identify, locate, gather, store, retrieve and process information from a range of sources;
organise, analyse, synthesize, evaluate, and use information;
present information clearly, logically, concisely, and accurately;
identify, describe, and interpret different points of view, and distinguish fact from opinion;
use a range of information–retrieval and information–processing technologies confidently and competently.

These skills are clearly important to everyday life in our communities. The range and quantity of information available to us is rapidly increasing, and skill in accessing, collating, interpreting and using information is very helpful to most educational, work and leisure activities.

Students possessing well developed information skills can perform three main tasks effectively: clarifying information needs, finding and gathering relevant information, and then analysing and using that information to meet the required purposes. A substantial proportion of the intellectual demands occurs during the first and third of these tasks: finding and gathering information is clearly important, but its value is greatly dependent on the extent to which it can be validly interpreted and used to answer important questions.

This chapter reports the results of fourteen information skills tasks administered to individual Māori students in both general education settings and Māori immersion settings. Seven tasks were administered in a videotaped one-to-one interview format, while the other seven tasks were attempted in a station or independent format (students worked independently on the tasks, with teacher support available if required for reading and writing).

National monitoring results are reported task by task so that results can be understood in relation to what the students were asked to do. To allow comparisons of performance between the 2001 and 2005 assessments, however, five of the fourteen tasks have been designated *link tasks*. Student performance data on these tasks are presented in this report, but the tasks are described only in general terms because they will be used again in 2005.

Four of the tasks were judged to be not suitable for comparisons of the performance of Māori students in general education and students in Māori immersion settings. The reasons for these exclusions are presented in the commentaries accompanying the tasks.

Among the remaining ten tasks, Māori students in general education and students in Māori immersion settings performed equally well on four of the tasks. Māori students in general education scored statistically significantly higher on six tasks. These comparisons must be interpreted with considerable caution, for the reasons discussed in Chapter 2.

### He Whakaaturanga Hako — Clown Show

Approach: One to one

*Focus*: Identify key information for a poster. *Resources*: Clown picture, recording book.

### Questions/instructions

Imagine a clown is going to do a show to help raise money. Here is a picture of the clown on a poster.

### Hand student the picture.

I want you to think of up to 5 pieces of important information to write on the poster. It should be information that will tell people the things they need to know about the show.

Think about this and then tell me the information you will need, and I'll write it down for you.

PROMPT: If student says something like, "What's going to happen" ask "what do you mean by that?"

Record all of the student's ideas on the answer sheet. Use the student's own words.

Here are the things I've written down for you.

### Read them through.

Is there anything you want me to change?

Whakaarotia, ka whakatū whakaaturanga tētahi hako hei kohi moni.

Anei he pikitia o tētahi hako i runga i te pepa pānui.

### Hoatu te pikitia ki te ākonga.

Whakaarohia, kia 5 ngā tino mōhiohio hei tuhi i te pepa pānui. He whakaputa mōhio tōtika ēnei ki nga tāngata mō te whakaaturanga kei te tū mai.

Whakaarotia ēnei, kātahi ka kōrero mai i aua mōhiohio, hei tuhinga māku,

He āwhina: Mehemea ka kī pēnei mai te ākonga, "Tuhia ngā mahi ngāhau," me kōrero atu "Whakamāramahia mai ō whakaaro."

Tuhia katoa ngā whakaaro o te ākonga ki te pepa whakautu.

Tuhia ngā kupu tonu a te ākonga.

Anei ngā mea i tuhia e au, māu.

### Pānuitia.

Kei te hiahia koe me tīni ētahi?





% responses

	GEd	MI
Core items included:		
date	43	34
time	47	39
venue	55	39
ticket prices	60	36
where to buy tickets	4	2
Other items included:		
what funds are for	18	0
names of other performers	23	59
who show is suitable for	9	9
promotional blurbs/testimonials	53	61
duration/finishing time	17	2
type of show or full name	43	18
Total score: 4-5	16	18
3	27	14
2	27	9
1	10	16
0	20	43

### Commentary

Māori students in general education (GEd) settings scored statistically significantly higher than students in Māori immersion (MI) settings.

### Ngā Pātai mō te Kiwi — Kiwi Questions

Approach: One to one

Focus: Developing questions on a topic.

Resources: 2 pictures of kiwi, recording book.



### Questions/instructions

### Hand student pictures of kiwi.

Here is a picture of a kiwi and an x-ray of a kiwi.

If you were going to give a talk to your class about the x-ray picture, you would need to have good information.

What are 3 really useful questions you could ask an expert on kiwis, so that you would have good information for a talk about the x-ray picture?

I'll write down your questions for you.

### Record student responses.

### After the 3 things have been written, say:

I'll read out what I've written down. If there is anything you want to change, tell me and I'll write it down.



### Hoatu te whakaahua o te kiwi ki te ākonga.

Anei te whakaahua me te <u>whakaata roto</u> [xray] o tētahi kiwi.

Mehemea, ka kõrero koe ki tõ karaehe mõ te whakaata roto me tino mõhio koe ki tõ kaupapa.

He aha ngā tino pātai e toru hei pātai māu ki tētahi tangata matatau ki ngā kiwi. Mā reira ka whiwhi tino mōhio koe mō tō kōrero, mō te whakaata roto?

Māku ō pātai e tuhi.

### Tuhia ngā pātai a te ākonga.

### Ā muri o te tuhinga o ngā pātai e toru, me kī:

Ka pānuitia e au, ēnei kua tuhia. Mēnā ka hiahia koe ki te whakarerekē, kōrero mai, kia tuhia ai e au.



First question:	% resp	onses	How
clear question about kiwis	GEd	MI	are th
related to x-ray	62	66	
not related to x-ray	34	29	
Second question:			
clear question about kiwis			
related to x-ray	54	43	
not related to x-ray	42	50	
Third question:			
clear question about kiwis			
related to x-ray	43	45	
not related to x-ray	48	46	

How much useful information are the questions likely to produce?	% resp	
lots		
a moderate amount		_
just 3 specific facts	ĺ	
less than that		
iess than that	4	9
Total score: 8-9	21	2
6-7	46	61
4-5	28	28
2-3	4	4
0-1	1	5

### Commentary

The results achieved by Māori students in general education (GEd) settings and students in Māori immersion (MI) settings were not statistically significantly different.

### Kei Hea Ra — Whereabouts?

Approach: One to one

*Focus:* Identifying appropriate sources of information.

Resources: None

### Questions/instructions

Some children want to find out information about different things. I want you to tell me your ideas about how they could find these things out. There may be more than one way to find out the information, so tell me all of the ways you can think of.

Ka hiahia ētahi tamariki ki te rapu mōhiohio mō ētahi mea rerekē. Ko tōku hiahia, me kōrero mai koe ō whakaaro me pēhea whiwhi mōhio ai. He nui ake i te kotahi huarahi mō te rapu mōhiohio. Otirā, me whakamōhio mai ngā huarahi e mōhio ana koe.

1. Sarah wants to know what time the % responses swimming pool opens. GEd MI How could she find that out? PROMPT Can you think of any other ways she could find out when the pool opens? Kei te hiahia a Sarah ki te mōhio he aha te wā e pūare ai te wāhi kaukau. Me pēhea ia e mōhio ai? He āwbina: Kei a koe anō ētabi atu whakaaro mā te aha ia e mōhio ai i te wā pūare o te wāhi kaukau? 2 or more ways, all workable 29 92 1 workable way 65 2. A little lost dog has turned up at Manu's house. How can Manu try to find out who its owner is? PROMPT Can you think of any other ways of finding out the dog's owner? I tatū tētahi kurī ngaro ki te kāinga o Manu. Me pēhea a Manu e mōhio ai nā wai te kurī nei? He āwbina: Kei a koe anō ētabi atu whakaaro mā te aha ia e mōhio ai i te wā pūare o te wābi kaukau? 2 or more ways, all workable 82 37 52 1 workable way 14

% responses GEd MI 3. It is a cold and windy day at Pene's school. Pene wants to know if she is expected to eat her lunch inside or outside. How can she find out? PROMPT Can you think of any other ways she could find out if she is expected to eat her lunch inside or outside? He rā makariri me te tino hauhau i te kura o Pene. Kei te hiahia tērā ki te mōhio, mehemea me kai ia i tana tina ki roto, ki waho rānei. Me pēhea ia e mōhio ai? He āwhina: Kei a koe anō ētahi atu wbakaaro mā te aba e mōbio ai ia, mehemea me kai i tana tina ki roto, ki wabo rānei? 2 or more ways, all workable 53 3 59 1 workable way 40 4. Peter wants to find out the name of the school his great-grandmother went to How could he find out? PROMPT Can you think of any other ways of finding out the name of the school Peter's grandmother went to? Kei te hiahia a Pita ki te mōhio ki te ingoa o te kura i haere ai tōna tipuna kuia. Me pēhea ia e mōhio ai? He āwhina: Kei a koe anō ētahi atu whakaaro mā te aha ia e mōhio ai ki te ingoa o te kura o tōna tipuna kuia? 2 or more ways, all workable 21 1 workable way 76

5. Two people are on holiday in Wellington. They are going to meet their friend at the railway station, but they are not sure how to find it.  How can they find out where the railway station is?  PROMPT Can you think of any other ways that they could find out where the railway station is?  E rua ngā tāngata kei te hararei i Poneke. Kei te haere rāua ki te tūtaki i tō rāua hoa i te tūranga tereina [railway station], engari kāore rāua i te tino mārama kei hea te wāhi nei.  Me pēhea rāua e tino mōhio ai kei hea te tūranga tereina?	*	oonses MI	6. Some children see some delicious looking berries on a bush.  How can they find out if they are safe to eat?  PROMPT Can you think of any other ways they could find out if the berries are safe to eat?  Ka kite ētahi tamariki i ētahi hua tino reka te āhua, e tipu ana i tētahi rākau iti.  Me pēhea rātou e mōhio ai mehemea he pai anō ki te kai?  He āwhina: Kei a koe anō ētahi atu whakaaro me pēhea rātou e mōhio ai mehemea he pai te kai i ngā hua nei?  2 or more ways, all workable	% resp GEd	
He āwhina: Kei a koe anō ētahi atu whakaaro me pēhea rāua e mōhio ai kei hea te tūranga tereina?			1 workable way	36	63
2 or more ways, all workable	87	46	Total score: 17-18	27	0
1 workable way	11	51	15-16	44	15
			13-14	22	37
			11-12	7	30
			0-10	0	9

### Commentary

Approximately half of the Māori immersion students were only encouraged to give one answer, compared to three percent of Māori students in general education. This means that statistical comparisons between the two categories are not appropriate.



### Te Ao Ngahere o Niu Tīreni — New Zealand's Forest World

Approach: One to one

Focus: Extracting information from poster, key, and information card.

Resources: New Zealand Forest poster and key, bird photo, Spotted Shag information card.



### Questions/instructions

### Show the student the poster and key.

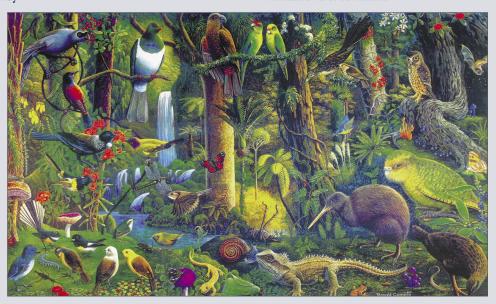
I want you to have a good look at this poster called New Zealand's Forest World, and the key that goes with this poster.

### Point out the key.

Whakaaturia te whakaahua nui me te tohutaka ki te ākonga.

Āta titiro ki tēnei whakaahua nui e kīia nei ko Te Ao Ngahere o Niu Tīreni. Tirohia hoki te tohutaka [key] mō tēnei whakaahua nui.

### Whakaaturia te tohutaka.





1. How do you think this key is used?

PROMPT: If student is unsure, tell them at this point.

Ki ō whakaaro, he aha te mahi mō tēnei tohutaka?

GEd MI

% responses

98

He āwbina: Mehemea kāore te ākonga i te mōbio, whakamārama atu.

not scored

I want you to use the poster and the key to answer some questions.

### Point to the New Zealand Pigeon on the poster.

Nā, whakamahia te whakaahua nui, me te tohutaka ki te whakautu i ētahi pātai.

Me tohu ki te kererū kei te whakaahua nui.

2. Find the name of this bird then show me where you found it.

Kimihia te ingoa o tēnei manu, kātahi, ka whakaatu mai i kitea e koe i hea.

NZ pigeon/kereru/pigeon/wood pigeon 99
pointed to bird name on key 93

### Show the word card "Nikau Palm".

Whakaaturia te kāri pānui "Rākau Nikau".

### Nikau palm Rākau Nikau

3. I want to know what a Nikau Palm looks like. I know it is a native tree.

Use the key to show me how to find the picture of the Nikau Palm on the poster.

Kei te rapu mōhio ahau, pēhea te āhua o te Rākau Nikau. Ki taku mōhio he rākau Māori tēnei.

Mā te tohutaka, whakaaturia mai me pēhea taku kite i te Nikau, i te whakaahua nui. % responses GEd MI

found *Nikau Palm* on key 96 94 found graphic 96 94

found *Nikau Palm* on poster 95 94

4. Choose any butterfly on the poster and point to it.

Now use the key to find out what its name is and show me where it says that.

Kōwhiria tētahi pūrerehua kei te whakaahua nui, ā, whakaaturia mai.

Nā, mā te tohutaka, kimihia tōna ingoa, ā, ka whakaatu mai kei hea.

% responses
GEd MI

chose butterfly 99 100
named correctly 97 100
used key 100 100

### Show photo of the bird.

Whakaaturia te whakaahua o te manu.

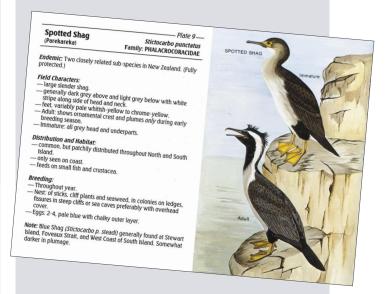
5. Here is a photograph of a bird.
Use the poster and key to find the name of the bird, then show me where you found that.

Anei te whakaahua o tētahi manu. Mā te whakaahua nui me te tohutaka, kimihia te ingoa o taua manu, kātahi ka whakaatu mai kei hea.

Stitch Bird 53 48

### Show information card of Spotted Shag.

Whakaaturia te kāri pānui o te Kawau Tikitiki.



6. Here is an information card about the Spotted Shag.This bird is not on the chart.Why do you think it is not there?

Anei he kāri pānui o te Kawau Tikitiki. Kāore tēnei manu i te whakaahua nui. He aha te take kāore ia i reira?

found on sea shore (not a forest bird) 84 92

Total score: 10 33 40 9 53 48 7-8 10 10

0-6 4

2

% responses

GEd MI



### Commentary

The results achieved by Māori students in general education (GEd) settings and students in Māori immersion (MI) settings were not statistically significantly different.

### <u> Whakahokinga Pukapuka — Book Returns</u>

Approach: One to one

Focus: Understanding library organisation.

Resources: 8 book covers (labelled A-H), recording book.



### **Ouestions/instructions**

### Arrange the book covers in order using the letters (A-H) on the backs.

Imagine that you are helping to put books back in their right place in a school library.

### Show the student the book covers.

Now imagine that these are real books. I want you to sort them so that they are ready for putting back in their right places in the library.

### Give student the pile of book covers.

Here are the books. Look carefully at the information on the covers, then sort them into order for putting on the library shelves.

When you have finished sorting them, I will ask you to explain why you have arranged them that way.

Allow time for student to sort books.

### Whakaraupapatia ngā uhi pukapuka mā ēnei pū (A-H) i ngā tuarā.

Pohewatia kei te āwhina koe ki te whakahoki i ngā pukapuka ki ō rātou wāhi tika i te whare pukapuka.

### Whakaaturia ngā uhi pukapuka ki te ākonga.

Pohewatia he pukapuka tonu ēnei. Wehewehea kia reri ai ki te whakahoki ki ō rātou wāhi tika i te whare pukapuka.

### Hoatu ngā uhi pukapuka ki te ākonga.

Anei ngā pukapuka. Āta tirohia ngā uhi, ka whakaraupapa ai hei whakahoki ki ngā whata [shelves] pukapuka.

Ka mutu tēnā, kī mai he aha i pēnātia ai te whakatikatika.

Tukua he wā mō te ākonga ki te whakatikatika i ngā pukapuka.

	0/ 1000	0.0000		0/ 2005	00000
	% resp	onses <b>MI</b>		% resp <b>GEd</b>	
Now can you tell me why you have arranged them that way?			If the student hasn't divided the books into fiction/non-fiction, ask:		
Write down the order of the books using the letters on the backs of the cards.			2. Can you sort the books into fiction (story books) and non-fiction?		
Kōrerotia mai he aha i pēnā ai tō			Allow time for student to sort the books.		
whakatikatika i ngā pukapuka?			Mēnā kāhore anō te ākonga kia wehewehe i		
Tuhia te whakaraupapatanga o ngā pukapuka i raro i te whakahaerenga Dewey i mua o ngā uhi.			ngā pukapuka pakiwaitara (fiction) me ngā pukapuka kōrero pono (non fiction), pātaitia:		
			2. Ka āhei koe ki te whakarōpū i		
Books divided correctly:			ngā pakiwaitara me ngā kōrero pono?		
fiction ordered alphabetically, non-fiction ordered numerically			books now divided correctly	73	73
both ordered correctly	13	2			
fiction only ordered correctly	11	3			
non-fiction only ordered correctly	2	0			
neither ordered correctly	12	9			
Doolso not divided compethy			Commentary		
Books not divided correctly:  but correctly alphabetised	24	25	For several reasons, statistical comparinappropriate on this task. All students were	e aske	ed to
Any other response:	38	61	categorise book covers in English and Māori i (MI) students do not generally use Dewey class for non-fiction books. Library resources in Māo	sificat	tions

limited.



### E Tū - Titiro - Whakaaro — Stop - Look - Think

Approach: One to one

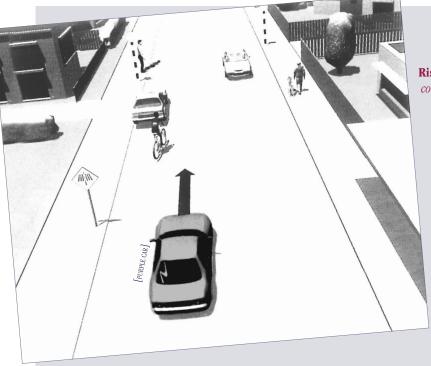
Focus: Interpreting visual information.

Resources: Road traffic picture.



% responses

5 16



### Questions/instructions

### Show the student the picture.

I want you to have a careful look at this picture to see what is happening, and to think about what might happen next.

- 1. Tell me what is happening in the picture.
- 2. Try to explain what you think might happen next.
- 3. What do you think are the risks for the person on the bike?

### Whakaaturia te pikitia ki te ākonga.

Āta tirohia tēnei pikitia, kia kite koe i ngā āhuatanga, ā, ka whakaaro ai, he aha rā ngā āhuatanga a muri atu.

- 1. Tirohia te pikitia. Kōrero mai, kei te aha?
- 2. Nā. Kōrero mai, ka aha rā a muri atu?
- 3. He aha ngā raruraru, tērā pea, ka pā ki te tangata eke paihikara?

	GEd	MI	
tisks:			
considering responses to all 3 questions			
cyclist getting hit by purple car when passing parked car or squeezed between both	74	64	
door of parked car opening and hitting cyclist	3	0	
parked car pulling out and crashing into cyclist	3	2	
cyclist hitting pedestrian on crossing	17	20	
cyclist stopping for pedestrian on crossing, getting hit from rear by purple car	2	7	
dog chasing cyclist	1	7	
cyclist hit by oncoming car	3	4	
cyclist falling off bike	4	60	
cyclist may not be wearing helmet	13	0	
vague comment about cyclist getting hit or run over	19	16	
Total score: 4-10	0	4	
3	4	20	
2	36	43	
1	55	17	

### Commentary

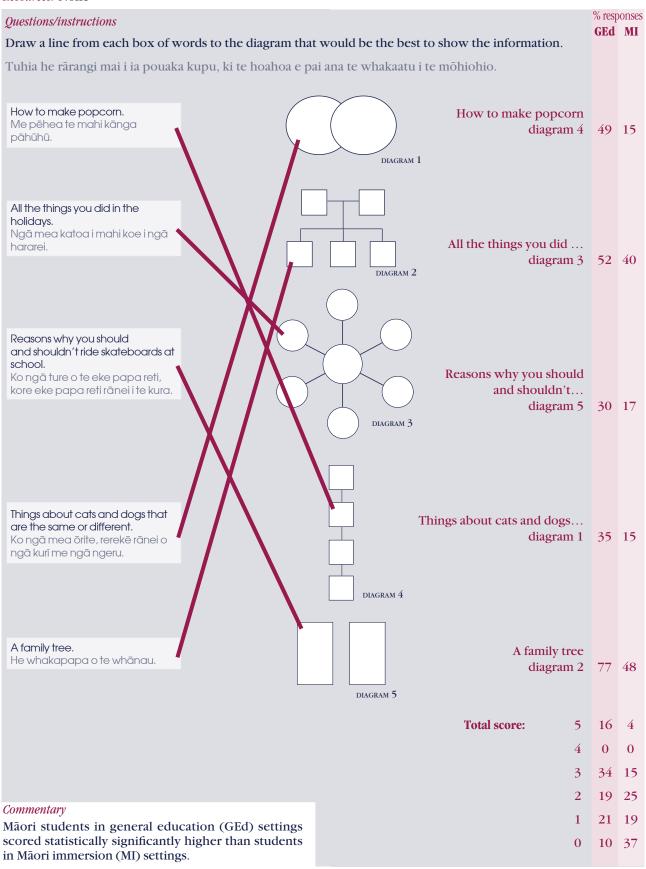
Statistical comparisons are not appropriate on this task because the markers for students in Māori immersion (MI) settings gave credit for the response "cyclist falling off bike" on a different basis to other markers. Otherwise, differences were small.

### Ngā Hoahoa —Diagrams

Approach: Independent

*Focus*: Relating verbal descriptions to diagrams.

Resources: None



# PEPA MÕHIOHIO

Vorm World: Recyclers

19/6/01 2:52 PM

Travel Channel Discovery Health Discovery Store Health Discovery Channel

Boards What's On TV? Fun & Games Awesome Cams Teams Animal Planet Choose An Adventure TLC Kids Home

World

Site on the interne

the

ritaru, konga mea perëti nigo tautoa mane, ngë tituate me ngë karrethe e pitau haerte ana. Ko nga kati totika o te watrakau, e mahia nerie ngë noke, ket ite whangai i te warene Kis momona, a, kar eka hoki, kis momona, a, kai reka te noko kati sa momona, a, kai reka te orecone Kis momona, a. He kathangarua takatu nga noke. Ka hangaruatia e nga noke, nga para kai me étahi atu mea ora, hei watiakau pirau, hei wairakau noke ranei. Ko nga mea igā Kaihangārua ā-Papa

ss&cool bod

ask wendell

yucky fun & gai

worm world roach world

ıga tupu.

Bin Basics
 How to Make a Bin

Worms as Recyclers

Meet Mary the Worm

What Worms do Worms, every plack and animal without The Pena of worms, every plack and an institute died and fell to the ground would stay right where it fell. Trees, leaves, fruit, nuts, dead animals and food would just keep piling up (you'd be living underground like us!).

Privacy Policy Teacher Center

Worms make nutrients

But worms and other decomposers break down all this refuge. All those trees and leaves becomes rich all over again! To learn more about how worms help soil for new seedlings to grow. And the cycle starts break down dead plants and animals, check out Wendell's exclusive interview with Eddie the Earthworm or click here to go onto worm bins.

other plants and animals.
Start with a old dead log or
fallen leaves and you end up
with rich soil for new things down into valuable nutrients that can be used by The Decomposers break seedlings to grow.

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### Nature's Recyclers

and decaying animals. The nutrients in the compost made by worms help the soil to become rich and fertile. When soil is rich and fertile, it is good for growing healthy plants and other organic material into vermicompost, or worm compost. Organic matter is stuff like dead plants, poop, Worms are busy recyclers. Worms recycle food scraps

## 19/6/01 2:53 PM **Cornell Composting** PEPA MÕHIOHIO 2 Composting in Schools Worm Composting Basics

# Worm Composting Basics

worm's body. Compost comes out through the worm's tail end. This compost can then be used to grow plants. To understand why worm compost is good for plants, remember that the worms are eating materials that are rich in Worms eat food scraps, which becomes compost as it passes through the

What is worm composting?

nutrients. They turn them into nutrients rich compost

by Jen Fong and Paula Hewitt

- What is worm composting?
- Materials to use (and avoid) in a classroom worm bin Setting up a worm bin
  - Containers
    - Harvesting
- Using worm compost Biology of worms Successful vermicompost projects

Visit Wendell's Cousins

All About Earthworms

## He aha te wairākau noke?

i te pito o te whiore o te noke. Ma tena, ka taea te whakamahi wairākau hei whakatō tupu. Kia mārama ki te take i pai ai te wairākau noke mō ngā tupu, me maumahara, kei te kai ngā noke i Kia puta atu ngā para kai a te noke i tōna tinana, kua huri kē ki te wairākau. Puta atu te wairāk ngā mea tôtika. Mai i tēnā, ka hurihia e rātou hei whakamōmona, hei whakareka i te wairākau

# Materials to use (and avoid) in a classroom worm bin

For millions of years, worms have been hard at work breaking down organic materials and returning nutrients to the soil. By bringing a worm bin into the classroom, you are simulating the worm's role in nature. Though worms could eat any organic material, certain foods are better for the classroom worm bin.

We recommend using only raw fruit and vegetable scraps. Stay away from meats, oils and dairy products, which are more complex materials than fruits and vegetables. Thus, they take longer to break down and can attract pests. Cooked foods are often oily or buttery, which can also attract pests. Avoid orange rinds and other citrus fruits, which are too acidic, and can attract fruit flies. Try to use a variety of materials. We have found the more vegetable matter, the better the worm bin. Stay away from onions and broccoli which tend to have a strong odor. Page 1 of 4

Page 1 of 1

### Te Pāmu Noke — Worm Farm

Approach: Station

Focus: Note-taking and summarising.

*Resources*: Two information cards about worms (opposite).



### Questions/instructions

1. Read the information which is circled on the two cards.

Pānuitia ngā tohu mōhio i porohitatia i ngā kāri e rua

2. From each article, write down two useful pieces of information about worms and compost.

Mai i ia pānui, tuhia kia rua ngā mōhiohio whaitake, e pā ana ki te noke me te wairākau [compost].

<b>Article 1</b> Te Pānui 1	<b>Article 2</b> Te Pānui 2
1.	1.
2.	2.

3. Use **your** pieces of information to write **one** sentence which tells about worms and compost.

Whakamahia ō mōhiohio whaitake, hei tuhi i tētahi whakamāramatanga mō te noke me te wairākau.

Kia kotahi te rerenga.

	% resp	
Article 1 — 7 possible specific points	GEd	MI
note 1:		
*	76	
noted other valid information from article	16	4
note 2:		
noted 1 point from article	59	
noted other valid information from article	19	6
And An O The will an air and a sector		
Article 2 — 7 possible specific points  note 1:		
	79	57
noted other valid information from article	8	
note 2:		
noted 1 point from article	66	46
noted other valid information from article	10	0
Summary sentence:		
pieces of information used (notes):		
3 or 4	31	9
2	27	4
1	20	43
and and do will be contained and and		
extent to which sentence captured main points of the 2 articles:		
very high	8	0
quite high		_
moderate		
low	41	74
used single sentence	64	59
Total score: 10-11		0
8-9	23	4
6-7	22	18
4-5	23	28
0-3	12	50

### Commentary

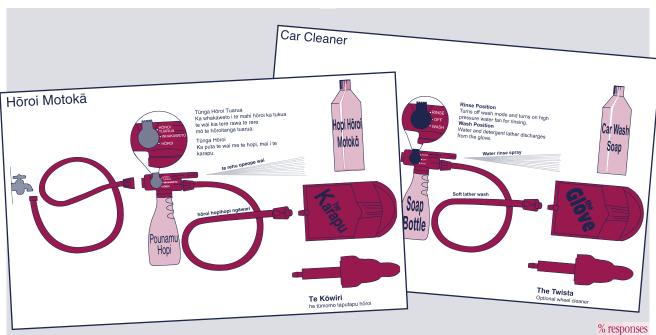
Māori students in general education (GEd) settings scored statistically significantly higher than students in Māori immersion (MI) settings.

### Hōroi Motokā — Car Cleaner

Approach: Station

Focus: Converting a diagram into written instructions.

Resources: Picture.



### Questions/instructions

The picture shows equipment for cleaning cars.

Write instructions which tell how to put the equipment together for washing a car.

You don't have to use all of the numbers.

Ka whakaatu tēnei pikitia i ngā taputapu hei hōroi motokā.

Tuhia ngā tohutohu hei whakamārama mai me pēhea te hono i ngā taputapu hōroi motokā.

Ki te kore hiahia, kaua e whakamahi i ngā tau katoa.

1. 2. 3. 4. 5. 6.			
<ol> <li>3.</li> <li>4.</li> <li>5.</li> <li>6.</li> <li>7.</li> </ol>			
<ol> <li>3.</li> <li>4.</li> <li>5.</li> <li>6.</li> <li>7.</li> </ol>			
<ol> <li>3.</li> <li>4.</li> <li>6.</li> <li>7.</li> </ol>	1		
<ol> <li>4.</li> <li>6.</li> <li>7.</li> </ol>	1.		
<ol> <li>4.</li> <li>6.</li> <li>7.</li> </ol>			
<ol> <li>4.</li> <li>6.</li> <li>7.</li> </ol>			
<ol> <li>4.</li> <li>6.</li> <li>7.</li> </ol>	2		
<ul><li>4.</li><li>5.</li><li>6.</li><li>7.</li></ul>	2.		
<ul><li>4.</li><li>5.</li><li>6.</li><li>7.</li></ul>			
<ul><li>4.</li><li>5.</li><li>6.</li><li>7.</li></ul>			
<ul><li>4.</li><li>5.</li><li>6.</li><li>7.</li></ul>			
<ul><li>5.</li><li>6.</li><li>7.</li></ul>	3.		
<ul><li>5.</li><li>6.</li><li>7.</li></ul>			
<ul><li>5.</li><li>6.</li><li>7.</li></ul>			
<ul><li>5.</li><li>6.</li><li>7.</li></ul>			
<ul><li>5.</li><li>6.</li><li>7.</li></ul>	4.		
6. 7.			
6. 7.			
6. 7.			
6. 7.	5.		
7.			
7.			
7.			
7.	6.		
	7.		
8.	· ·		
8.			
8.			
O.	Q		
	0.		

Steps mentioned:	OLU	IVEE
put car wash soap in bottle	36	33
connect hose to tap	54	56
connect hose to bottle	59	49
connect hose to glove	60	56
turn switch to wash position	21	20
turn tap on	12	29
replace glove with "twista" to wash wheels	27	27
switch to rinse position to rinse soap off	19	18
The order of tasks made sense	70	82
Clarity of instructions: (language, not handwriting) high	16	24
moderate	48	58
low	36	18
10 W	50	10
Total score: 10-11	1	2
8-9	8	5
6-7	31	35
4-5	24	34
2-3	17	13
0-1	19	11

GEd MI

### Commentary

The results achieved by Māori students in general education (GEd) settings and students in Māori immersion (MI) settings were not statistically significantly different.

### Information Skills Link tasks 1, 4, 6, 7, 9

### **LINK TASK 1**

Approach: Station Focus: Choosing questions for a purpose.

> % responses GEd MI **Total score:** 5 53 4 25 23 14 29 1 2 12 0 0 11

**LINK TASK 4** 

Approach: One to one

Focus: Understanding library conventions.

% responses GEd MI **Total score:** 15-16 12 13-14 13 0 11-12 15 8 9-10 18 19 7-8 25 25 5-6 25 7 0-4 10 21

### Commentary

Māori students in general education (GEd) settings scored statistically significantly higher than students in Māori immersion (MI) settings.

### Commentary

Statistical comparisons inappropriate for same reasons as for "Book Returns" task (p22).

### LINK TASK 6

Approach: Station

Focus: Understanding how to search fuse information.						
		% resp				
Total score:	11-26	2	0			
	9-10	10	2			
	7-8	12	10			
	5-6	30	12			
	3-4	32	31			
	0-2	14	45			

### **Commentary**

Māori students in general education (GEd) settings scored statistically significantly higher than students in Māori immersion (MI) settings.

### LINK TASK 7

Approach: Independent Focus: Notetaking from a video.

		% responses	
		GEd	
Total score:	15-17	0	0
	13-14	6	4
	11-12	21	5
	9-10	33	37
	7-8	23	26
	5-6	15	26
	0-4	2	2

### Commentary

Māori students in general education (GEd) settings scored statistically significantly higher than students in Māori immersion (MI) settings.

### LINK TASK 9

Approach: Station Focus: Label a flow chart.

		% responses	
		GEd	MI
Total score:	7	58	37
	5-6	12	20
	3-4	19	34
	1-2	4	2
	0	7	7

### Commentary

The results achieved by Māori students in general education (GEd) settings and students in Māori immersion (MI) settings were not statistically significantly different.