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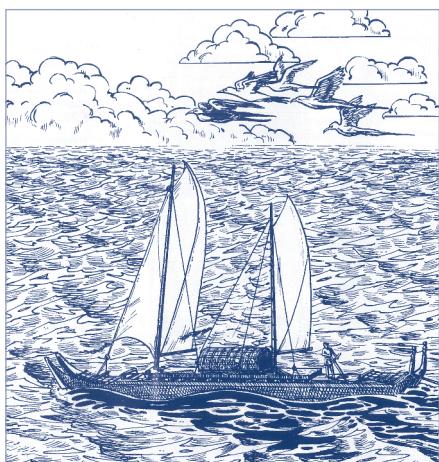
Ngā Mihi – Acknowledgements

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- ▶ Lisa Rodgers and other staff members of the Ministry of Education
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- ▶ members of the Project's Māori Immersion Education Advisory Committee and Māori Reference Group
- ▶ members of the Project's Science Advisory Panel and Arts Advisory Panel
- ▶ He Kupenga Hao i te Reo Ltd.
- ▶ principals and children of the schools where tasks were trialled
- ▶ principals, staff and Board of Trustee members of the 252 schools included in the 2003 sample
- ▶ the 112 children who participated in the assessments and their parents
- ▶ the 4 teachers who administered the assessments to the children
- ▶ the 45 senior tertiary students who assisted with the marking process
- ▶ the 170 teachers who assisted with the marking of tasks early in 2004.

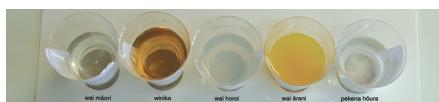
KO TE KAUPAPA

Nō te tau 1993 i tīmata ai te Kaupapa Aroturuki Mātauranga ā-Motu. Ko te tino kaupapa, he aromatawai, he tuku pūrongo mō te ekenga paetae mātauranga o ngā tamariki o ngā kura tuatahi i roto i ngā marautanga katoa. Kei te aromatawaihia ngā tamariki i ngā taumata akomanga e rua: te tau 4 (kei te takiwā haurua o te kura tuatahi) me te tau 8 (te whakamutunga o te kura tuatahi). Ko ngā ākonga o te tau 8 anake ka aromatawaia ana i ngā kura reo Māori. He rerekē ngā marautanga me ngā pūkenga e aromatawaia ana i ia tau, ā, ka oti ngā marau katoa i te huringa o ia whā tau. Ko ngā kaupapa i oti i te tau 2003, ko te pūtaiao, te toi ataata, ko te whakamahi kauwhata, tūtohi, mahere hoki.



KO TE PŪRONGO

E arohaia ana ngā kōrero o tēnei pūrongo ki ngā ākonga o te tau 8 e ako ana i roto i ngā hōtaka mātauranga rumaki ki te reo Māori. I te tau 2003, 60 ūrau o ngā ākonga o ngā kura reo Māori i uru mai ki tēnei kaupapa nō tētahi kura rumaki (ko te nuinga he Kura Kaupapa Māori), ko te toenga 40 ūrau nō tētahi akomanga rumaki reo Māori (i roto i tētahi kura auraki, engari i waenga i te 80 me te 100 ūrau o ngā mahi kei te whakaakohia i roto i te reo Māori). Mō tēnei tipakonga ākonga motuhake ko te nuinga o ngā akoranga kei roto i te reo Māori, i hangaia i roto i te reo Māori, i whakamāorihia rānei ngā ngohe aromatawai, ā, ka whakahaerehia e tētahi rōpū kaiako e tino taunga ana ki ngā whakaakoranga rumaki.



Ko te whāinga matua o te aroturuki ā-motu, kia āta mōhiotia ai he aha ngā mahi e taea ana e ā tātou tamariki, kia kitea ai ngā wāhi e pakari ana me ngā wāhi e īhua ngoikore ana, kia whakanuia ngā īhuatanga pai, kia tautuhia ngā īhuatanga me whakapai ake, kia tautuhia hoki ngā rauemi e whaihua ana, kia whakatinanahia hoki ēnei.

Ia tau, ka tipako matapōkerea ētahi tamariki ruarua nei, mai i ngā kura puta noa i te motu. Ka aromatawaia ēnei tamariki i roto i ūrātou ake kura e tētahi rōpū kaiako kua tohua, kua whakangungua mō tēnei momo mahi. Ka tohutohua ngā tamariki mā te reo ī-waha o te kaiako, mā te whiti ataata, mā te rorohiko, mā te tuhituhi rānei. Ko te nuinga o ngā ngohe aromatawai, he mea whakamahi taputapu, whakamahi rauemi rānei. Ko ngā momo whakautu a ngā ākonga, ko te whakautu ī-waha, ko te whakaatu, ko te tuhituhi, ko te whakautu ī-rorohiko, ko te hanganga ī-ringa rānei. He maha ngā whakautu ka hopukina ki te whiti ataata hei arotakenga i muri iho.

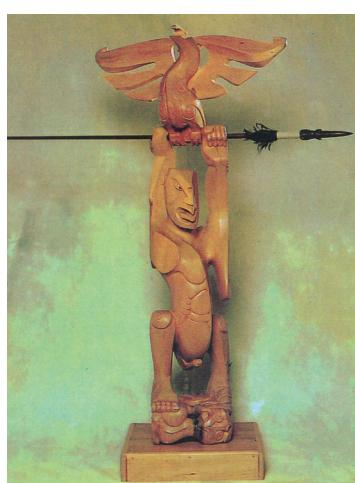
1 : NGĀ īHUATANGA MATUA

Ko te wāhanga 1, he whakamārama i ngā īhuatanga matua o Te Kaupapa Aroturuki Mātauranga ā-Motu e hāngai ana ki tēnei pūrongo.



2 : NGĀ TAKE

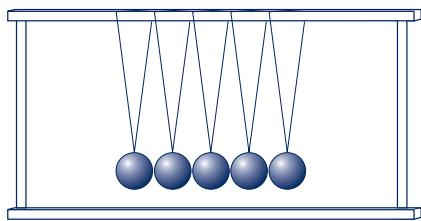
Ko te wāhanga 2, he whakamārama i ētahi o ngā take e pā ana ki te whakamāramatanga o te aromatawai i ngā ākonga i roto i ngā akomanga rumaki reo Māori i te tau 2003.



Ko te īwawangawanga tino nui e pā ana ki te whiriwhiritanga o ngā kura i roto i te tipakonga mātauranga rumaki Māori. He maha ngā take, engari o ngā kura tekau mā rua o te tipakonga matapōkere tuatahi e whā i wehe mai i te kaupapa. Nā te whāiti hoki o ngā kura whakaako reo Māori me te tokooti o ī-rātāu ākonga (ko te tau toharite mō ngā ākonga o te tau 8 ko te 10 mō ia kura), e toru o ēnei kura i whakakapia mai i waho atu o ēnei rohe, ā, e mānukanuka ai te ū ki te kaupapa ī-motu o te tipakonga whakamutunga. Tērā pea, e rerekē ana ngā mahi a ngā ākonga o ngā kura rumaki Māori o te tipakonga tuatahi ki ngā ākonga o ngā kura whakakapinga.

3 : TE PŪTAIAO

Kei te wāhanga 3 ngā kōrero e pā ana ki ngā hua o te aromatawai i te mātauranga o ngā ākonga me ngā pūkenga pūtaiao. E aro ana te pūtaiao mātauranga ki te hinengaro pākiki o te ākonga, me tōna mārama ki te mahi me te pāhekoheko hoki o ngā īhuatanga koiora, īhuatanga ā-kikokiko o te taiao. E 35 ngā ngohe aromatawai e hāngai ana ki ngā whenu mātauranga e whā o te marautanga pūtaiao (ō mataora, ō kawekawe, ō ahupūngao, ō Papatūānuku me tua atu).



Ko te nuinga o ngā ākonga i whakaatu i te pai o ō rātau whai mōhio me ō rātau pūkenga mātakitaki mō ētahi o ngā ngohe pūtaiao, engari tino iti nei ō rātau mōhio mō ētahi atu ngohe. I pātaihia ngā ākonga i roto i ētahi ngohe ki te whakamārama i

ngā tītohunga pūtaiao. I te nuinga o ngā wāhanga o ēnei momo ngohe, ko te nuinga o ngā ākonga kāore i taea e rātau te tuku i ngā whakamārama tika.

5 : NGĀ KAUWHATA, NGĀ TŪTOHI, NGĀ MAHERE WHENUA

Ko te wāhanga 5 e kōrero ana mō ngā hua o te aromatawai i ngā pūkenga o ngā ākonga ki te whakamahi kauwhata, tūtohi, mahere whenua hoki. He whai tikanga ki te hapori kia mārama, kia mātau anō hoki te tangata ki te whakamahi i ēnei mea te kauwhata, te tūtohi, me te mahere whenua i roto i ngā īhuatanga o ia rā. E rua ngā wāhanga o te whakamahi kauwhata, tūtohi, mahere whenua hoki i aromatawaihia: ko te hauhake me te whakamāori i ngā kōrero e whakaaturia ana, ko te whakaraupapa me te whakaatu raraunga.

Te utu mō te Haere ki te Pikitia

NGĀ UTU KITAMAKI-MA-KAU-RAU, KI KIRIKIRIRO ME OTEPOTI

RĀTU (Tūrei)	RĀHINA & RĀAPA (Māne & Weneri)	RĀPARE & RĀMERE (Tāte & Parare)	RĀHOROI & RĀTAPU	
te katoa o te rā	i mus i te 5.00 ahiahi	i muri i te 5.00 ahiahi	i muri i te 5.00 ahiahi	te katoa o te rā
Tamariki	\$7.00	\$7.00	\$7.50	\$7.50
Ākonga Kura Tuarua	\$9.50	\$9.50	\$10.50	\$10.00
Pakeke	\$9.50	\$9.50	\$12.50	\$12.00
Kaumātua	\$7.00	\$7.00	\$7.50	\$7.00



RĀTU (Tūrei)	RĀHINA & RĀAPA (Māne & Weneri)	RĀPARE & RĀMERE (Tāte & Parare)	RĀHOROI & RĀTAPU	
te katoa o te rā	i mus i te 5.00 ahiahi	i muri i te 5.00 ahiahi	i muri i te 5.00 ahiahi	te katoa o te rā
Tamariki	\$6.50	\$6.50	\$6.50	\$6.50
Ākonga Kura Tuarua	\$8.00	\$8.00	\$9.00	\$9.00
Pakeke	\$8.00	\$8.00	\$11.00	\$11.00
Kaumātua	\$6.50	\$6.50	\$6.50	\$7.00

4 : NGĀ TOI ATAATA

Kei te wāhanga 4 ngā kōrero e pā ana ki te aromatawai i te mātauranga, te māramatanga, me ngā pūkenga o ngā ākonga i roto i ngā toi ataata. E rua ngā wāhanga matua o roto i te mātauranga toi ataata: te waihanga mahi toi me te urupare ki te toi ataata. Ko tā te waihanga mahi toi, he whakawhanake i te ākonga ki te whakaputa whakaaro whaiaro, whakaaro pāpori hoki mā roto i te whānuitanga o ngā rawa tā, ngā īhua me ngā tūāhua mahi. Ko tā te urupare ki te mahi toi he whakawhanake i te maioha me te mātau o te ākonga ki te mahi toi a te tangata, me te hua o te tirotiro, te tuku whakaaro me te uara ki te mahi toi.



Ko tā ngā putanga e pā ana ki ngā ngohe mahi toi me te urupareā-toi e whakaatu ana, ko te nuinga o ngā urupare a ngā ākonga he iti noa iho tā rātou whiwhi māka mō tēnei. Ahakoa i taea e te tokomaha o ngā ākonga te tautuhi mai ngā īhuatanga o waho o ngā mahi toi, kāore rātau i tino angitu ki te kōrero me te whakamārama whakaaro, hātepe hoki.

6 : NGĀ TIROHANGA

Kei te wāhanga 6 ngā hua o te pātaitai i ngā whakaaro o ngā ākonga e pā ana ki ngā marautanga, me ō rātou ake titiro ki ngā paetae e eke ana rātau mā te pūtaiao me te toi ataata.

He pai ake ki ngā ākonga ngā ngohe ā-tinana me ngā ngohe ataata i te pūtaiao, ki ngā mahi whakaako, pānui, kōrero rānei mō te pūtaiao. Ahakoa "ko te mahi i ngā mea pēnei i ngā whakamātau" te mahi hira rawa atu i tohua tuatahihia, o ngā ngohe e toru, i kaha ake te whiria o ēnei, arā "ko te haere ā-takiwā" me ngā "whakaaturanga mō te pūtaiao". Tata i te 25 īrau o ngā ākonga i tino hiahia ki te pūtaiao i te kura, ā, i īhua pai ki te nuinga o te toenga atu. Ko ngā haere ā-takiwā, hāereere me ngā whakamātau i pā ki te 1/3, iti iho rānei o ngā ākonga, ki ō rātau whakaaro. Ko te mahi ā-rōpū me ngā mahi kaupapa ngā ngohe i kaha te whakamahia.

Ko te ngohe hira rawa atu o te toi ataata ki ngā ākonga i roto i tō rātou ake wā, ko te peita, whai muri tonu mai ko te tā pikitia, ā, ko te tā hāraunga. Neke atu i te 50 īrau ngā ākonga i tākare ki ngā mahi toi i te kura, engari e 40 īrau kāore i pai ki te auau o ngā ngohe toi "tino pai". Ko te tā pikitia, ngohe ā-rōpū, tā hāraunga me te whakairoiro rorohiko ngā ngohe auau i te kura. Ko te tirotiro me te kōrero mō te toi i roto i te akomanga e kīia ana kāore i tino auau ēnei ngohe mō te 75 īrau o ngā ākonga.



THE PROJECT

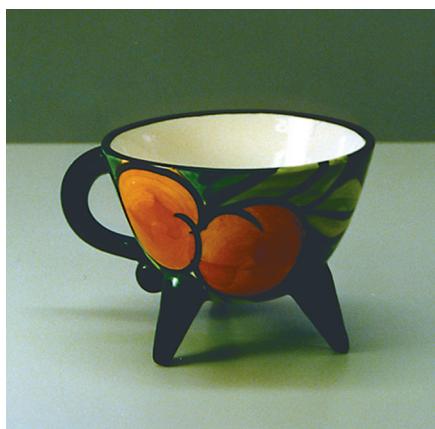
New Zealand's National Education Monitoring Project commenced in 1993, with the task of assessing and reporting on the achievement of New Zealand primary school children in all areas of the school curriculum. Children are assessed at two class levels: year 4 (halfway through primary education) and year 8 (at the end of primary education). Only year 8 students are assessed in Māori medium. Different curriculum areas and skills are assessed each year, over a four-year cycle. In 2003, the areas covered were science, visual arts, and the use of graphs, tables and maps.

The main goal of national monitoring is to provide detailed information about what children can do so that patterns of performance can be recognised, successes celebrated, and desirable changes to educational practices and resources identified and implemented.

Each year, small random samples of children are selected nationally, then assessed in their own schools by teachers specially seconded and trained for this work. Task instructions are given orally by teachers, through video presentations, on laptop computers, or in writing. Many of the assessment tasks involve the children in the use of equipment and supplies. Their responses are presented orally, by demonstration, in writing, in computer files, or through submission of other physical products. Many of the responses are recorded on videotape for subsequent analysis.

THIS REPORT

This report focuses solely on year 8 students learning in Māori immersion education programmes. In 2003, 60 percent of these Māori immersion students were learning in immersion schools (mainly Kura Kaupapa Māori), while the other 40 percent were learning in immersion classes (located in mainstream schools, but having 80 to 100 percent of instruction conducted in Māori). For this special sample of students learning predominantly in Māori, the assessment tasks and task materials were developed in Māori or translated into Māori, and were administered by teachers experienced in Māori immersion settings.



1 : KEY FEATURES

Chapter 1 explains key features of the National Education Monitoring Project that are relevant to this report.



He Pouaka Pakakū



2 : ISSUES

Chapter 2 explains some concerns about the interpretation of the 2003 assessments in Māori immersion education settings. The most serious concern related to the selection of schools in the Māori immersion education sample. For various reasons, four of the twelve schools in the original random sample withdrew. Because of the limited number of Māori immersion schools and their relatively small enrolments (an average of less than 10 year 8 students per school), three of these schools needed to be replaced from other regions, raising serious doubts about how nationally representative the final sample remained. It is possible that the students from the originally sampled Māori immersion schools would have performed quite differently than the students from the replacements schools.



3 : SCIENCE

Chapter 3 presents the results of the assessments of students' knowledge, understanding and skills in science. Science education focuses on students having inquiring minds and making sense of the actions and interactions of the biological and physical features of their environment. The 35 assessment tasks addressed the four main content strands of the science curriculum (the living world, physical world, material world, and planet Earth and beyond).

Most students displayed good knowledge and good observation skills on some of the science tasks, but very limited knowledge on some other tasks. Some tasks asked students to attempt to explain scientific phenomena. On most task components of this type, a majority of the students did not manage to provide appropriate explanations.

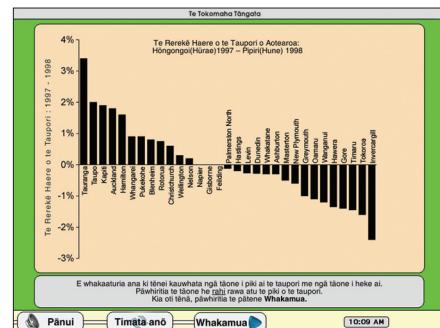


4 : VISUAL ART

Chapter 4 presents the results of the assessments of students' knowledge, understanding and skills in the visual arts. There are two major domains in visual arts education: making art and responding to art. The former offers opportunities for developing abilities of personal and social expression through a range of visual media, forms and techniques. The latter is concerned with developing an appreciation and understanding of the art of others, and the ways art works are looked at, thought about and valued.

The results show that in both art-making and art-responding tasks, most students' responses were rated towards the lower end of the marking scales. While many students could identify surface visual features of artworks, they were generally less confident in discussing and explaining ideas and processes.





5 : GRAPHS, TABLES AND MAPS

Chapter 5 presents the results of the assessments of students' skills in the use of graphs, tables and maps. Understanding and using information presented in the form of graphs, tables or maps is an important part of everyday life in our community. The tasks cover two aspects of the use of graphs, tables and maps: extracting and interpreting information, and organising and presenting information.

Student performance on the tasks was quite variable, with some tasks handled well by most students and others producing mainly low scores. Even on tasks where many students did well, there usually was a substantial percentage of students scoring very low. Task components requiring multiple steps, comparisons of information, or multiple valid answers were handled less well than those that involved finding single pieces of information.

6 : SURVEYS

Chapter 6 reports the results of surveys of students about their curriculum preferences and perceptions of their achievement and potential in science and the visual arts.

Students liked more active and visual science activities, rather than being told about science, reading about it, or talking about it. While “doing things like experiments” was the most popular first choice activity, “going on field trips” and “being shown about science” were more often chosen among the three preferred activities. About a quarter of the students were very enthusiastic about science at school and most of the rest liked it moderately well. Field trips, visits and experiments occurred often for one third or fewer of the students, in their view. Group work and projects were the most common science activities.

The most popular visual art activity in students' own time was painting, closely followed by drawing and then printmaking. More than half of the students were very enthusiastic about doing art at school, although 40 percent were not happy about the frequency of "really good" art activities. Drawing, group activities, printmaking and computer graphics were reported to be the most common art activities in school. Looking at art and talking about it in class were reported to be infrequent activities for about three quarters of the students.