



Te Puni Kōkiri
REALISING MĀORI POTENTIAL

Te Whakapiki i te Pānui me te Tatau mō ngā Kaimahi Māori

Improving Literacy and Numeracy for the Māori Workforce



Government and Māori emphasise the critical importance of good literacy and numeracy skills for Māori development, and more broadly for the New Zealand economy. Te Puni Kōkiri recently completed a report on Māori workforce literacy and numeracy outcomes. This report presents a summary of the results from the full report.

INTRODUCTION

This is a summary of the results from Te Puni Kōkiri's 2010 monitoring review which examines the collective contribution of the State sector in improving literacy and numeracy outcomes for the Māori workforce. This report focuses on good practice features in programme design and delivery and illustrates good practice in action from the review's case studies.

This report presents the following summaries:

- workforce literacy and numeracy outcomes;
- State sector workforce literacy and numeracy activity; and
- examples of good practice in workforce literacy and numeracy programme design and delivery as identified in a literature review, and as evidenced in four case studies.

Te Puni Kōkiri's monitoring role

Te Puni Kōkiri has a statutory responsibility to monitor and liaise with each department and agency that provides, or has a responsibility to provide, services to or for Māori, for the purpose of ensuring the adequacy of these services.¹

Rationale

Literacy and numeracy are critical skills for New Zealand if we are to have a productive and highly skilled workforce. Because of the Māori population's youthful age structure, Māori will make up a greater proportion of



New Zealand's workforce in the future. Lifting literacy and numeracy attainment rates amongst working-age Māori (between 16 and 65 years) is therefore a very important objective for New Zealand's productivity and economic growth.

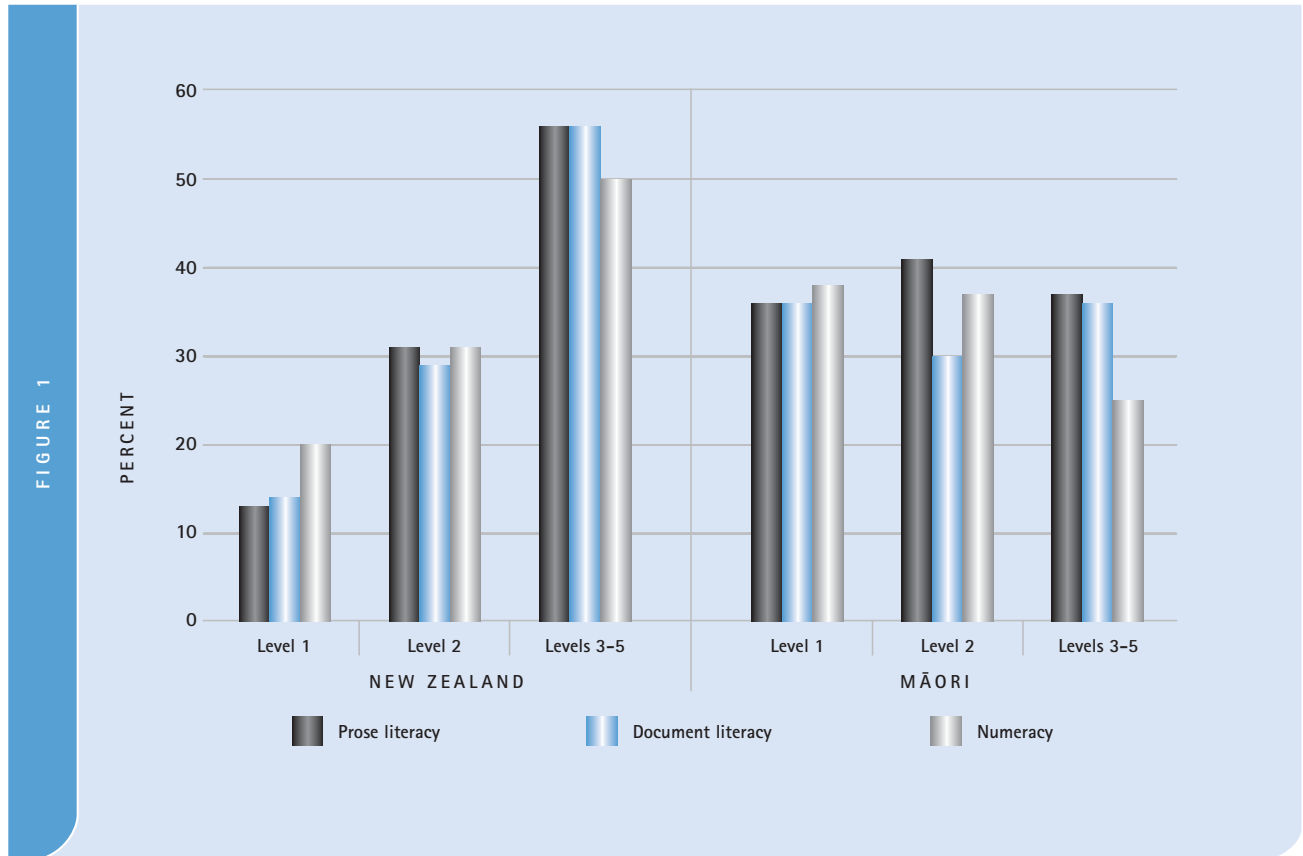


ADULT LITERACY AND NUMERACY OUTCOMES

It is estimated, on the basis of Ministry of Education 2006 data, that between 50 – 60% of New Zealand adults have the level 3 literacy and numeracy skills² needed to participate in

a knowledge-based economy. For the Māori adult population, however, it is only 25 – 40%. Numeracy is also a particular area of concern, as Māori adults attain level 3 and above at approximately half the rate of non-Māori adults. See Figure One below.

ADULT LITERACY AND NUMERACY LEVELS, MĀORI AND NEW ZEALAND, 2006



Source: Ministry of Education unpublished tables (Note that a further disaggregation of level 3-5 is not available).

Definitions:

- Prose literacy – knowledge and skills required to understand and use information from texts e.g. fictional books and newspapers.
- Document literacy – knowledge and skills required to locate and use information in various forms including: timetables; graphs; charts; and forms.
- Numeracy – knowledge and skills required to effectively manage mathematical requirements in different situations.

TABLE ONE: MĀORI ADULT LITERACY AND NUMERACY BY AGE GROUP, 1996 AND 2006

Age group	Level	Prose literacy		Document literacy		Numeracy
		1996 (%)	2006 (%)	1996 (%)	2006 (%)	2006 (%)
16–24 yrs	1–2	63	73	70	73	84
	3–5	37	27	30	27	16
25–34 yrs	1–2	68	60	68	57	71
	3–5	32	41	32	43	29
35–44 yrs	1–2	60	54	63	58	65
	3–5	40	46	37	42	35
45–65 yrs	1–2	70	64	78	68	79
	3–5	29	36	22	32	21

Source: Ministry of Education unpublished tables. (Total may not sum to 100 percent due to rounding.)

For Māori youth (16 – 24 years) the proportion with level 3 literacy skills declined between 1996 and 2006 (see Table One above). A number of factors probably contribute to these results, including individuals' experiences in compulsory schooling and the home.

There is also some evidence of difficulties in designing and delivering literacy and numeracy programmes. Some providers experienced difficulty attracting potential learners with very low literacy levels. Some evaluations suggest there are providers who are unwilling to work with the most challenging learners.

Outcomes from State sector-funded programmes

Te Puni Kōkiri's monitoring review, *The State Sector's Contribution to Improving Literacy and Numeracy for the Māori Workforce* identifies some very positive outcomes for the Māori workforce resulting from State sector funded programmes, particularly when programmes utilise good practice features as discussed below. Employers notice a

variety of benefits including: fewer workplace accidents; increased staff loyalty; and better problem-solving skills. These improvements can 'open up' promotion prospects and greater re-employability if a worker loses his or her job. Some whānau also enjoy benefits, including improved communication skills leading to better personal relationships and an ability to pass literacy skills on to children.



STATE SECTOR ACTIVITY³

Key government agencies involved in contributing to improved literacy and numeracy outcomes for the Māori workforce include:

1. Accident Compensation Corporation;
2. Department of Corrections;
3. Department of Labour;
4. Ministry of Education;
5. Ministry of Social Development;
6. New Zealand Qualifications Authority; and
7. Tertiary Education Commission.

There is a wide range of literacy and numeracy activities delivered by these agencies. The amount of literacy and numeracy content of each programme and initiative varies; it may be a component of a programme focussing on increasing employability, or the core focus of a programme.

The content of programmes is affected by criteria attached to each respective funding source. Content can also be determined by the needs of target audiences. Programmes are aimed at groups such as: youth; jobseekers; and people that live in rural areas.

Similarly programmes are delivered in a wide variety of contexts including: informal community settings where tuition can be one-on-one or in small groups, and in workplaces and prisons.



PROGRAMME DESIGN AND DELIVERY: GOOD PRACTICE EVIDENCE

This section summarises good practice examples identified in a literature review and evidenced in case studies. The literature review's purpose is to identify the key features of good practice for designing and delivering literacy and numeracy programmes for the Māori workforce. The findings provide a framework against which to consider the review's case studies.

Four case studies were chosen based on State sector agencies' recommendations, and on the availability/ accessibility of participants. Each was selected for its 'point of difference' as follows:

1. The Tūwharetoa Adult Literacy Initiative is coordinated by the Tūwharetoa Māori Trust Board, and is provided by Literacy Aotearoa. This programme provides literacy and numeracy support to learners in the Taupō region, in order to facilitate employment or further training.
2. The Commercial Fishing and Processing Course is delivered by the Westport Deep Sea Fishing School, a Private Training Establishment. This 20 week programme aims to equip people with skills to gain employment in the deep-sea fishing industry.
3. Whakatō te Mātauranga is coordinated by the Waikaremoana Māori Trust Board. The programme adopts a multi-pronged approach to learning – integrating life skills with the academic imperatives of NCEA level 1. The programme is normally one year full-time, although learners can stay for two to three years.
4. TeamWorks is an on-site programme at Downer EDI Works and is delivered by an external provider, The Learning Wave. The programme comprises eight modules focusing on: leadership; communication skills; problem-solving; task planning; work roles; and team work. There are two, two day courses, with six weeks coaching and individual project work in between.

Examples of programme design and delivery good practice criteria identified in the literature review, and evidenced in the four case studies, are outlined below.

Programme design

Consideration of Māori Needs and Aspirations

The literature review identifies that agencies should involve Māori in programme planning and purchasing processes, showing consideration of Māori needs and aspirations. Providers should include key elements of te ao Māori in the programme, and recognise the diverse experience of learners and tailor the programme accordingly.

Consideration of the needs and aspirations of individual learners is evidenced through the case study programmes. TeamWorks encourages learners to plan their literacy and numeracy learning through individual learning plans. The Tūwharetoa Māori Trust Board plans for the requirements of the future job market, with a literacy and numeracy course as part of their response.

"The Tūwharetoa Māori Trust Board is strategically planning 25-50 years out, and is cognisant of the requirements for transferable skills in the job market – which is seriously compromised by the lack of foundation skills."

Tūwharetoa Adult Literacy Initiative.



Consideration of Barriers to Access by Māori

As identified in the literature review, programmes should be located within Māori communities, or integrated into the workplace, thereby removing access barriers. The marketing of programmes to potential Māori learners needs to be done effectively. It is essential that programmes are offered at low or no cost.

Removing cost is an essential way to remove an access barrier. The Tūwharetoa Adult Literacy Initiative and Whakatō te Mātauranga are provided at no cost to learners, whereas the Commercial Fishing and Processing Course is provided to learners with appropriate financial support. TeamWorks is held in the workplace as part of workplace training, also at no cost to learners.

"The fact that there is no cost to learners is an advantage, many of their families would be unable to afford further education beyond school."

Whakatō te Mātauranga.

Consideration of Barriers to Māori Retention and Achievement

Support mechanisms which facilitate the retention and achievement for learners, such as transport assistance and childcare options, should be established, according to the literature review.

In case study programmes, flexibility in the scheduling of course hours, location, and format, assisted learners to attend and finish courses. The Tūwharetoa Adult Literacy Initiative is held in learners' homes or in an office. The scheduling of course hours is flexible, which means that learners can participate in sessions at times suitable to them. Transport for learners is provided by the Tūwharetoa Adult Literacy Initiative and Whakatō te Mātauranga, removing distance and cost of travel as barriers to course attendance.

"There are very few barriers for those wishing to attend the programme. Students are picked up for class each morning and returned home in the afternoon – thus overcoming any travel barriers."

Whakatō te Mātauranga.

Programmes are successful in encouraging Māori attendance when they do not make the learner feel whakamā (embarrassed) about attending a literacy and numeracy course. To mitigate this, tutors at TeamWorks spend time building their learners' confidence and self esteem. It is also helpful when courses are designed as a combination of practical 'hands on' learning, and classroom and text-book learning. At Whakatō te Mātauranga a combination of external fieldtrips and classroom learning is used as teaching tools.



Programme delivery

Responsive to Māori Culture

The literature review identifies that literacy and numeracy programmes should be responsive to Māori culture. Programmes, where possible, should aim for a whānau atmosphere and promote Māori values such as: whakamana (empowerment); whakapapa (establishing links/connections); and tuakana-teina (less experienced learners learning from more experienced learners). More resources need to be developed for adult learners based on Māori themes.

Elements of Māori culture such as tikanga and/or te reo Māori are incorporated into the case study programmes. The incorporation of te reo Māori and Māori principles in TeamWorks such as whakawhanaungatanga (operating like a whānau) and aroha (caring for each other) appears to work well for encouraging learners, and keeps them comfortable with the course content.



"The natural integration of te reo Māori helped to validate Māori participants' language and culture. It also helped to convey content, for example using Māori proverbs to succinctly illustrate a teaching point."

TeamWorks



At the Commercial Fishing and Processing Course peer teaching (exemplifying a tuakana-teina model) works well. Those who pass a particular unit standard support their classmates through the same work. Although tutors have in-depth industry knowledge they are open to learning from their students, promoting the concept of ako. They endeavour to relate the learning back to students' lives and are affirming of the knowledge that students bring to the classroom.

Providers and Tutors are Skilled and Capable

As identified in the literature review, tutors need to be skilled and capable. Tutors need to be able to respond to the diverse experiences and learning styles of learners, as well as building self-esteem and success in their learners.

The skills of tutors in relating well with learners came through as a critical element in the case study programmes. At Whakatō te Mātauranga staff members are non-judgemental. Learners are granted a fresh start when they join the programme. There is a strong emphasis on building and maintaining relationships – especially between learners, and between tutors and learners.

"Our tutors are our best resources... the learners are safe, wanted and they belong. Mutual respect is established."

Whakatō te Mātauranga.



Similarly at the Tūwharetoa Adult Literacy Initiative the tutor creates a non-threatening learning environment, using praise and positive feedback to instil feelings of success. Students' individual needs and interests are catered for. The tutor maximised the learners' own experiences and interests as a basis for their writing and reading.

Contextualised Learning and Resources

Resources should be adapted to suit learners' literacy levels, and customised so they are relevant to learners' workplaces. Tutors, where possible, should make links with industries and workplaces to ensure resources can be useful for their workplaces. Providers should ensure that learners have access to computers and other technology.

In the case study programmes, the resources used are relevant to learners' real-life needs, interests and workplace. The Commercial Fishing and Processing Course responds to industry needs by having a model fish-processing plant on-site, stimulating the real working environment on a vessel. Downer EDI Works written material, such as health and safety manuals, is used in TeamWorks so learning is immediately applicable to the job.

"Most of the resources are for hands on teaching and learning. For example, there is a processing room and a set of knives used in seafood processing, to simulate the real working environment."

Commercial Fishing and Processing Course.

Collaboration with Whānau and Between Authority Figures

The literature review recommends tutors should collaborate with whānau to support learners, and provide on-going contact with learners once they are employed. Tutors could also develop relationships with potential employers.

It appears to be helpful when tutors are willing and able to collaborate with learners and their whānau, and with other significant stakeholders. Tutors at Whakatō te Mātauranga are in weekly contact with each of their learners' whānau. This encourages a good home-school partnership. At the Tūwharetoa Adult Literacy Initiative, the tutor acts as a broker with other authority figures in their learners lives, such as Work and Income New Zealand, food bank staff, and social workers.

"The tutor of this programme is part of the wider community, with credibility in the field of adult literacy and numeracy tuition. As a result, she is able to broker relationships with other social services."

Tūwharetoa Adult Literacy Initiative.



TŪWHARETOA MĀORI TRUST BOARD





■ SUMMARY

Outcomes data reveals there is more work to be done towards improving Māori workforce literacy and numeracy outcomes. The numeracy levels of the total Māori population, and literacy and numeracy levels of Māori youth population are particularly concerning. Improving the literacy and numeracy skills of the Māori population is a priority for government. A range of State sector literacy and numeracy activities were identified in the review. These activities seek to contribute to improved literacy and numeracy for the Māori workforce.

As shown in the literature review and case studies, when focussing on building the Māori workforce's literacy and numeracy skills, there is a clear need to incorporate Māori needs and aspirations when designing

programmes. Programmes need to be designed to remove barriers to Māori access, retention, and achievement. Potential barriers include transport difficulties, childcare issues, high course fees, and whakamā. Individual tutors can make a critical difference to learners' outcomes. Not only do tutors need to be highly skilled in the techniques of adult education, they also need the ability to build trust and self-esteem. One way of achieving this is by weaving key concepts of te ao Māori into programme content and delivery methods.

- 1 Ministry of Māori Development Act, 1991.
- 2 Proficiency at level 3 or above in these skill areas has been described as the level needed for individuals to fully participate in a knowledge-based economy and society (CAB Min (07) 40/2 refers).
- 3 This information was gathered at the beginning of 2009, and was current at that date.
- 4 The 2005 Hui Taumata, a national hui held to discuss future Māori economic development, affirmed the high priority of improving the literacy and numeracy skills of Māori adults. The hui saw this as a means of improving employability and enabling progression to more highly skilled work.

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March 2011