# IS THE HEALTH OF TE REO MĀORI IMPROVING?

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## Abstract

This paper compares the statistics about the health of te reo Māori from the 2001 and 2006 national surveys and the language knowledge question in the 2001 and 2006 censuses. Three areas are considered: children's use of te reo, gender differences in te reo speakers, and speaking proficiency in te reo, both nationally and regionally. The paper argues that the data from the national surveys is not reliable enough to provide a good picture, and the figures from the censuses show few positive signs that knowledge of te reo is strengthening rather than declining. It is also suggested that the current national survey methodology is not serving its intended purpose, and it is argued that a different language strategy might needed if te reo is to be preserved.

## 1. Introduction

In 2006, the most recent five-yearly national survey of the health of the Māori language was undertaken, and 2006 was also census year. The census contains a question about language knowledge, and between them, these two types of survey provide an insight into the changes that have taken place in relation to the Māori language in the five years since the previous national survey and census in 2001.

When the census figures were released, Te Puni Kōkiri (henceforth TPK),

who have as part of their brief the monitoring of Māori language revitalisation, concentrated in their press statements on the fact that the number of people reporting that they could have a conversation in Māori about a lot of everyday things has shown a small increase (1,128 people) in the last five years (Statistics NZ, 2007). The 2006 national survey results were released in Māori Language Week 2007 (23-29 July), and much was made of the increases in the percentage of the population with a high level of proficiency in te reo (see, for example, TPK, 2007, 1). It was, of course, in the interests of TPK to demonstrate that the tax-payer's money that has been put into Māori language revitalisation is producing positive results.

My examination of the statistics does not support that optimistic view of the state of te reo Māori. The figures from the national surveys and the censuses do not present the same picture, and that must cast doubt on the reliability of the data we have. I believe from the figures available that the language is still struggling, and there are disturbing signs that it continues losing ground, rather than gaining it.

## 2. The National Surveys

A programme of five-yearly national surveys of the health of te reo Māori was initiated by Te Puni Kōkiri in 1995, in collaboration with Te Taura Whiri i te Reo Māori (the Māori Language Commission). After it was carried out, the 1995 survey was discovered to be unreliable (Tipene Chrisp, personal communication), and the results are accordingly not considered here. The report on the 2001 survey (TPK, 2002a, b) and the report on the 2006 survey (TPK, 2007) are available in print and can also be downloaded in electronic form from the TPK website. The data for both the 2001 and the 2006 national surveys was collected by interviewers administering a questionnaire. The questionnaire involves self-assessment of language proficiency by the respondents. Interviews are conducted in English or te reo Māori at the respondents' request.

### *2.1 The 2001 National Survey*

The 2001 National Survey of the Health of the Māori language was undertaken by the Department of Statistics. A few details of the background to the survey are discussed because they impact on the interpretation of the findings.

*Sampling*

The 2001 survey is based on a sample of almost 5000 adults (defined as those aged fifteen and over), who were selected from those who put Māori as their ethnicity (or one of their ethnicities) in the 2001 Census. The details about the sampling can be found in the report (TPK, 2002b, 13). Because the Māori population is not spread evenly round the country, TPK had determined eight regions of significance to Māori people (TPK, 2002b, 6), and the areas sampled were spread across those regions. The population was also selected in two age bands, 15-55 and 55+, to ensure sufficient representation of those older respondents (TPK, 2002b, 13). Within these groups, the sampling was random.

*The Survey Instrument*

Because of the faults found with the 1995 survey, before the 2001 Survey took place, a new survey instrument was developed and pilot-tested for validity and reliability (see further 2.5 below). The questions ultimately adopted for the actual survey used a five-point scale for the assessment of proficiency in the four crucial areas of language use (speaking, listening, reading and writing).

One further point in relation to the questionnaires is worth noting. Respondents were given the option of completing the survey in English or in te reo Māori (TPK, 2002b, 10). However, it took two hours to complete the survey in te reo, but only about forty minutes in English (TPK, 2002b, 14). I am told (Piripi Whaanga, personal communication) that on at least some occasions when a respondent elected to complete the survey in te reo, they were told that a Māori-speaking interviewer would contact them to make an appointment, but this did not happen. This would have the effect of excluding from the respondents a group of people committed to te reo Māori, and fluent in it, and would thus bias the results against te reo. I can find no information on the number of occasions when this occurred.

*Descriptors for Levels of Proficiency*

A scale containing five levels was adopted for the assessment of language proficiency. The main points in the descriptors of these levels are as follows (TPK, 2002b, 49):

- Very well: can talk naturally and confidently about any domestic and community subject. Makes few grammatical mistakes.
- Well: can talk about domestic and community subjects. Occasionally

struggles to convey an idea; may switch to English. Occasional grammatical mistakes, but can be understood.

- Fairly well: can maintain short question and answer sequences. Sometimes unable to convey an idea in Māori. Grammatical errors are noticeable, but can still be understood.
- Not very well: can give simple instructions, can maintain basic question and answer sequences.
- Few words: some vocabulary and phrases; maybe basic questions and answers.

These descriptors set the level of ability fairly low. Only the 'very well' group above has native-like speaking proficiency, and even that group probably contains both native speakers and highly proficient second language speakers. The descriptor of 'well' makes it quite clear that this group contains second language speakers whose lack of proficiency is at times evident. It is important to bear this in mind when considering the results, which often group 'well' and 'very well' together, thus conflating a wide range of levels of proficiency.

*Sampling Errors*

The results of the survey were generalised from the sample to the entire population. That process, of course, introduces some inaccuracy into the figures reported, and the size of the error is related to the size of the sample in a particular cell. Appendix 3 to the report (which is published in a separate booklet from the main report) discusses the sampling error figures, and provides tables of guidelines for which cells are unreliable, and which need to be treated with caution. The report provides the following example to indicate the general nature of the margins of error involved: The estimate of those who speak Māori 'fairly well' is 34,700. At the 95% confidence level, there is a margin of error of ± 3,400 (i.e. of 10%), so that 'there is a 95% likelihood that the true figure is 31,300 – 38,100' (TPK, 2002b, 19). However, there were other estimates, such as those for a specific age or gender, that had margins of error of 40% or more, indicating a large amount of uncertainty about the population estimate (TPK, 2001, 2 (Table 1a)). We need to bear in mind the margin of error when we look at the figures, in particular those given for subsets of the population.

### *2.2 The 2006 National Survey*

The 2006 National Survey was undertaken by Research NZ. In relation to the questions that most concern us, the questionnaire was identical to that used in 2001, and the same proficiency descriptors were used. The Māori version of the questionnaire still took much longer than the English version to administer, and potential respondents were warned about this when choosing which language to respond in. I also know that in one case (Karena Kelly, personal communication) a person who chose to answer in te reo was never contacted again, and so did not participate, although willing and interested. Thus again, it is possible that the sampling was to some indeterminable degree biased against showing positive results about the health of the language.

#### *Sampling*

The sampling for the 2006 survey was different from 2001, as Research NZ did not have access to the 2006 census data. Their sample was 3858 respondents, so noticeably smaller than the 2001 survey (TPK, 2007, 13). That inevitably increases the margins of error of the findings. As in 2001, they concentrated on districts with a significant Māori population, and had the guidance of a statistician in choosing their sample (TPK, 2007, 14). The details of the sampling method can be found in the report.

Here I concentrate on the most significant departure from the 2001 sampling methodology. Research NZ chose a sample of city districts and non-city districts. Within these districts, they selected respondents from the Māori and General electoral rolls, plotted them geographically, and then made a random selection of clusters of thirty households. Where they failed to get enough volunteers from their clusters, they approached neighbouring households.

This sampling method could easily have led to different results from the more random sampling of 2001. There is evidence from the Ministry of Education (Earle, 2007, 26) that the extent to which people participate in tertiary courses in te reo is dependent on the amount of Māori spoken in their community. Earle writes: '…the more Māori speakers of te reo there are in a region, the more students are likely to be enrolled in a te reo Māori programme.' Thus if the sampling randomly selected a community in which Māori was strong, there was a likelihood that all in the neighbourhood would be strong, whereas if it selected one that made little use of te reo, that would probably be true of the neighbourhood as a whole. This would give rather different results from a random sampling of households across an entire district. We cannot

predict whether the differences would favour or disadvantage the picture of the health of te reo.

However, in the process of generalising the results to the entire population, the results were weighted to counteract the effect of this sampling method (TPK, 2007, 25). This weighting was calculated by a trained statistician, and involved the use of the 2001 and 2006 census results. What is not clear is whether that weighting could have taken account of this probable community clustering in knowledge of te reo without circularity.

*Margins of error*

There is virtually no information on the likely size of the sampling errors in the report on the 2006 survey. (The matter is mentioned in 3.11, TPK 2007, 25.) In the tables, various figures are highlighted in different ways, but I can find no explanation in the report of the significance of these different highlights. Cells with very low numbers are, however, marked with a ** indicating that there is a need for caution, as the results are 'indicative only'.

### *2.3 Final comments on the survey methodology*

It has been necessary to spend time discussing the survey methodology, because it influences the results. The reports of these two surveys are also very different in what they report and how they report it. That adds to the difficulties in comparing the two surveys. The 2006 survey report (TPK, 2007) contains little commentary and analysis in comparison with the report from 2001 (TPK, 2002a), but more raw data. To add to the confusion, there is more than one report on the 2001 survey. The 2001 reports contain only figures generalised to the entire population, while the 2006 report contains tables with the figures from the survey sample.

### *2.4 The Censuses of 2001 and 2006*

Both these censuses contained the question 'In which language(s) could you have a conversation about a lot of everyday things?' They asked exactly the same question, and surveyed the entire population, and so should give directly comparable results. Because the entire population was surveyed, the sampling errors introduced into the survey results by the process of generalising from a small sample to the entire population are not present; total accuracy is not, however, achieved, as is clear from the Post-enumeration Surveys (Statistics NZ, 2008a, 2008b).

Like the national surveys, the census involves self-reporting, which

brings with it the possibility for both over- and under-reporting. The issue of comparative reliability is discussed further below (2.5).

In addition, the census results cover the population under the age of fifteen, although for children, we need to remember that their parents (who may or may not speak Māori themselves) will have made the judgement about whether children could converse in te reo. Non-Māori-speaking parents would have had no way to judge the quality of the children's reo. If the children were using Māori words in English structures (an all-too-common situation, see, for instance, comments in Harlow, 1991, 33-38; 2005, 137-139; 2007, 217-219; Christensen, 2001, 26-28; Bauer, 2007), they would probably have been judged able to converse in te reo. (While the literature suggests that parents who are fluent in a language can report accurately on their child's performance in that language in response to well-defined questions, and especially in areas such as vocabulary knowledge, (see e.g. Camioni et al 1991; Gutiérrez-Clellen & Kreiter, 2003; Bernhardt, Kemp & Werker, 2007), I have been unable to find any studies of the accuracy of parental reporting from parents who do not speak the language. Note, however, that Gutiérrez-Clellen & Kreiter specifically excluded such parents from their study because of their limited proficiency (2003, 273), Christensen (2001, 20) expresses reservations about this in the New Zealand context, and the 2001 Survey report notes in relation to the census that 'the inaccuracies may be augmented in the under 15 portion of the population, as many of the responses in this age group would have been by proxy' (TPK, 2002a, 46).)

In comparison with the national surveys, the census question is very general, and thus offers only a very rough guide to levels of proficiency. It effectively uses a two-point scale rather than the five-point scale of the surveys. To that extent, it is less useful than the surveys in gauging the strength of revitalisation efforts. However, that disadvantage is to some extent off-set by the far larger sampling of the population.

The figures from the censuses that I present below relate to the Māori population of NZ, and not the entire population, based on those who listed Māori as one of their ethnicities in the censuses.

### *2.5 Comparative reliability of the National Surveys and the Censuses*

There is information on the pilot-testing process for the 2001 national survey in the Appendices to the 2001 Survey report (TPK, 2002b, 10ff). While the pilot-testing process was not without flaws, the report concludes that the survey methodology is both valid and reliable, and that we should therefore

be able to trust that the self-reported levels of proficiency correlate highly with the actual levels of proficiency of respondents. There are two reports on the pilot, one in the published Appendices (TPK, 2002b), and one available only online (TPK, 2001). Since the online report contains clear mis-statements (e.g. of the 20 respondents, 139 were accurate (2001, 6)), I base my comments on the published version. This concluded that in relation to speaking Māori, of the 20 respondents in the pilot, 15 assessed themselves accurately (i.e. their self-assessment coincided with the independent assessment of a qualified interviewer), 4 over-rated themselves by one point (i.e. they put themselves one category higher than the independent assessment), and there was 1 under-rating.

The published version of the main report on the 2001 survey also contains a comparison of the 2001 census and the 2001 survey (TPK, 2002a, 47). 35% of people who said they could speak Māori 'fairly well' in the survey said they could *not* 'converse in Māori about a lot of everyday things' in the census; more puzzlingly, 13.3% of those who said they could speak Māori 'well or very well' in the survey also said they could not converse in Māori in the census, while 12% of those who said they knew no more than a few words or phrases in the survey deemed themselves able to converse in the census.

In addition, the 2001 Survey contained the census question, and there is a comparison of the answers to that question from the survey and the answers from the 2001 census. 93% of those who could not converse in Māori answered consistently, but 47% of those who said they could converse in the census said that they could not converse when asked the same question during the national survey. The report suggests (TPK, 2002a, 47) that this 'may reflect the difference between a self-administered questionnaire and an interviewer administered questionnaire'. What we cannot know is which is the more accurate assessment, since the presence of an interviewer could lead to either over-reporting (e.g. to please the interviewer, or increase status in the interviewer's eyes), or to under-reporting (e.g. from fear of being judged/found to be boasting).

The indeterminate level of inaccuracy of self-reporting is an additional factor that must be borne in mind as we consider the results.

## 3 Findings

Needless to say, I can only talk about some representative findings. I have chosen three areas to concentrate on.

The first is children's use of te reo. That should give us some picture of the degree to which intergenerational transmission is being achieved, and thus the extent to which a new generation of native speakers of te reo is emerging.

The second area is the relationship between proficiency and gender. The 2001 survey identified a gender gap in the younger age groups with possible implications for the parenting side of intergenerational transmission (TPK, 2002a, 21), but also implications for the future maintenance of the marae as the dominant domain for Māori (Earle, 2007, 63).

Finally, I will consider the results for speaking proficiency, which is essentially what the census question is targeting, and thus we can attempt to compare the census results and the survey results. The regional distribution of those with speaking proficiency will also be discussed.

### *3.1 Children's use of te reo*

The picture in the 2001 survey was fairly bleak, showing that there was only limited use of Māori in homes. On the positive side, good adult speakers were most likely to speak Māori to children (especially those under five), which probably shows the impact of kōhanga reo (Māori language pre-schools). However, children were not particularly likely to respond in Māori: only 9% of respondents in 2001 said that under twelves spoke Māori half or more of the time. This suggests that for the most part, children are developing passive skills, and if they have active skills, they are not taking them out of the educational domain into the home (TPK, 2002a, 27).

In 2006, the figures reported show some improvement: the proportion of pre-schoolers and primary schoolers using Māori at home more than half the time is up from 9% to 13%. However, that is still a very small proportion of the Māori population, and when we take into account the different sampling methods of the two surveys, and the size of the likely margin of error, it is possible that this increase falls within that margin. That means, of course, that there may not be a real increase, or the increase may indeed be bigger.

A comparison of the 2001 and 2006 census figures for children in the 5-9 age-group, while it is asking a different question, nevertheless suggests that we should take this reported increase with a grain (or maybe even a teaspoon) of salt. The census groups 0-4 year olds together, and thus includes children who are not yet talking. Table 1a shows the figures for the four age-bands under 20. Each one shows a decline between 2001 and 2006 in the percentage of children able to converse in te reo Māori.

Because there has been a substantial increase in the total population in each

**Table 1a: 2001 and 2006 Census figures for children able to converse in te reo by age**

| AGE BAND | 2001 TOTAL MĀORI IN AGE BAND | 2001 NO. SPEAKING MĀORI | 2001 % SPEAKING MĀORI | 2006 TOTAL MĀORI IN AGE BAND | 2006 NO. SPEAKING MĀORI | 2006 % SPEAKING MĀORI |
|---|---|---|---|---|---|---|
| 0–4 | 65,814 | 9,765 | 15% | 66,426 | 8,910 | 13% |
| 5–9 | 65,088 | 13,782 | 21% | 66,771 | 12,243 | 18% |
| 10–14 | 61,989 | 15,126 | 24% | 66,726 | 13,998 | 21% |
| 15–19 | 48,987 | 12,249 | 25% | 58,533 | 13,221 | 23% |

(Sources of data: Statistics NZ 2002, Table 13a; 2007, Table 9)

of these age bands between the censuses, as high as 4737 in the 10-14 age band, and 9346 in the 15-19 group, it is possible that the drop in percentage is, at least in part, an effect of the increase in the population (presumably due to factors such as more people identifying as Māori). However, even if we look at the raw numbers rather than the percentages, a picture of decline emerges. There is a drop in absolute numbers speaking Māori in all of these age groups except 15-19, where there is an increase of 972.

Even if we look at the same cohorts, comparing what should be substantially the same groups of individuals by moving the 2001 age bands up a band, the picture is not one of increase. Table 1b aligns these cohorts.

**Table 1b: 2001 and 2006 Census numbers of children able to converse in te reo by age cohort**

| AGE BAND 2001 | AGE BAND 2006 | 2001 TOTAL MĀORI IN AGE BAND | 2001 MĀORI SPEAKERS | 2006 TOTAL MĀORI IN AGE BAND | 2006 MĀORI SPEAKERS | CHANGE |
|---|---|---|---|---|---|---|
| | 0–4 | | | 66,426 | 8,910 | |
| 0–4 | 5–9 | 65,814 | 9,765 | 66,771 | 12,243 | +2478 |
| 5–9 | 10–14 | 65,088 | 13,782 | 66,726 | 13,998 | +216 |
| 10–14 | 15–19 | 61,989 | 15,126 | 58,533 | 13,221 | –1905 |
| 15–19 | 20–24 | 48,987 | 12,249 | 42,774 | 9,768 | –2481 |

(Sources of data: Statistics NZ 2002, Table 13a; 2007, Table 9)

Because the 0-4 age group contains some children too young to speak, the increase between the 0-4 group from 2001 and the 5-9 group from 2006 does not tell us much. There is only a small increase (216) between the 5-9 group from 2001 and the 10-14 group from 2006, but there is also a rise in the population in the group (+1638). The comparison of the 10-14 group in 2001 and the 15-19 group in 2006 shows a substantial loss of speakers (1905), and the picture is even worse for those who were 15-19 in 2001, where 2481 fewer speak Māori by 2006. Although the declines in these two groups are probably in part due to declines in the total populations in these groups, the fact that the percentages have also declined is not good news.

These figures certainly do not support the picture presented by the survey comparison. Even if the small number who do speak te reo at home are speaking it more, the overall picture is one of decline rather than increase in the younger age groups.

### *3.2 The Gender Gap*

In the 2001 Survey, a gender gap was noted in all language skills in the 15-24 age group. For example, in the top two categories for proficiency in speaking Māori (i.e. very well, well), in 2001 there were 8% of Māori women, but only 4% of Māori men. In the middle category, the discrepancy was even greater: 48% of women, but only 38% of men could speak Māori 'fairly well' (TPK, 2002a, 21). (No raw data was provided in the report to support these percentages.) While, as the report notes, it is the women who are likely to be the primary transmitters of language, it is clearly much harder for a woman to maintain a Māori-speaking environment at home for children if she has a partner who does not speak te reo (cf. Benton, 1991, 29; Christensen, 2001, 33), particularly since for most of these young women, Māori is a second language. A further problem, not highlighted by this report, but noted by David Earle in his report on tertiary education in te reo, is that if men are not acquiring te reo, the time will come when they are the kaumātua, and would traditionally be the speakers on the marae, but they will not be able to speak in te reo (Earle, 2007, 63). Since the marae is the primary domain for maintenance of te reo (TPK, 2002a, 28; TPK, 2007, 3), this gender gap may have significant implications for that domain.

The gender gap came as no surprise to me: te reo classes at Victoria University, for instance, regularly have strong gender imbalances in favour of women students. I thus expected the 2006 survey to confirm this gap. The report on the 2006 survey did not provide the gender/proficiency figures in a

way which made it possible to discover whether the gender gap was still in evidence, so I obtained the figures directly from Research NZ (with TPK's consent).

The results are rather different from 2001 for those in the top two categories. Following are the figures for proficiency in speaking in 2006. I looked at both the 15-24 age group and the 25-34 age group, because half of the people who were 15-24 in 2001 are now in the 25-34 group. If there was a gender gap in the 15-24 bracket in 2001, we might expect to see some signs of it in the 25-34 bracket in 2006.

Table 2 shows the 2006 survey raw numbers and percentages for those in the top three categories for proficiency in speaking. Note that the top two categories are combined, and recall that the total survey population was 3858.

**Table 2: Speaking proficiency by gender in youngest age bands, 2006 National Survey**

| | MEN | | | | | WOMEN | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | TOTAL IN BAND | (VERY) WELL | | FAIRLY WELL | | TOTAL IN BAND | (VERY) WELL | | FAIRLY WELL | |
| Age band | | No. | % | No. | % | | No. | % | No. | % |
| 15–24 | 269 | 34 | 12.0 | 27 | 9.9 | 258 | 37 | 14.5 | 51 | 19.9 |
| 25–34 | 316 | 34 | 11.0 | 37 | 11.8 | 323 | 33 | 10.0 | 63 | 19.6 |

(Source: Gender and age by speaking proficiency; table supplied on request by ResearchNZ)

Even these raw numbers are not entirely reliable. Firstly, the actual numbers in all of these cells are very small. Secondly, as Nokuthaba Sibanda pointed out to me, in several cases in the table provided, the percentages reported do not add up to 100%, and are so far off 100% that rounding cannot account for it (e.g. the cell for ages 25-34 speaking 'very well' is reported to have 29 people, consisting of 67% males and 50% females (= 117%), while the cell for those aged 55+ speaking 'not very well' is supposed to have 143 people, consisting of 11% male and 66% female (= 77%)). For the two highest proficiency levels, there is a small gap in the percentages in favour of women in the 15-24 group, but there is a higher percentage of men than women in these categories of proficiency in the 25-34 age-group, so the gender gap there appears to be reversed. For the middle level of proficiency (fairly well), the figures are compatible with those reported in 2001.

The numbers might suggest that more women than men in these groups are reaching the 'fairly well' standard, though numbers in the top two categories are not so different. However, as I have shown, there are good reasons not to trust the numbers. When the standard of the data presentation in these surveys falls so far short of providing the information necessary to interpret it, and contains errors of this magnitude, the surveys have virtually no value, and we might be better off without them. At least then we would not be misled into believing that the surveys support conclusions which in reality they do not.

It is perhaps necessary to point out that the difference between the results of the two surveys is unlikely to reflect a real change in the gender gap. David Earle's Ministry of Education report shows that the gender gap is present in the tertiary educational statistics. This is a survey of the uptake of education in te reo across the full spectrum of tertiary providers. He summarises (2007, 12): 'The low male participation in te reo courses is of concern, particularly given that younger Māori men have lower proficiency than Māori women in the same age group'. In the body of the report he notes that (2007, 20) 'In 2005, 68 percent of students in te reo courses were female'. Thus the Earle report identifies a gender gap, both in terms of numbers and in terms of proficiency in the tertiary sector. This is also set against a backdrop of declining participation in tertiary education in te reo towards the end of the period in question (Earle, 2007, 20).

**Table 3: Māori schoolchildren in immersion education in te reo, July 2006, July 2007**

| % OF CURRICULUM IN TE REO | NO. OF STUDENTS | | % OF MĀORI SCHOOL POPULATION | | % CHANGE SINCE PREVIOUS YEAR | |
|---|---|---|---|---|---|---|
| | 2006 | 2007 | 2006 | 2007 | 2005–06 | 2006-07 |
| 81–100% | 12,125 | 11,876 | 7.5% | 7.2% | –4.0% | –2.1% |
| 51–80% | 5,018 | 5,166 | 3.1% | 3.1% | 0.5% | 2.9% |
| 31–50% | 4,820 | 4,600 | 3.0% | 2.8% | –7.1% | –4.6% |
| Up to 30 % | 4,377 | 4,342 | 2.7% | 2.6% | 16.3% | –0.8% |
| Totals | 26,340 | 25,984 | 16.2% | 15.8% | –0.9% | –1.4% |

(Source: Ministry of Education 2006, 2007)

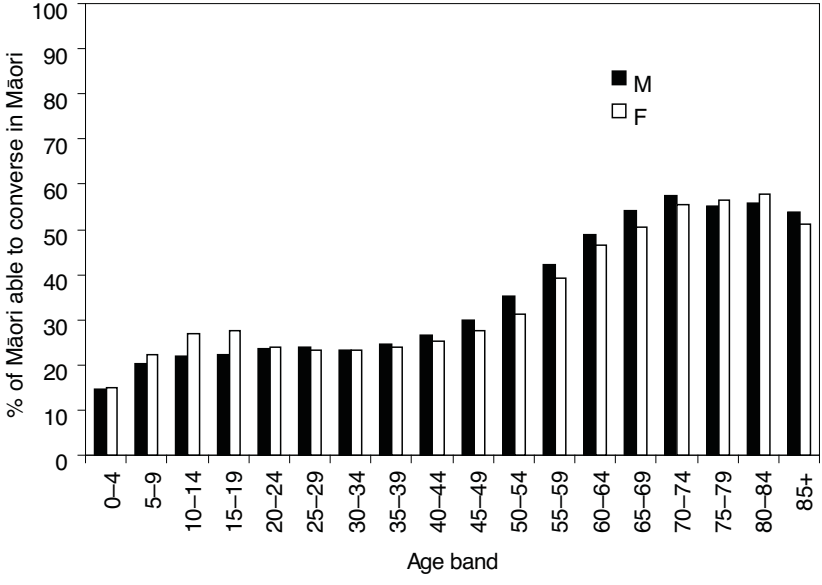
There has also been a drop in participation in the highest level of immersion schooling in te reo; the Ministry of Education provides the statistics in Table 3

at July 2006 and July 2007 (Ministry of Education, 2006, 2007). Notice that by 2007 only 7.2% of the Māori school population is enrolled in the highest level of Māori immersion, the only level likely to deliver highly proficient speakers, and that there was a 4% drop in numbers between 2005 and 2006, and a further 2.1% drop by 2007. Thus even amongst those still in school in the 15-24 age group, there is unlikely to have been an increase in learning of te reo, and the overall picture is one of a decrease in the exposure to te reo through immersion schooling.

The censuses confirm the gender gap in the younger age groups, but not elsewhere. From the census data, I worked out the proportion of each gender group who said they could have a conversation in te reo (which should correspond approximately to those in the top three categories in the national surveys). Below are the graphs of the 2001 and 2006 census figures. The actual numbers involved are provided in Tables 4 and 5 in Appendix 1.

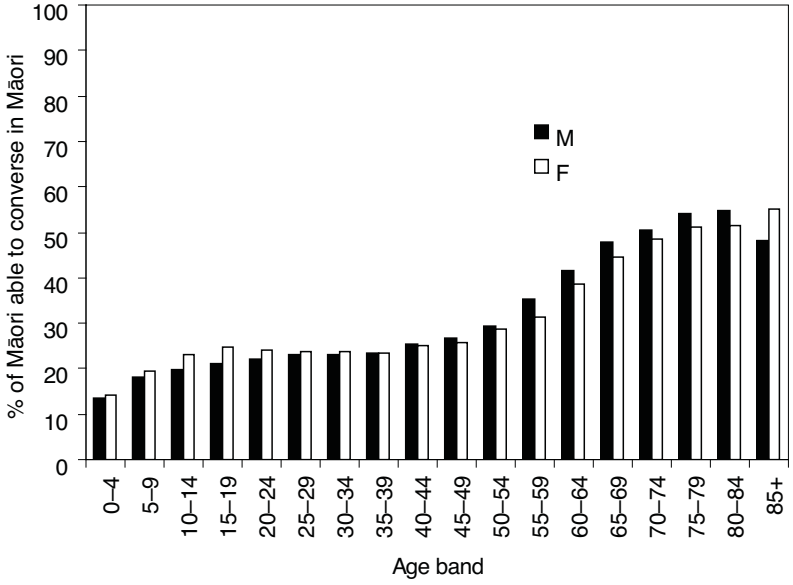
The graphs suggest that in both 2001 and 2006, a greater percentage of young females than males were acquiring te reo. However, beyond the age

**Figure 1: Ability to converse in Māori by gender, Census 2001**




(Source of data: Statistics NZ 2002, Table 13a)

**Figure 2: Ability to converse in Māori by gender, Census 2006**




(Source of data: Statistics NZ 2007, Table 9)

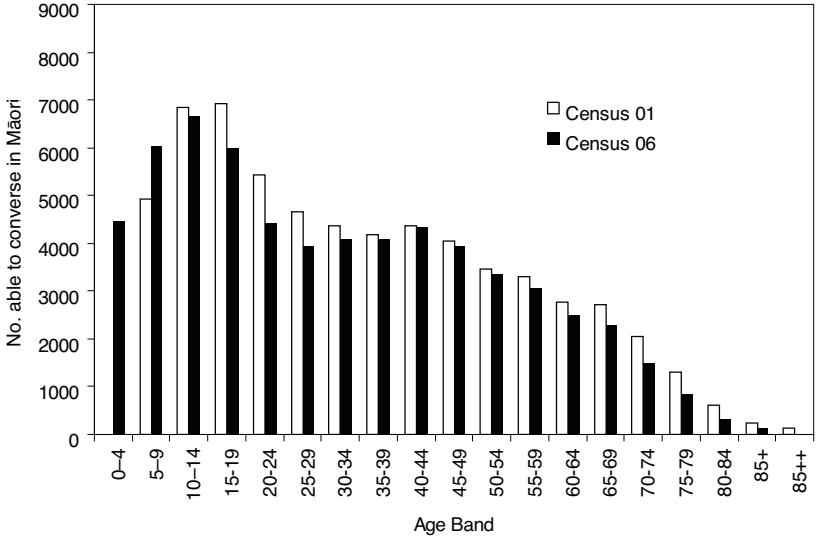
bands likely to have had kōhanga education, (i.e. those 20 and under in 2001, 24 and under in 2006) the gender gap in terms of percentages either vanishes, or favours men. As can be seen in Tables 4 and 5, in most age bands, the number of females is greater than the number of males; there are more males only in the three youngest age bands. However, only in one of these three bands (0-4) are there more male than female speakers. In the higher age groups, the percentage of male speakers exceeds the percentage of female speakers in most bands in both censuses, but there are only three bands in the 2001 census where the number of male speakers is greater than the number of female speakers (50-54, 55-59, 65-69), and only one in 2006 (55-59) (asterisked in Tables 4 and 5). As Nokuthaba Sibanda pointed out to me, the last lines of Tables 4 and 5 suggest that there is a slight increase in the overall gender gap from 2001 to 2006: while the total number of Māori males and the total number of Māori females increased between 2001 and 2006, the number of male speakers declined, while the number of female speakers increased.

The gender gap amongst the younger age groups may reflect the general

tendency for girls to outstrip boys at school, but the fact that it is not as clear in the older age groups may also suggest that as Māori men mature, and wish to take their place as leaders in their community, they do acquire te reo. If so, it would be valuable to know how, but the current surveys are not designed to reveal this. The differing linguistic roles available to men and women on the marae seems likely to be one of the influences on the gender patterns of the older age bands. However, it may also be counteracted by the more widespread involvement of women in the educational sector. These are important questions in relation to understanding the dynamics of revitalisation that the current research does not answer.

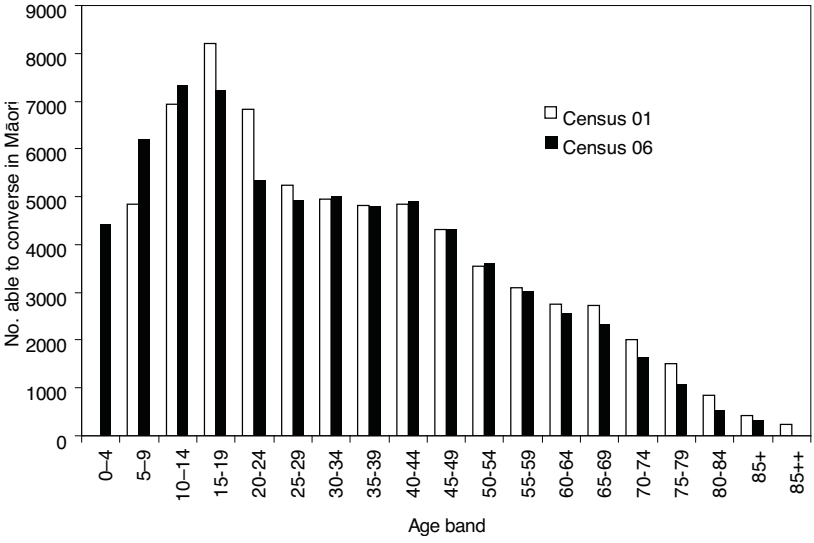
Below, I have produced graphs of the numbers of male and female speakers matching age cohorts between the two censuses (i.e. putting those who were 0-4 in 2001 against those who were 5-9 in 2006, since they should be largely the same individuals; there is no 2001 group matching the 0-4 group in 2006, and those who were 85+ in 2001 have been classed as 85++ in 2006). The rise in both graphs in the 5-9 bracket is at least in part accounted for by those who were not talking at all in 2001, and so nothing can be read into that rise. It will

**Figure 3: Numbers of male speakers comparing cohorts, Census 2001 and 2006**




(Source of data: Statistics NZ 2002, Table 13a; *Statistics NZ 2007*, Table 9)

**Figure 4: Numbers of female speakers comparing cohorts, Census 2001 and 2006**




(Source of data: Statistics NZ 2002, Table 13a; Statistics NZ 2007, Table 9)

be seen that for men, there is a drop in each cohort, while for the women, there is a rise in the 10-14 bracket, and then very small rises in all but one of the age brackets between 30 and 54. Again, this suggests that there really is a gender gap in favour of women, although the significant drop in the 15-29 groups, the most likely parenting groups, is not a good sign. This suggests that the burden of language revitalisation will increasingly fall on women, although it is the men who have the most opportunities to develop their reo in the dominant domain, the ceremonial aspects of the marae.

When we put these figures from the censuses alongside the figures for participation in tertiary education from the Earle report, it would appear that the gender gap in the young groups, although small, is probably real. The fact that it was not clearly shown in the 2006 national survey for the highest levels of proficiency reinforces my contention that we are unable to trust the statistics in at least that report in relation to the categories involving small numbers, or small increases. This impacts on our willingness to rely on the figures presented in the next section.

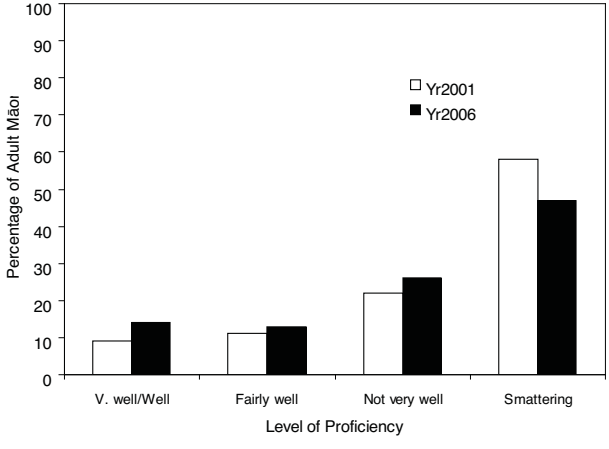
### *3.3 Speaking Proficiency*

The comparison of the 2001 and 2006 national surveys shows an increase in the levels of proficiency in the Māori community in all of the four language areas (speaking, listening, reading and writing). I will discuss just the figures for speaking, but I believe that what I have to say applies in outline to the other areas as well. The *Factsheet* for the 2006 survey (TPK, 2007, 1) glows:

> 'The 2006 survey shows that there have been significant gains in proficiency levels across all language skills … the greatest increases have been recorded in the higher proficiency levels … the number of people with a high proficiency level has more than doubled in the 15-24 and 25-34 year age groups'.

The graph below shows the picture for the changes in the levels of proficiency in speaking based on the 2001 and 2006 national surveys as presented by TPK. I have used the label 'smattering' for 'no more than a few words or phrases' for the sake of economy. Table 6, with actual numbers, is in Appendix 1. Unfortunately, the only numbers available from the 2001 survey have been generalised to the entire population (Appendix 8, TPK 2002b, 62), while the only numbers available from the 2006 survey are the raw numbers from the

**Figure 5: Speaking proficiency in the 2001 and 2006 National Surveys**




(Source of data: TPK, 2007)

sample of 3858 people (Table 7, TPK, 2007, 28), a situation which repeatedly makes a serious survey comparison impossible. To add to the inaccuracy, the raw numbers for 2006 have been worked out from percentages, with consequent rounding effects, although my figures add up to the sample of 3858. Research NZ provide alternative numbers on the following page (TPK, 2007, 29), which differ from mine by as much as 11 in one category, but which still add up to 3858!

At first glance, it appears that there has been a rise in the percentages of Māori adults in all the categories of proficiency except the bottom one (where we should be pleased to see a decline).

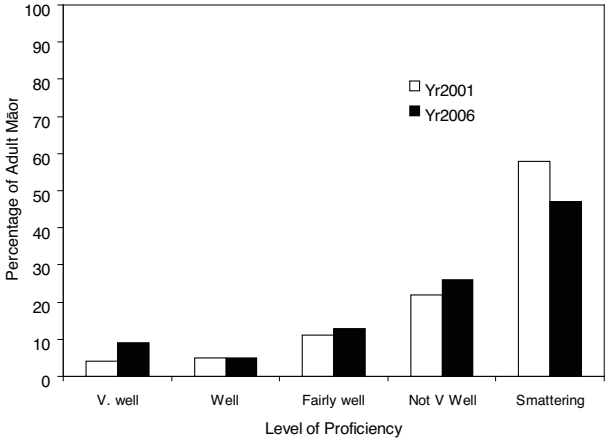
However, there are four important points to note. Firstly, although there has been an increase, the actual percentages in the top categories are relatively small: in the top category (very well + well), the 2001 figure is 9%, rising to 14% in 2006. That means that these percentages are based on quite low numbers of people. Secondly, the percentage increase, biggest in the top category, is 5%. That is well within the margin of error for cells of this size. Thirdly, the majority of those in the top category for speaking proficiency are in the 55+ age group. Lastly, but not least, the picture is skewed by the fact that the figures for the top two categories have been combined. This was done in both surveys because the actual numbers in these categories taken separately was so low that the figures were clearly unreliable. By adding these categories together, the figures become more reliable, because the cells are larger.

I think it worthwhile producing for comparison the graph where these two top categories are kept separate. I do not have the separate figures for 2001, so I have simply split the 9%, arbitrarily putting 4% in the top one, and 5% in the second one. I have the actual figures for 2006. The resulting picture is Figure 6.

There is still a visible increase in those with the highest level of proficiency, and that is a positive sign, but we have to remember that, given the small numbers involved, it falls within the margin of error. However, in the older age groups, where the most fluent speakers are found, we are losing speakers, and so this overall increase in proficiency (if it is real) must be sufficient to offset those losses, and must also be amongst the younger or middle population. Those are good signs.

To emphasise my point about the distortions to the picture produced by combining the top two categories, below I present the picture in a third form. If we combine the top two categories, justifying it by saying these are the people who know enough Māori to play a positive role in revitalization, then

**Figure 6: Speaking proficiency in the 2001 and 2006 National Surveys, top categories separate**



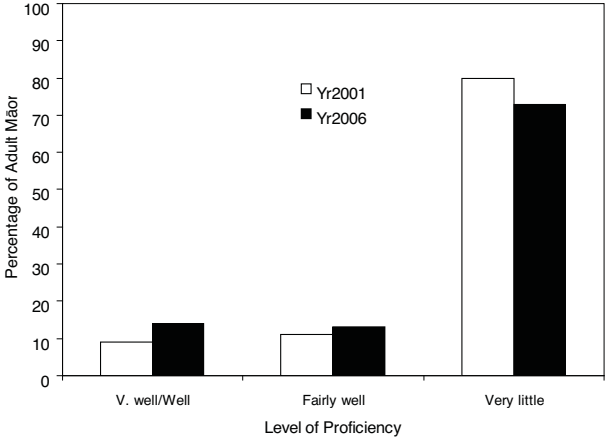

(Source: TPK, 2002a, 20; TPK, 2007, 28)

we can also justify combining the lowest two categories: those who know so little Māori that they really cannot help to sustain the language. This leaves the middle category as a distinct group, whose contribution is uncertain. Figure 7 is the result of that exercise. It presents a picture in which the overwhelming majority of the Māori population do not know enough Māori to support language revitalization.

Because the age demographics are important to revitalization, I have also produced a picture showing the correlation between age and level of proficiency. The TPK *Factsheet* has a graph which shows this for all levels of proficiency, but I have selected just the two top levels, because they are the most significant. I present the figures for these two levels combined, since I do not have the uncombined figures for 2001.

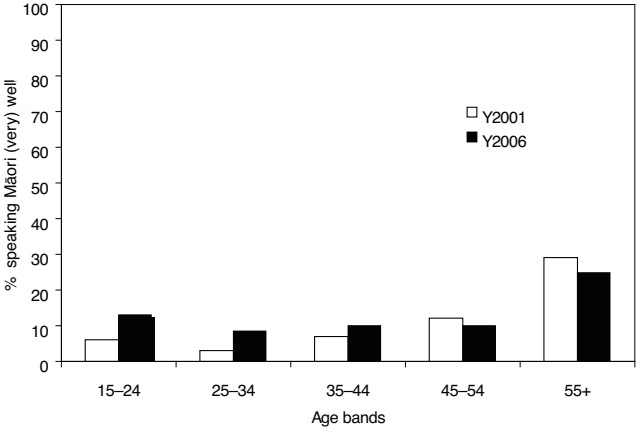
The graph does indeed suggest that there is an increase in those in the younger age groups with these high levels of proficiency. It also shows the loss of proficient speakers from the oldest age groups. However, by conflating the figures for the top two levels of proficiency, the graph hides the fact that the distribution of proficient speakers between these top two categories is not the same across all age bands. For 2006, for instance, of the 'well/very well'

**Figure 7: Speaking proficiency in the 2001 and 2006 National Surveys, top two and bottom two categories combined**




(Source: TPK, 2002a, 20; TPK, 2007, 28)

**Figure 8: Highest levels of speaking proficiency by age, 2001 and 2006 National Surveys**

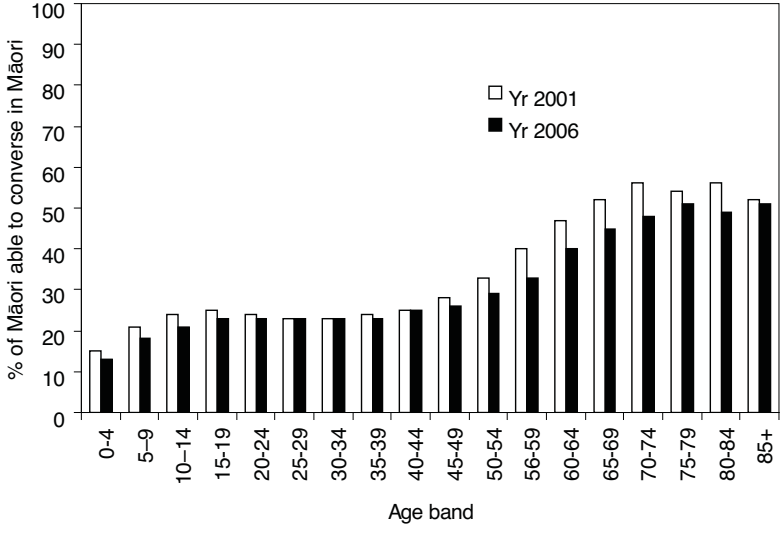



(Source of data: TPK, 2007)

group aged 55+, 80% are in the 'very well' category, and 20% in the 'well' category. In contrast, of the 'well/very well' group aged 15-24, only 53% are in the 'very well' category, and 47% are in the 'well' category.

A further factor which might lead us to have reservations about this increase in the younger age group relates to the use of self-assessment as the survey methodology. It is possible that what a 55 year old native speaker of Māori counts as being able to speak 'very well' might represent a higher level of proficiency than what a 15 year old speaker might count as being able to speak 'very well'. Certainly my impression in listening to the two groups is that there is often noticeable English influence in the syntax of the Māori of young fluent speakers which is not present in the older age group, and that what the young are speaking fluently is thus closer to an English-Māori hybrid than to traditional Māori. (Commentators vary considerably in the importance they attach to this English influence, see for instance Harlow's varying attitudes (1991, 38; 1995, 137; 2007, 219); Karetu's comments cited by Garlick, (1998, 44); Christensen's reports of Māori community reservations

**Figure 9: Percentage of Māori able to converse in Māori by age, 2001 and 2006 Censuses**



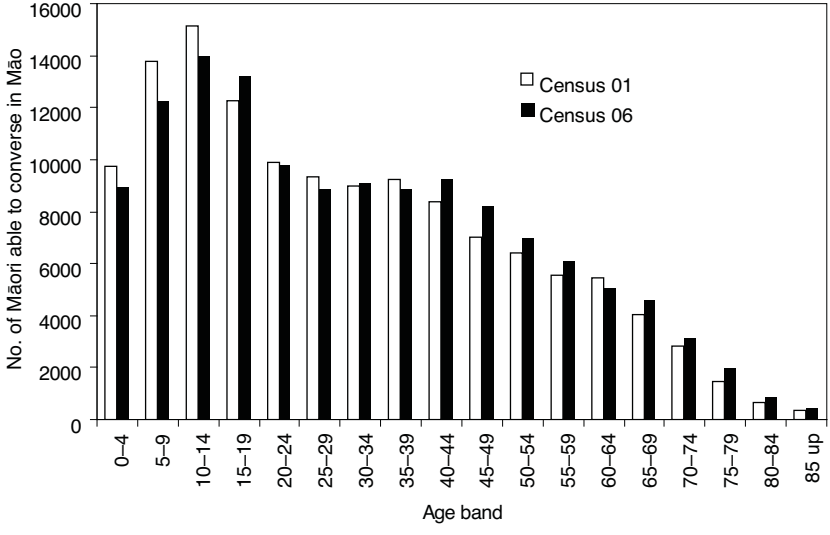

(Sources of data: Statistics NZ 2002, Table 13a; 2007, Table 9)

(2001, 26-28); and Bauer 2007.) I will return to the issues raised by under- and over-reporting below.

Even if we agree that the picture that emerges from the 2001 and 2006 national surveys is positive, I think we must acknowledge that the gains are still relatively small, small enough to fall within the margins of error. My doubts about the picture they present are confirmed by the picture that emerges from the censuses. The census, of course, asks a different question: it sets the bar lower in terms of level of proficiency than the figures we have just been looking at. Setting the bar lower should provide an even more positive picture. The results do not bear that out. Figure 9 compares the percentages of each age-band able to converse in Māori in 2001 and 2006, while Figure 10 compares the numbers of speakers in each age band. Table 7 with the actual numbers is in Appendix 1.

What this figure shows is that in no age group has there been an increase in the percentage of those who can have a conversation in te reo in the period between 2001 and 2006. Indeed, there has been an overall decrease from

**Figure 10: Numbers of Māori able to converse in Māori by age, Census 2001 and 2006**




(Sources of data: Statistics NZ 2002, Table 13a; 2007, Table 9)

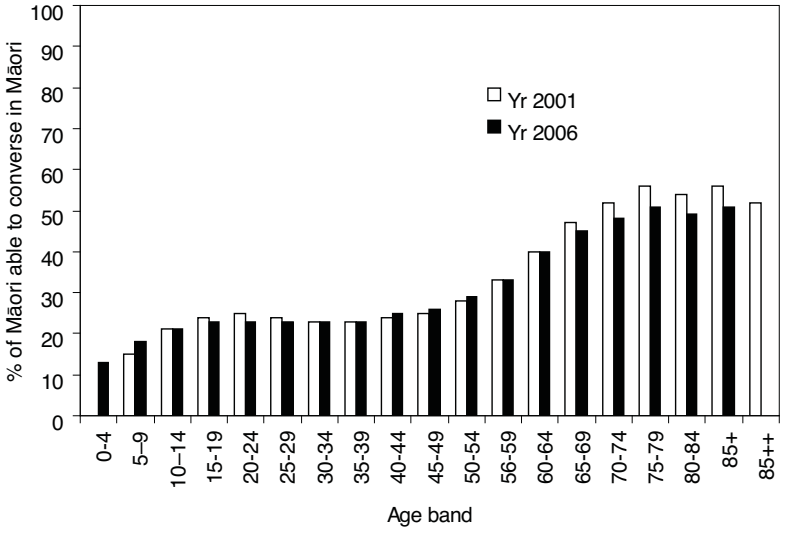
25.2% (Statistics NZ, 2002) to 23.7% (Statistics NZ, 2007). This provides a much less optimistic picture of the future for the language.

The graph of these numbers provides an interesting picture when compared with the graph of percentages.

The decline in numbers (as well as percentages) in the youngest age groups, with the exception of the 15-19 group, has already been commented on, and must be worrying. The parenting and teaching generation shows a mixture of small increases and small declines. But the age bands where the greatest increases in numbers of speakers have occurred are the groups from 40 upwards. It would be very helpful to know what is going on in these groups. If the growth arises because, at that time of their lives, people have more leisure and money to get involved with language revitalisation, this might be a hopeful sign, since it would then be expected to repeat itself over time. If, on the other hand, this is a group of people who had a passive knowledge of Māori from before the decline and are now turning that to active use, that is a pattern which will not be repeated. These are the kinds of questions which would help us to understand how revitalisation is taking place, and how it might best be supported, but the current national survey methodology does not provide a means of obtaining answers.

The picture matching the individual age cohorts between the two censuses is also interesting: those who were 0-4 in 2001 are compared with those who were 5-9 in 2006 etc., since they should be to a large extent the same individuals. (As before, there is no 2001 bar for 0-4 because there is no 2001 cohort for those born after 2001, and I have arbitrarily created a category 85++ for those who were in the 85+ bracket in 2001. The corresponding raw numbers can be found in Table 8 in Appendix 1.) The results are revealing: In Figure 11, (see also Table 8), the rise in the 5-9 age group is, at least in part, accounted for by the fact that some of this group were not talking at all in 2001, so we cannot deduce anything from that. In terms of percentages, there is no change in the 10-14 group, though there is a small rise in the numbers (216). Between 15 and 24, there is a small decline in the percentages, and a noticeable decline in numbers. There is a tiny rise in percentage for those from 40-54, but only the 40-44 group shows a rise in actual numbers (three more speakers!). Beyond 65, we have the expected age-related decline. What these figures show is that, in what most commentators regard as the crucial age-group, the parenting generation, there is no increase. There is thus little comfort in the statistics gathered by the census. These figures also contradict the figures derived from the national surveys.

**Figure 11: Percentage of Māori able to converse in Māori by age, cohort comparison, 2001 and 2006 Censuses**




(Sources of data: Statistics NZ 2002, Table 13a; 2007, Table 9)

To discover the degree of consistency in the self-reporting between the surveys and censuses discussed in this paper, Table 9 compares the percentages from the two national surveys and those from the censuses. I have assumed that the census question equates roughly to those in the top three categories in the national surveys (although the figures reported at the end of 2.5 make that questionable). I have used the age bands from the national surveys, since they are broader than those of the censuses. The figures are thus the percentage of each national survey age group who said they could 'speak Māori fairly well or better' and of each census age group who said they could 'converse in Māori about a range of everyday things'. The 2001 Survey percentages are all significantly below those of the 2001 Census. There is less disparity between the two sets of figures for 2006, but in 2006, the Survey figures in three age bands are higher than the figures for the 2006 Census. This comparison throws considerable doubt on the reliability of any of the figures, since the two years show differing relationships. It seems likely that one of the factors leading to these discrepancies is the self-reporting methodology of both the surveys

and the censuses. Clearly, the issue of over- and under-reporting of Māori proficiency is one which needs further research before we will know how to interpret such results.

**Table 9: Comparative percentage of moderate – good speakers by age group**

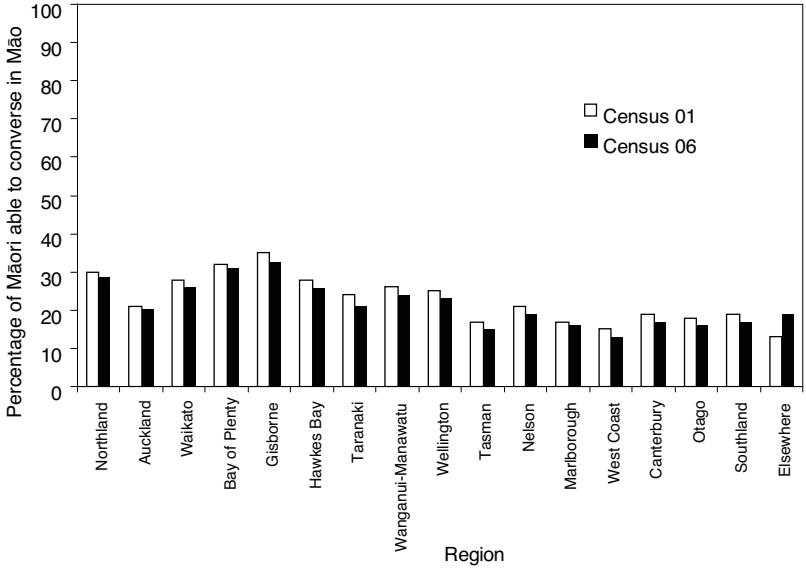
| AGE BAND | 2001 SURVEY | 2001 CENSUS | 2006 SURVEY | 2006 CENSUS |
|---|---|---|---|---|
| 15–24 | 18% | 24% | 25% | 23% |
| 25–34 | 12.5% | 23% | 26% | 23% |
| 35–44 | 14% | 25% | 21% | 24% |
| 45–54 | 22.5% | 35% | 25% | 27% |
| 55+ | 40% | 48% | 43% | 41% |

Sources: 2001 Survey: figures read from graph (TPK, 2002a, 21); 2006 Survey: percentages calculated from Table 8 (TPK, 2007, 30); 2001 Census: percentages calculated from Table 13a, (Statistics NZ, 2002); 2006 Census: percentages calculated from Table 9 (Statistics NZ, 2007)

Knowledge of te reo Māori is not evenly spread around the country. It is therefore worth looking at the regional picture, because it is possible that the overall figures are being pulled down by those regions in the country where there is little Māori spoken, and that there are regions where the picture is more positive. I have derived the regional figures from the censuses, rather than from the national surveys, for two reasons. Firstly, these figures are less affected by problems with sampling, and secondly, comparable figures are available for both censuses. There are regional figures in the 2001 national survey report (TPK, 2002a, 19), but it is not clear which levels of proficiency they relate to. The figures in the report on the 2006 survey are not provided in a way that makes it possible to find out what proportion of those in a particular region are in, for example, the top three categories of proficiency (TPK, 2007, 32). The figures from the two censuses made it possible to identify the proportion of the Māori population who spoke no language (in most cases because they were too young to talk), and in the graphs below they are excluded from the calculations, so that there is no effect of the size of the baby population, which might vary from region to region, on the figures. Table 10, containing the numbers of speakers in each region, is in Appendix 1.

The first thing to note about this graph is the not unexpected difference between the two islands. There are higher levels of knowledge of te reo in the North Island than in the South Island. Notice that in percentage terms, the

**Figure 12: Percentage of Māori able to converse in Māori by region, 2001 and 2006 Censuses**




(Sources of data: Statistics NZ 2002, Table 17; 2007, Table 10)

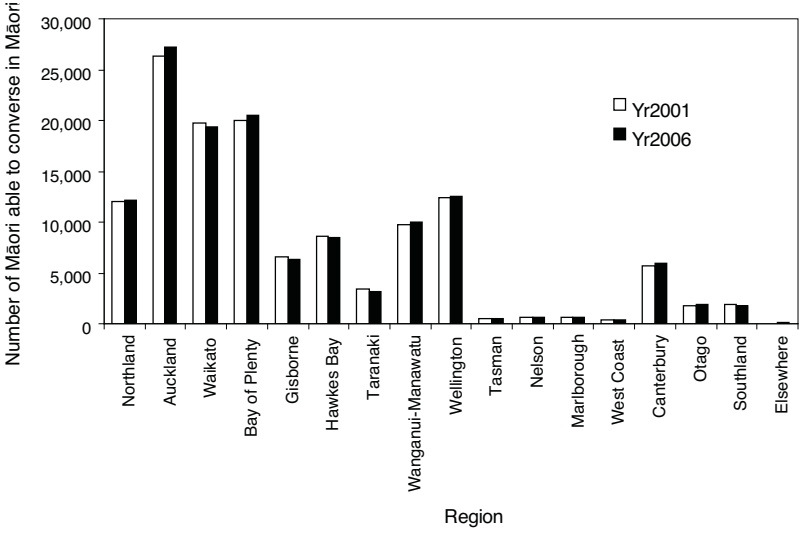
strongest region is Gisborne, where the 2001 figure is 35%. Notice also how low the percentage rate is in Auckland, which of course is home to the largest number of Māori people. However, depressingly, it is clear that in all regions, the proportion of the population able to have a conversation in te reo Māori has declined by 2006, with one exception: the 'elsewhere' region. I have no idea where these people live, but wherever they are, a greater percentage of them can speak Māori in 2006 than in 2001. (It is worth noting that the regional figures from these censuses are largely compatible with the picture of regional knowledge presented in the 2001 Survey report (TPK, 2002a, 19), where Gisborne also topped the percentage table with 34%. In the 2001 Survey, there are also iwi-based figures, and again, the East Coast iwi had the highest percentage (46%), followed by Bay of Plenty iwi (36%) (TPK, 2002a, 18-19). The Gisborne region also had the highest percentage of Māori in Māori medium education according to that report (29%), with Bay of Plenty next on 27.5% (TPK, 2002a, 25); I presume that this strong commitment to education

in te reo is responsible for the high standing of these regions overall. Note that Ruatōria, which falls in the Gisborne region, was chosen as a location for the 1995 pilot survey 'because of the strength of language use evident during the NZCER survey in the 1970s' (TPK, n.d. c1996, 23).)

The picture provided by the numbers (Figure 13) is rather different from that provided by percentages. I will discuss below why I think that the percentages may be more significant in terms of revitalisation than the numbers: it is a matter of the degree of 'dilution' in a particular community of those who can speak te reo. Of the areas with the highest percentages of speakers (Gisborne, Bay of Plenty, Northland, Hawkes Bay and Waikato) that is, those with least dilution, only the Bay of Plenty and Northland show an increase in the number of speakers (513 and 99 respectively) between 2001 and 2006. Even in those regions, the increase in speakers is not large enough to offset the population increase, so the dilution effect continues to rise.

Of course, even these regional figures do not present the most optimistic picture we might be able to find. If we had figures for Rūātoki or some of the

**Figure 13: Numbers of Māori able to converse in Māori by region, 2001 and 2006 Censuses**




(Sources of data: Statistics NZ 2002, Table 17; 2007, Table 10)

settlements between Gisborne and Te Araroa, for example, we might have at least a higher proportion able to speak Māori, but it is not clear, even in such strongholds, that we would find an increase in the proportion of speakers in the five years between 2001 and 2006, or even the maintenance of the proportion. The overwhelming picture, even at the regional level, is that the proportion of Māori speakers continues to decline.

## 4. Conclusion

While I have demonstrated that neither the national surveys nor the censuses are satisfactory methods of data collection about language revitalisation, they are, nevertheless, what we have. If we take the change between 2001 and 2006 from the two sets of data, and project that forward for 25 years, we get the situations presented in Table 11. The figures in the last line of this table represent a prediction about the percentage of speakers in 2026. The table makes a number of dubious assumptions which need to be stated. I have assumed that the percentage change in those with the relevant proficiency (different for the two pairs of surveys, of course) will remain constant for the next 25 years. There is no guarantee of that. However, I believe it represents in both cases an assumption which is favourable to te reo Māori. It minimizes the effect of losing the most proficient speakers we have over the next 25 years. It also assumes that there will be no further falls in the uptake of education opportunity, which is by no means sure. It thus represents a best-case scenario for the picture from the national surveys, and does not represent a worst-case scenario for the picture from the censuses.

**Table 11: Prediction about te reo based on changes between 2001 and 2006**

| YEARS AHEAD | YEAR | NATIONAL SURVEYS % MĀORI SPEAKING (VERY) WELL | CENSUS % MĀORI ABLE TO CONVERSE IN MĀORI |
|---|---|---|---|
| | 2001 | 9% | 25.2% |
| +5 | 2006 | 14% (+5%) | 23.7% (-1.5%) |
| +25 | 2026 | 34% | 17.7% |

The truth probably lies somewhere in between.

One of the most significant issues to arise from this analysis is whether the five-yearly national surveys have any value if the figures they contain in the crucial cells are too small to be reliable. While it is clear that the census question can provide only a very rough guide as to what is happening nationally, at least the figures are as reliable as any self-reporting survey can be. The national surveys are clearly intended to provide more in-depth analysis, but I think they have failed to provide a better picture than the censuses in the crucial areas, because that picture is so significantly affected by sampling issues, the types of questions asked, and perhaps most importantly, by the way the data is presented. If the current survey methodology is to continue, a larger sample is required, so that the numbers are reliable enough to show something, and the results must be reported in such a way that they are directly and easily comparable between the surveys.

But perhaps a different type of survey should replace the current model. We might learn more from in-depth studies of a small number of representative communities than we do from these national surveys. If we are to know and understand what is actually happening, we probably need to consider the issues in relation to particular communities, because the national picture is unlikely to reflect any individual community. Understanding what is happening might involve trying to find answers to questions like these: Why is the uptake of high-level immersion schooling dropping? If Māori men are not participating in education in te reo to the same extent as Māori women, are they nevertheless acquiring Māori by some other means? Which communities are being most successful at language revitalisation, and what factors are crucial to their success? The national surveys are not designed to provide answers to questions like these, which can only be answered by in-depth studies of particular communities, with both qualitative and quantitative analysis. We also need more rigorous investigation of the effects of self-reporting on the results, including whether it is consistent across age-groups and degrees of proficiency.

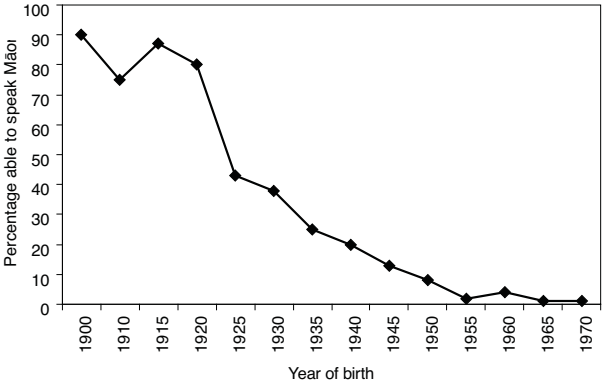
The other question which needs to be asked in relation to the figures I have presented is one to which I believe we do not know the answer, and that is 'What percentage of the population needs to be proficient in Māori to ensure its survival?' Globally, there are communities of as few as perhaps 350 speakers who have maintained their language for thousands of years, but they have done so because they were isolated, their community was not subject to outside influence, a hundred percent of the community spoke the language in question, and it was passed on by intergenerational transmission. That is why

Rūātoki was successful in maintaining Māori for so much longer than other areas of New Zealand. That is not the situation of Māori as a whole today.

While I have no definitive answer to that question, I wish to put forward a suggestion which I think makes some pragmatic sense. It is based on the fact that it is communities, rather than individuals that speak languages: if you can speak a language, but have nobody to speak it to, you do not speak it. For a language to survive, what matters is not who *can* speak it, but who *does* speak it. For there to be a reasonable chance that Māori will be spoken, there has to be a reasonable chance that those spoken to will also speak Māori. Every time a te reo speaker begins a conversation, they have to make a decision about whether it will be in Māori or in English. If they know that their interlocutor speaks Māori, they have a real choice. If they do not know, then they have to make a guess. Using similar reasoning, Benton points out (1991, 26) that if 70% of a community speaks Māori, 'The odds that any two people encountering each other by chance would be able to talk to each other in Maori … would only be even'. This is the 'dilution' effect mentioned earlier: if speakers of te reo are too diluted in their community by non-speakers, they will not have many opportunities to speak te reo. If two people are speaking in Māori, but are joined by a third person who is not a speaker, the conversation will almost certainly shift to English, even although the English-only speaker is in the minority in that group. The reverse does not happen: if a speaker of te reo joins a group speaking English, the conversation will not shift to te reo. Thus more than 70% of a community needs to be able to speak Māori for the odds to be better than even. (This does not necessarily mean more than 70% of the entire population of New Zealand, but more than 70% of a Māori speaker's natural social grouping need to be able to speak Māori for Māori to be regularly used.)

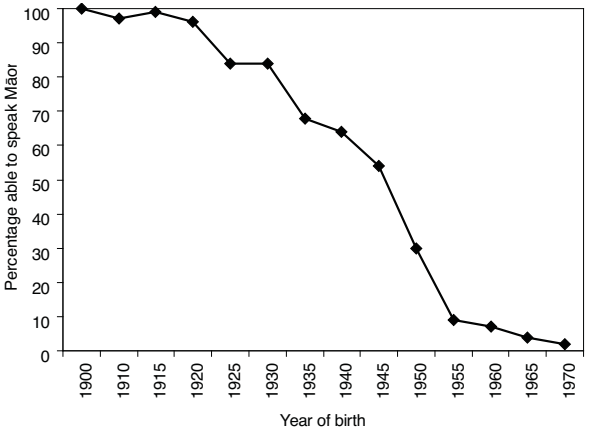
The graphs produced by Richard Benton on the basis of his survey in the early 1970s (Benton, 1991, 15-23), might provide a clue as to how much more than 70% is needed. They show a pattern which, while not present in every case, is present sufficiently often to be worthy of notice. I have taken several of Benton's graphs of the decline of te reo Māori in different areas of the country (or different tribes: Benton has data for a variety of groupings) and reproduced from those graphs only the figures for those who could speak Māori. (Benton's graphs also have figures for those who could understand Māori, and those who could only speak English). They present a picture of the fall in knowledge of te reo Māori:

**Figure 14: Ability to speak Māori by year of birth in the Taranaki-Wanganui Regions**



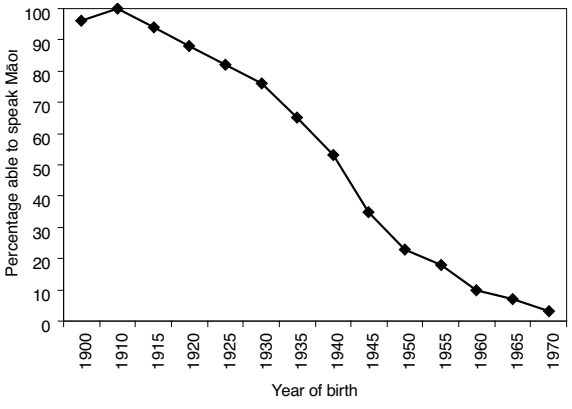

(Source of data: Benton, 1991, 19)

**Figure 15: Ability to speak Māori by year of birth in Ngāti Porou**



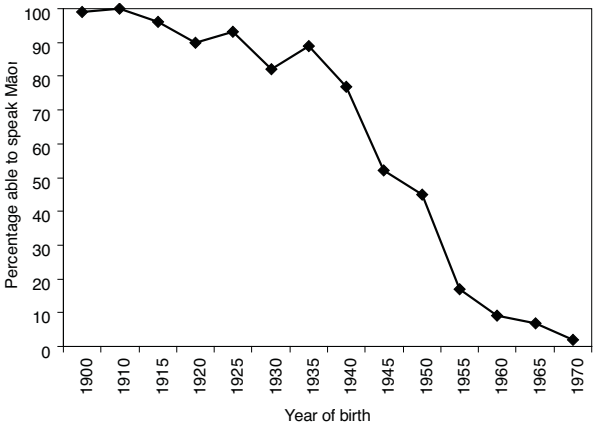

(Source of data: Benton, 1991, 21)

**Figure 16: Ability to speak Māori by year of birth in Ngāpuhi**



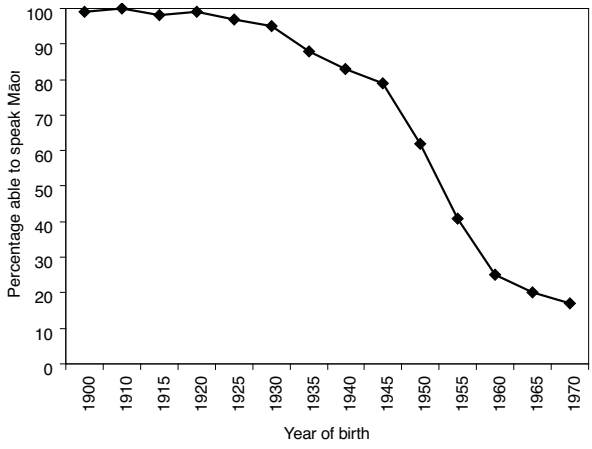

(Source of data; Benton, 1991, 21)

**Figure 17: Ability to speak Māori by year of birth in Te Aupōuri, Te Rarawa and Ngāti Kahu**




(Source of data: Benton, 1991, 22)

**Figure 18: Ability to speak Māori by year of birth in Tūhoe**




(Source of data: Benton, 1991, 22)

A striking feature of these graphs is that, regardless of how early or how late the decline set in, once the figure for the percentage speaking Māori gets down to about eighty percent, the rate of decline becomes much more rapid. I do not know whether it is fair to stand those graphs on their heads, so to speak, and to claim that only when at least eighty percent of a community speaks Māori will it be safe, but it seems likely. If this is fair, it also provides a ray of hope: quite a number of the graphs show a significant tailing off of the decline somewhere between twenty and forty percent. Perhaps it is the case that if we can reach those levels, there will be the possibility of a rapid increase, mirroring the rapid fall. Again, I think it makes some pragmatic sense: the greater the percentage of a community that speaks te reo, the greater the motivation of the rest of the community to learn. The figures discussed in 2.2.1 from Earle's report (2007, 26) show that this is not just a hypothetical scenario.

The figures that I have presented show that, overall, we are still a long way from achieving the eighty percent that these graphs suggest we might need. However, there are communities where the percentage is much higher than the overall figures, and these are our greatest hope and resource for the future. If I am right – and it would be nice if I am not – that we need to aim for eighty percent of a community not only able to speak, but actually speaking Māori, then maintaining the current rate of revitalization is not enough (recall that

the most optimistic forecast, based on the surveys, was 34% by 2026). One of my concerns about the positive publicity given to the figures from the recent surveys is that I believe they are giving rise to complacency. People are saying 'The language is doing well, we are fine, we just need to keep going' (or even worse 'Our language is safe, we don't need to do more'). I believe we need to think again. The figures presented here suggest that the current revitalisation strategies are not sufficiently effective to produce the growth in knowledge and use of te reo necessary to sustain it.

What I have said about communities is, I believe, very important. The English adage 'Don't put all your eggs in one basket' provides good advice in many situations, but Andrew Carnegie said 'Put all your eggs in one basket, and watch that basket'. I believe that our best strategy for saving te reo Māori would be to put our efforts into fostering Māori in those communities which have the best chance of delivering eighty percent of the community able to speak Māori: I am suggesting putting all our eggs in one or two baskets, and pouring our resources in abundance into those communities (the equivalent of 'watching the basket'). The resources I am talking about include not only money, but also, crucially, Māori immersion schooling right through the secondary school period, provided by the best Māori teachers we can find. We need to encourage into these communities those who are able to live their lives in te reo, so that those in such communities will be able to use te reo in their leisure time, will be able to shop in te reo, and have the opportunity to work in environments where most daily talk will be in te reo. While it may be impossible to create the sort of community that exists in e.g. Ni'ihau in Hawaii (see e.g. Nettle and Romaine, 2000, 179; Wilson, 1998), the more closely a community can approach that ideal, the more strongly will they be able to support language revitalisation.

In time, such baskets would, I hope, overflow, and the overflow could be used to establish more baskets. In the meantime, I am afraid that if we spread our resources too thinly, as the current *Rautaki Reo Māori* strategy implies ('The majority of Māori will be able to speak Māori to some extent by 2028', (TPK, 2003, 19)), none of our baskets will fill to the levels required to ensure that te reo Māori remains with us, so that it can be *he taonga tuku iho, ake, ake, ake*.

## Appendix 1: Tables of numbers

In all these tables, * indicates age bands where the number of male speakers exceeds the number of females.

**Table 4: Gender gap numbers, Census 2001**

| AGE BAND | SPEAKERS OF MĀORI M | SPEAKERS OF MĀORI F | TOTALS OF MĀORI POPULATION MĀORI M | TOTALS OF MĀORI POPULATION MĀORI F | TOTALS OF MĀORI POPULATION ALL MĀORI |
|---|---|---|---|---|---|
| 0–4* | 4,923 | 4,842 | 33,720 | 32,094 | 65,814 |
| 5–9 | 6,843 | 6,939 | 33,636 | 31,452 | 65,088 |
| 10–14 | 6,921 | 8,205 | 31,398 | 30,594 | 61,989 |
| 15–19 | 5,424 | 6,825 | 24,324 | 24,666 | 48,987 |
| 20–24 | 4,671 | 5,244 | 19,788 | 21,819 | 41,607 |
| 25–29 | 4,374 | 4,944 | 18,261 | 21,432 | 39,693 |
| 30–34 | 4,173 | 4,812 | 17,898 | 20,841 | 38,736 |
| 35–39 | 4,368 | 4,854 | 17,706 | 20,208 | 37,914 |
| 40–44 | 4,050 | 4,317 | 15,258 | 17,226 | 32,484 |
| 45–49 | 3,462 | 3,543 | 11,970 | 12,852 | 24,822 |
| 50–54* | 3,300 | 3,099 | 9,369 | 9,921 | 19,287 |
| 55–59* | 2,778 | 2,763 | 6,588 | 7,050 | 13,641 |
| 60–64 | 2,703 | 2,736 | 5,526 | 5,889 | 11,412 |
| 65–69* | 2,037 | 2,025 | 3,765 | 4,017 | 7,785 |
| 70–74 | 1,299 | 1,509 | 2,265 | 2,718 | 4,986 |
| 75–79 | 603 | 855 | 1,095 | 1,515 | 2,613 |
| 80–84 | 249 | 420 | 447 | 726 | 1,170 |
| 85+ | 129 | 234 | 240 | 456 | 696 |
| All ages | 62,310 | 68,172 | 253,248 | 265,479 | 518,727 |

Source of data: Statistics NZ 2002, Table 13a

**Table 5: Gender gap numbers, Census 2006**

| AGE BAND | SPEAKERS OF MĀORI M | SPEAKERS OF MĀORI F | TOTALS OF MĀORI POPULATION MĀORI M | TOTALS OF MĀORI POPULATION MĀORI F | TOTALS OF MĀORI POPULATION ALL MĀORI |
|---|---|---|---|---|---|
| 0–4* | 4,479 | 4,431 | 34,071 | 32,352 | 66,426 |
| 5–9 | 6,057 | 6,183 | 34,227 | 32,547 | 66,771 |
| 10–14 | 6,663 | 7,335 | 34,347 | 32,379 | 66,726 |
| 15–19 | 5,979 | 7,239 | 29,031 | 29,502 | 58,533 |
| 20–24 | 4,419 | 5,352 | 20,340 | 22,434 | 42,774 |
| 25–29 | 3,942 | 4,929 | 17,577 | 20,529 | 38,106 |
| 30–34 | 4,107 | 4,998 | 18,072 | 21,384 | 39,456 |
| 35–39 | 4,098 | 4,788 | 17,811 | 20,790 | 38,598 |
| 40–44 | 4,329 | 4,899 | 17,367 | 19,902 | 37,272 |
| 45–49 | 3,939 | 4,311 | 14,979 | 16,926 | 31,908 |
| 50–54 | 3,366 | 3,588 | 11,595 | 12,597 | 24,189 |
| 55–59* | 3,069 | 3,015 | 8,868 | 9,762 | 18,630 |
| 60–64 | 2,508 | 2,556 | 6,096 | 6,720 | 12,813 |
| 65–69 | 2,277 | 2,337 | 4,848 | 5,310 | 10,155 |
| 70–74 | 1,500 | 1,650 | 3,039 | 3,471 | 6,510 |
| 76–79 | 861 | 1,089 | 1,620 | 2,190 | 3,807 |
| 80–84 | 327 | 537 | 693 | 1,074 | 1,764 |
| 85+ | 129 | 327 | 276 | 609 | 888 |
| All ages | 62,046 | 69,567 | 274,860 | 290,469 | 565,329 |

Source of data: Statistics NZ 2007, Table 9

**Table 6: Speaking proficiency numbers, 2001 and 2006 National Surveys**

| LEVEL OF PROFICIENCY | 2001 | 2006 |
|---|---|---|
| (Very) well | 29,684 | 540 |
| Fairly well | 34,694 | 502 |
| Not very well | 72,297 | 1,003 |
| Smattering | 186,907 | 1,813 |
| Totals | 323,582 | 3858 |

Sources of data: TPK, 2002b, 62; TPK, 2007, 28
Note: in Table 6, the numbers for 2001 have been generalised from the actual survey population to the entire Māori population, while those for 2006 are the numbers from the actual survey.

**Table 7: Numbers of Māori able to converse in Māori, Census 2001 and 2006**

| AGE BAND | 2001 | 2006 |
|---|---|---|
| 0–4 | 9,765 | 8,910 |
| 5–9 | 13,782 | 12,243 |
| 10–14 | 15,126 | 13,998 |
| 15–19 | 12,249 | 13,221 |
| 20–24 | 9,915 | 9,768 |
| 25–29 | 9,315 | 8,871 |
| 30–34 | 8,985 | 9,105 |
| 35–39 | 9,225 | 8,889 |
| 40–44 | 8,370 | 9,228 |
| 45–49 | 7,008 | 8,250 |
| 50–54 | 6,399 | 6,954 |
| 55–59 | 5,541 | 6,084 |
| 60–64 | 5,439 | 5,064 |
| 65–69 | 4,062 | 4,611 |
| 70–74 | 2,808 | 3,150 |
| 76–79 | 1,458 | 1,950 |
| 80–84 | 669 | 867 |
| 85+ | 366 | 453 |
| All ages | 130,482 | 131,610 |

Sources: Statistics NZ 2002, Table 13a; 2007, Table 9

**Table 8: Numbers of Māori able to converse in Māori by cohort, Census 2001 and 2006**

| AGE BAND | 2001 | 2006 |
|---|---|---|
| 0–4 | | 8,910 |
| 5–9 | 9,765 | **12,243** |
| 10–14 | 13,782 | **13,998** |
| 15–19 | 15,126 | 13,221 |
| 20–24 | 12,249 | 9,768 |
| 25–29 | 9,915 | 8,871 |
| 30–34 | 9,315 | 9,105 |
| 35–39 | 8,985 | 8,889 |
| 40–44 | 9,225 | **9,228** |
| 45–49 | 8,370 | 8,250 |
| 50–54 | 7,008 | 6,954 |
| 55–59 | 6,399 | 6,084 |
| 60–64 | 5,541 | 5,064 |
| 65–69 | 5,439 | 4,611 |
| 70–74 | 4,062 | 3,150 |
| 76–79 | 2,808 | 1,950 |
| 80–84 | 1,458 | 867 |
| 85+ | 669 | 453 |
| 85++ | 366 | |
| All ages | 130,482 | 131,610 |

Sources: Statistics NZ 2002, Table 13a; 2007, Table 9

Note: Bold figures in 2006 are those which show a rise over the corresponding 2001 group.

**Table 10: Numbers of Māori speakers by region, 2001, 2006 Censuses**

| REGION | 2001 SPEAK MĀORI | 2001 TOTAL MĀORI | 2006 SPEAK MĀORI | 2006 TOTAL MĀORI | CHANGE |
|---|---|---|---|---|---|
| Northland | 12,045 | 39,618 | 12,141 | 42,489 | +96 |
| Auckland | 26,373 | 123,285 | 27,162 | 133,248 | +789 |
| Waikato | 19,749 | 70,440 | 19,422 | 74,412 | –327 |
| Bay of Plenty | 19,995 | 61,662 | 20,508 | 65,877 | +513 |
| Gisborne | 6,591 | 18,864 | 6,276 | 19,293 | –315 |
| Hawkes Bay | 8,550 | 31,122 | 8,493 | 32,715 | –57 |
| Taranaki | 3,423 | 14,079 | 3,216 | 15,357 | –207 |
| Wanganui–Manawatu | 9,795 | 37,926 | 10,047 | 41,118 | +252 |
| Wellington | 12,423 | 49,284 | 12,552 | 53,865 | +129 |
| Tasman | 459 | 2,676 | 450 | 2,979 | –9 |
| Nelson | 639 | 3,084 | 666 | 3,504 | +27 |
| Marlborough | 654 | 3,762 | 669 | 4,170 | +15 |
| West Coast | 366 | 2,463 | 363 | 2,841 | –3 |
| Canterbury | 5,712 | 30,513 | 5,979 | 35,538 | +267 |
| Otago | 1,800 | 10,221 | 1,896 | 11,901 | +96 |
| Southland | 1,872 | 9,708 | 1,710 | 10,086 | –162 |
| Elsewhere | 51 | 381 | 69 | 363 | +18 |
| Totals | 130,497 | 509,088 | 131,610 | 549,756 | +1,113 |

Sources: Statistics NZ 2002, Table 17; 2007, Table 10

The figures for Total Māori in Table 10 exclude those who spoke no language (presumably largely babies). (I do not know why this total increase figure of 1,113 does not equal the rise in numbers of speakers reported by Statistics New Zealand (Statistics NZ, 2007) between the censuses, which is 1,128.)

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Note: At least three different reports on this survey were produced by TPK at various times, with similar, but not identical, titles and content. From the information on the website, it appears that the hard-copy document above is the latest of them. One other of the earlier reports is still available online; note that the content and the page references do not coincide with the hard-copy document: http://www.tpk.govt.nz/publications/subject/default.asp#language

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