why such caution is needed.

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, held in Rotorua. 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 teachers participating in regional task development workshops, NEMP staff members, or by members of the NEMP national advisory panels for music, technology or literacy. Initial ideas were developed and tried out by NEMP staff, and then subjected to careful scrutiny by the advisory panel for that curriculum area (each of 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 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 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 will continue to be given priority, with the help of Te Runanga Nui o nga Kura Kaupapa Māori o Aotearoa.

Translation from English to Māori

In 1999, tasks were translated to Māori after task materials, instructions and questions had been finalised in English. Each task was sent to one of the four translators. That translator 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 the process used in 1999 was a tendency for the Māori version to use language more appropriate to adults than to children. Another 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 students responding to the Māori version were very significantly impeded by translation issues.

Major changes were made to translation processes for the 2000 assessments. Six translators, including two native speakers, 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 assessment tasks in 1999, and were well aware of the language capabilities of year 8 students and the difficulties that had been experienced in 1999. The English language versions of the tasks were not in final form, so that where necessary the English could be edited to facilitate the development of Māori and English versions that were conceptually and linguistically equivalent.

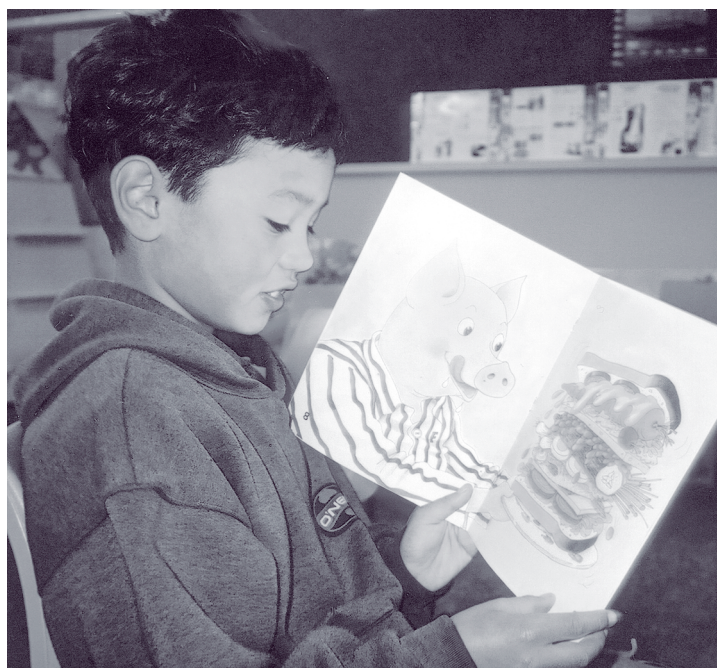
After initial translation, all tasks were tried out in a Kura Kaupapa Māori, and further adjustments made. Finally, all tasks were reviewed by two experienced immersion teachers not previously involved in the translation work. They looked specifically at the appropriateness of task language for year 8 students. The entire translation process was closely supervised by a NEMP staff member who had evaluated thoroughly the 1999 translation processes and outcomes. In reaching final decisions about task wording, she worked collaboratively with the NEMP directors and one of the senior translators.



Student Sample and Task Administration

The original sample of schools and students for the 2000 assessments reflected the national population of year 8 students with five or more years of Māori immersion learning. Seventy percent of the 120 selected students were in immersion schools (predominantly Kura Kaupapa), while the other 30 percent were in immersion classes (80 to 100 percent of instruction in Māori) at mainstream schools. Unfortunately, two immersion schools withdrew from the assessments too late to be replaced, reducing the sample by 16 students, so that the final sample had 65 percent of students in immersion schools and 35 percent in immersion classes.

The assessments are planned on the assumption that all Māori immersion students will 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. For instance, limited reading or writing capabilities should not be allowed to prevent students from showing what they can do in music or technology. 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 in 1999. For the assessments in 2000, account was 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 reported by schools to have had five or more years in Māori immersion education were included in the 2000 assessments. This allowed all assessments to be conducted predominantly or entirely in Te Reo Māori. Despite these precautions, a few of the students still indicated in questionnaire responses that they would have been more comfortable being assessed in English.

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. While translation and task administration issues were much less of a concern for the 2000 assessments, it is still not clear that Māori immersion students were on an equal footing with general education students in

understanding the tasks and communicating their responses. It is desirable that a higher proportion of tasks used in the Māori immersion assessment originate from Māori immersion educators, and that some of the tasks are developed in Māori and then translated into English.

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 a correspondingly 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.

In conclusion

A final point is that Māori immersion education is in a comparatively early stage of development. Many immersion schools and classes have been established for only 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

Te Wai Tōmiti — Disappearing Water

Focus: Explanation of evaporation and understanding of the water cycle.

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Resources: Video showing evaporation with hand fanning and use of a hair dryer.

In this activity you are going to watch a video clip showing people cleaning a blackboard, then answer some questions about what you saw happening in the video

Watch the video and then answer these questions.
You may replay the video if you need to.

I tēnei mahi e mātakitaki ana koutou i tētahi ripene
ataata poto o ngā tāngata e ūkui ana i te papatuhituhi,
kāhau ka whakautu i ngā pātai o ngā mahi i kite
koutou

Mātakitaki i te ataata, ā, ka whakautu i ēnei pātai.
Me whakaatu anō te rīpene ataata mehemea koutou
e hiahia ana

Students saw or heard the tasks.
either in English **or** Māori .
This bilingual presentation is to
make the results easier to read.
Unusual words were translated.

1. Why did fanning the wet blackboard help it to dry?

He aha i maroke ai te papatuhituhi i te tāwhiritanga [fanning]?

fanning moves moist air away from the blackboard to allow more to evaporate

mentions wind and/or water
vapour and/or evaporation

mentions wind or air movement only

ake ai te maroke o te papatuhituhi i te mahana?

mentions increased warmth		
helping evaporation	50	34

3. Where does the water go as the blackboard dries?

Ka tōmiti te wai ki hea i te wā e maroke
haere ana te papatuhituhi?

evaporation or equivalent (eg. "into the air")	50	40
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4. Now think about a puddle on the foot-
water go when the

- air and the ground
- into the air/sky
- into the ground

tain in one place
er place that is
y this happens.
um with labels to
wer.

hi wāhi i
ni pāmamao.

whakamāramatia he aha i pēnā ai?
Tāngia he hoahoa, me ōna tapa, hei
whakamārama i tō whakautu.

Includes all three aspects:

water
evaporation
from source,
cloud
movement,
rain falling
elsewhere

Overall, the performances of GEd (General Education) and MI (Māori Immersion) students were not statistically significantly different.

Students did this task on their own at a 'station,' writing their own answers.

What this task was evaluating.

The resources that were used in this task.

GED: General Education

Māori students educated in English who were in the main sample.

MI: Māori Immersion

Māori students educated in Māori in Māori immersion schools or in Māori immersion classes within mainstream schools.

12% of the Māori Immersion students mentioned wind and/or water vapour and/or evaporation in their answer.

9% of Māori students in the General Education sample mentioned wind and/or water vapour and/or evaporation in their answer.

Comments on the task or the results that help when interpreting the results.

Underlined words indicate an English equivalent was provided. In this report the translation has been inserted into the text. Students, however, saw the English word in the right margin.

He aha i maroke ai te papatuhituhi
i te tāwhiritanga?

fanning