Languages in Aotearoa New Zealand

Summary

This paper outlines the major issues facing language practices in New Zealand. Important factors are:

- The position of the statutory languages of New Zealand, te reo Māori and New Zealand Sign Language.
- Access to English for the whole community.
- Consideration of the many languages used by the people of New Zealand.
- Language capability in a highly diverse society.
- The importance of language capacity in international trade connections.
- The ability for contemporary research to aid examination into language practice in society.
- The fragmented nature of language policy within New Zealand society and the opportunities for a national, unified approach.

Introduction

The past few decades have seen large increases in the ethnic, cultural, social and linguistic diversity of the New Zealand population, which is expected to increase even further in the foreseeable future (Statistics New Zealand 2011). Internationally, we are not unique in this, but this increasing diversity will develop at a faster rate than most nations, within New Zealand's unique bicultural setting. Languages play a central role in all areas of this development, such as: education, social and economic mobility, access to public services, identity building and cultural maintenance, engagement with an increasingly globalised trade and diplomatic environment, to name a few

Understanding the role of language in our society requires a high-level, cross-sector, multi-disciplinary approach. Research in diverse areas such as socio-cultural studies in immigrant integration, cognitive neuroscience, and international trade can all help in such an approach.

As such, language practice at a national level is a complex issue to evaluate. This paper provides an overview which can be utilised to help understand the impacts of language practice, provision, and policy in New Zealand. In order to inform this developing framework, the evidence base is examined; from the effects on cognition derived from language learning, to the importance of language use in the development of identity. Whilst further evidence will always facilitate increasingly nuanced analyses, especially in the case of evidence gathered in new contexts such as

increased diversity, there is already a robust research base from which to begin the development of language policy in a national context.

Language in a superdiverse New Zealand

While language forms the basis for human communication it is also central to human identity. Language provides the means to express experience, culture and personal individuality as described well in the 1987 Australian National Language Policy (see box on page 2).

Over the last two decades New Zealand has become one of a small number of culturally and linguistically superdiverse countries (Spoonley & Bedford 2012). Superdiversity indicates a level of cultural complexity surpassing anything previously experienced. New Zealand is now home to 160 languages, with multiethnic depth forecasted to deepen even further (Statistics New Zealand 2011).

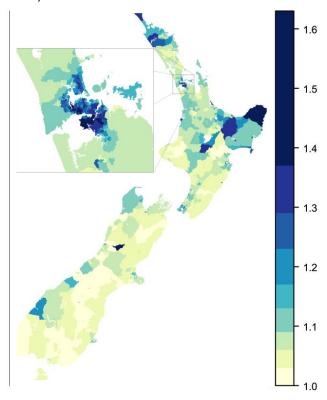


Figure 1. Linguistic diversity in New Zealand as a distribution of the average number of languages spoken per person. For example, if a region has an average number of languages spoken per person of 1.5 or greater, one out of two people will be bilingual or multilingual (Area unit data from Statistics NZ, Census 2006).

The Australian National Language Policy 1987 (abridged)

The centrality of languages in personal, group and national identity is outlined in the Australian National Policy on Languages which was adopted by the Australian Government with bipartisan agreement in 1987 (Lo Bianco 1987). It notes that language is:

- central to the intellectual development and socialisation of children, basic to all learning and concept formation,
- a means for personal growth, individual cultural enrichment and recreation,
- the primary means of interpreting reality and therefore is basic to cultural evolution and change,
- the basis for human society and the primary means for transmitting knowledge and past achievement,
- the product of cultural, artistic, economic and intellectual endeavours as well as the tool of them. By revealing ways of being human, languages are a source of human identity.

This superdiversity is especially visible in urban centres such as Auckland, which is now one of the most diverse cities in the world. This superdiversity leads to a very diverse linguistic environment (Figure 1). The development of this multiethnic environment is rendered more complex because it is proceeding in an embedded and rapidly evolving bicultural legislative system.

Given the inextricable relationship between language and evolving social change, language practices will play an important role in emerging national issues, and will become more important as diversity increases even further.

Language support and learning in New Zealand are provided for in a number of widely distributed sectors including education, labour, housing, law, foreign affairs and immigration. At present there is little unification of policies, making it challenging to produce analyses of the evidence regarding language provision and practice in New Zealand (see box on page 3). Additionally, since these issues are emerging in a superdiverse environment, we face a complex challenge in interpreting and applying available evidence.

This paper aims to outline a selection of important national and international evidence in order to facilitate the broader evaluation of the benefits and costs of language policy to New Zealand. This evidence may aid the consideration and evaluation of policy choices, such as whether New Zealand needs a unified, macro-level languages policy.

Languages in a global community

The majority of the world has always been multilingual (Nagy & Meyerhoff 2008) and in historically English-speaking countries there has been an increased visibility of language capacity as an important issue. Governments in some English-speaking nations have signalled a renewed desire to engage with and actively promote language policy. In education these efforts have ranged from mandating of Asian language provision for all years

of instruction in Australian schools to strong support for compulsory language learning to be extended for 7 to 16 year olds in the United Kingdom (Commonwealth of Australia 2012, United Kingdom Department for Education 2012).

International leaders in language policy include the Council of Europe, which has developed a Europe-wide framework for the recognition of language proficiency and the promotion of linguistic diversity. This has been rigorously pursued in the name of 'improved potential for international mobility ... and of economic development' (Council of Europe 2007).

The geographical isolation and small population size of New Zealand present unique challenges, increasing the importance of language learning. Maintaining and deepening global connections can help attain positive cultural, social and economic outcomes. Language learning provides a method for ameliorating the effects of this isolation by facilitating the development of global links and the internationalisation of the population.

Languages of the Realm of New Zealand

The social and institutional tolerance for an individual or group to use a language has been understood as a human right for many decades (United Nations 1966). Since this recognition, international consensus has moved towards the philosophy that it is not enough for a language to be tolerated, but that it should be actively provided for and promoted (United Nations 1992). This is partly in recognition that even with tolerance-based language rights, languages are becoming extinct at increasing rates (Austin et al. 2011). This is in recognition that people need proficiency in their own language/s for important social and cultural reasons such as intergenerational communication and security of personal identity.

In addition to international obligations, New Zealand has a number of national obligations which both mirror and further the protection and promotion of the official languages within New Zealand, chiefly with respect to te reo Māori and New Zealand Sign Language.

The unification of language policies in New Zealand

This year (2013) marks the 21st anniversary of the release of the *Aoteareo: Speaking for Ourselves* report commissioned by the Ministry of Education (Waite 1992). This document was understood to be a precursor to a New Zealand national languages policy (Holmes 1997, Spence 2004, East et al. 2007).

In the intervening period, there has been a number of evolving subsidiary language initiatives. However, there has been no further development of a policy across the national context. Independently, the New Zealand Human Rights Commission (2010) has developed a proposed national languages policy. The statement can be summarised in the priorities for action:

- Progressively provide opportunities for all New Zealanders to develop knowledge of tikanga Māori and the ability to communicate competently in both English and te reo Māori.
- Include te reo and tikanga Māori in teacher education and professional development to ensure their effective use in teaching.
- Ensure the continued survival and use of the Cook Islands Māori, Niuean and Tokelauan languages in New Zealand and foster the retention and use of other Pacific languages.
- Develop a languages policy that encourages the learning of a range of languages and supports community efforts to teach their heritage languages.
- Ensure that all new migrants and refugees have access to appropriate English language tuition.
- Extend the availability of the Language Line interpreter service to all public agencies.

New Zealand Human Rights Commission 2010

There is no official status for languages not native to the New Zealand mainland, but to which New Zealand could be seen to have a responsibility, such as the associated state and territory languages: Cook Islands Māori, Tokelauan and Niuean. The question of whether there should be any defined responsibilities for these languages further than those set out in international conventions is still unresolved.

Other languages in New Zealand include those of migrant communities, predominantly Pacific, Asian and European languages. Whilst there is little formal recognition of these languages in legal, cultural and educational settings, these linguistic skills make up an important part of the asset base that migrant settlers bring to New Zealand.

New Zealand is home to a distinctive dialect of English, commonly referred to as New Zealand English, which will continue to evolve within New Zealand society. New Zealand English is not currently declared to be official, but is the main language of communication in Aotearoa New Zealand and as such acts as a *de facto* official language. It is important for full societal participation and realisation of potential that all New Zealand residents have access to learning advanced levels of English.

Language promotion in New Zealand: whose responsibility – both the state and the individual?

The state clearly has important human rights obligations when addressing languages, but what further role does the state have with regard to the use and learning of languages in New Zealand? To help develop and answer this question, an examination of the types of benefits and costs of promoting languages is needed, including analysis of to whom these benefits and costs accrue.

From an economic perspective, language skills could be modelled as skills in demand and so a simple 'job-market' based approach could be used, in which extra earnings accrued to workers with language abilities are set against the opportunity cost of developing those skills. However, the more people use a language, the more valuable it becomes as a tool for those who already use it. This is in stark contrast to a market good whose value decreases with its availability, making this approach limited in its utility.

One framework for considering language issues involves evaluation of direct and non-direct impacts. These impacts can be broadly outlined by evaluating four distinct areas of policy (Grin 2004):

- Private monetary effects: Some examples of these
 may include increased earnings from developing a skill
 in demand, or reaping cognitive benefits from
 language learning. One example of a direct cost is the
 salary of a language teacher.
- Private non-monetary effects: These are impacts that
 are hard to monetarily value and may include:
 personal satisfaction derived from engaging in
 activities in two languages, or the decrease in stress
 accruing to members of the public when the minority
 language is legitimised through policy. Conversely,
 costs may include stress felt by members of the
 majority group who would rather see the minority
 language used in private settings.
- Social monetary effects: These impacts include any
 effect for which a benefit or cost to society can be
 calculated. These may possibly include reduced
 healthcare costs of a lower prevalence of Alzheimer's
 disease amongst bilingual speakers (Craik et al. 2010).

They also may include monetary benefits that flow from relationships between multilingualism and creativity, innovation or investment (Marsh et al. 2004) or reduced youth suicide rates (Hallett et al. 2007)

• Social non-monetary effects: These are social impacts that are not amenable to monetary evaluation and can include effects that have a larger influence than all of the above. Examples may be more harmonious community relations or the positive value placed on diversity in its own right. Costs may be the unused skills of non-majority language speaking groups or Deaf groups. This final point touches on questions of fairness in the provision of language support as social impacts are rarely equal between speakers of two different languages. An understanding must be made, not just of the net effect of a policy to society but how much each group or individual gains, loses, and by how much.

Many important factors lie in non-monetary contexts or as long term benefits such as building capability, competitiveness and reducing costs. Given the non-market nature of many of these factors this framework shows a clear argument for the opportunity for state support of language use and language learning. This is not to deny the roles that the individual, community or the market play in language learning, provision and maintenance, more to show that there is a clear basis for language-based public policy in this framework. Indeed, given that the state operates in a chosen language or set of chosen languages it does by definition involve itself in the public policy of languages.

Research to guide policy development

Language plays an important role in learning

Second language learning in education typically takes one of several forms, students in some form of bilingual or immersion education, and students learning a second language in a majority language setting.

Broadly, evidence of the effects of bilingualism in an educational setting suggests that bilinguals with good capability in both languages have superior creative thinking, language and multi-tasking skills when compared with monolinguals (Bialystok et al. 2011, May et al. 2004).

Proficiency in the majority instruction language/s is a strong requirement for success in education; this is seen even in subjects that may not be thought of as requiring a high level of language fluency, such as mathematics (Barton 2007). Studies have shown that for minority language speakers, English-only programs offer the lowest form of educational efficacy (May et al. 2004). Bilingual education consists of teaching students all subjects in some mix of a majority language and an additional language. Longitudinal studies show that the length of education in the mother tongue is more influential than

any other factor in predicting the educational success of bilingual students, including socioeconomic status (Ramirez et al. 1991, Thomas & Collier 2002). Furthermore these results show that bilingual student cohorts immersed in bilingual instruction for a minimum of 6 years on average outperform monolingual cohorts in many sectors of the curriculum.

Immersion or bilingual schools in New Zealand tend to be focussed on the preservation and revitalisation of te reo Māori and as such, large sample number analysis of student outcomes are usually assessed on the basis of this criterion, not standardised scholastic performance. In one of the most recent studies, although based on a small number of students, indications are that Māori students in Māori-medium schools show higher rates of achievement in NCEA than Māori students not in Māori-medium schools and are more likely to meet University entrance requirements (Wang & Harkess 2007).

There have been sporadic attempts internationally to calculate the costs of providing bilingual education. Two primary examples where figures are available are the bilingual education systems in Guatemala and Spain. In both these cases costs over and above the costs of monolingual education were found to be in the order of 4% to 5% of expenditure per student per year in initial costs and tapered to 2% over time (Grin & Vaillancourt 1998). However, local studies are not available and more studies are needed in order to generalise costs across different countries and languages.

Speakers of the majority language who learn another language at school accrue a number of benefits (Baker 2012). Importantly, there is evidence suggesting that learning another language at school improves performance across the curriculum. For example:

- Students have been shown to perform better in mathematics and their first language in standardised tests after language instruction three times a week (Armstrong & Rogers 1997).
- Garfinkel & Tabor (1991) found that students studying one or two years of a second language (Spanish) outperformed those not studying a second language in primary language reading tests (English).
- A large study concluded that students who studied foreign languages for longer periods of time did better on American Scholastic Achievement Tests than students who studied less foreign language. In this study, the variables of verbal giftedness and socioeconomic background were controlled (Cooper 1987).
- Learning another language improves the speed and level of intercultural skill acquisition in students (Byram 2012).

Language and identity

Studies have demonstrated that language and culture produce each other (Crozet & Liddicoat 2000). In a quantitative analysis, Hallett et al. (2007) showed that

indigenous language use, as a marker of cultural persistence, is a strong predictor of health and wellbeing in Canada's Aboriginal communities. In this study, communities in which a majority of members reported a conversational knowledge of an Aboriginal language also experienced low youth suicide rates. In those communities in which less than half of the members reported conversational knowledge, suicide rates were six times greater.

In the New Zealand case, the ability to speak te reo Māori is regarded as central to Māori identity – this is universally acknowledged through cultural, qualitative and quantitative research. For example the ability to speak te reo has been shown to be highly correlated with measures of Māori identity under the Multi-dimensional Model of Māori Identity and Cultural Engagement (Houkamau & Sibley 2010). This is important in many ways, and has consequences for many factors of social outcomes.

Language and the brain

Learning another language is a demonstration of brain plasticity, whereby the brain alters in response to external stimuli. There is evidence that bilingualism and multilingualism results in cognitive enhancements, but most authors are still cautious in attributing all enhancements directly to language learning. However, available research is moving towards supporting the statement that there are some cognitive improvements with varying levels of multilingualism. For example:

- Bilingualism probably reduces the impact of some cognitive biases, resulting in improved rational decision making (Keysar et al. 2012).
- By analysing the subcortical auditory regions of the brain, Krizman et al. (2012) showed that advantages of bilingualism likely include enhancement of executive functions, specifically attention and working memory.
- Infants living in bilingual homes show some adaptive learning improvements (Kovács 2009).
- Studies report evidence that lifelong bilinguals may have a delayed onset of Alzheimer's disease (Craik et al. 2010).

The opportunity costs of multilingualism are dependent on the other activities that could be undertaken instead of learning or (in the case of migrants) maintaining a language. However, given the evidence in this section, these benefits suggest that learning or maintaining another language could be seen as a high value activity.

Language in the labour force and international trade opportunities

Non-proficient English speakers are likely to face difficulties integrating into New Zealand society. Amongst other factors there is good evidence that immigrants and non-English speakers face employment discrimination (Earle 2009). The difficulty faced by non-English speakers in accessing services and the job market has an impact on society and the economy as a whole (Boyd 2003).

Provision of English for speakers of other languages can be one of the most cost-effective methods of improving the outcomes of non-English speaking communities and can result in extremely high cost/benefit ratios (Prebble 2009).

The benefits and costs to trade of monolingualism are methodologically difficult to quantify. However, it is well understood that not sharing a common language is a barrier to trade and that businesses report that foreign language facility is very important (Watts 1992, Enderwick & Gray 1992). Small to medium enterprises (SMEs) suffer most from reduced language facility through the fixed costs of entering foreign markets, which is especially important in the New Zealand context given our high proportion of SMEs. The language knowledge of immigrants is potentially a very important resource, with many immigrating to New Zealand from important or emerging trade partners.

There are limited studies that attempt to evaluate language impacts quantitatively (Melitz 2008). Those studies that have been performed reveal that some nations may be losing business because of identified communication barriers. One such attempt to calculate annual unrealised gains to the UK economy suggested losses may total a minimum of \$18 billion (Foreman-Peck 2008).

Language evidence in the New Zealand context

Continuing uncertainty of te reo Māori

The future of te reo remains uncertain. Whilst there have been significant efforts to review policy and to reinvigorate the language (Te Puni Kōkiri 2011a), there are deep concerns with respect to the resources available, especially within the bilingual education sector (Waitangi Tribunal 2012).

The number of people conversant in te reo Māori declined rapidly during the 20th century, therefore concerns regarding te reo Māori have long been related to language survival and maintenance. Moreover, the language has come under increasing pressure from the effects of public monolingualism in New Zealand.

Although te reo Māori has been accorded legal status (Māori Language Act 1987) and has received attention from public policy, under the UNESCO framework for endangered languages te reo Māori remains endangered (Lewis & Simons, 2009). This is partly due to the reduction of te reo Māori use in the home, coupled with a diminishing number of young speakers (Statistics New Zealand 2001). Restricted use of te reo in public contexts, and uneven attention in the education system, have led to concerns that te reo Māori is approaching a crisis point (Waitangi Tribunal 2011).

Slow progress in the implementation of New Zealand Sign Language (NZSL) recognition

The passing of the New Zealand Sign Language Act provided support for the Deaf in New Zealand courts and has provided the impetus for the government sector to improve NZSL access to services and information. However, there are areas where little provision is available, for example at present there is no right to the provision of NZSL in broadcasting, or for deaf students in the education system. In some cases NZSL is provided by organisations or individuals with minimal resourcing and no formal standards of competence. There is still the possibility of Deaf children not being able to sufficiently access any languages whilst in school.

English support for non-English speakers is crucial

There is little formal appreciation of the student's skill in their non-English mother tongue within the education system. Problematically, whilst such students are mostly assessed in English, English language skills can be two years or more behind mathematic or scientific skills. If a child is unable to comprehend instruction in English, learning across the curriculum can suffer markedly. This may further exacerbate the issues with integration outlined above and may perpetuate the underutilisation of potential.

Opportunities for more language learning at school and in tertiary education

Following analysis from national and international agencies outlining the lack of language provision in the New Zealand education system (McGee et al. 2003, Le Métais 2002), the Ministry of Education developed a new language learning area in the most recent release of the New Zealand Curriculum (2007). This new learning area is now available for students in school years 7 to 10. However, whilst the New Zealand Curriculum requires access to language learning for all students, the nonmandatory nature of entitlement means that significant numbers of students are still able to complete their compulsory education without encountering language study, and for many who do, time spent on language study is limited. This contrasts heavily with the current environment of language learning in the United Kingdom and Australia. There is little evidence that the provision of this learning area has increased long term interest in language learning, and numbers of secondary enrolments have actually decreased (Education Counts 2012).

Currently, there is no clear articulation between languages at secondary school and languages offered at the tertiary level. Effective language/s instruction at a tertiary level requires low student/staff ratios but often current funding does not reflect this. Due to this funding pressure, language departments are typically cross-subsidised by tertiary institutions, resulting in constant budgetary concerns and reductions of capability.

The role of languages in Pasifika education

The poor socio-economic outcomes experienced by Pasifika peoples have many precursors, and evidence of the role of language in these outcomes could provide important guidance to the development of future policy. Despite the tendency to homogenise Pasifika languages in one group, there are a range of different concerns, from issues of language protection for Tokelauan and Niuean, to Samoan where policy attention will likely focus on questions regarding bilingual immersion provision.

There have been a number of Pasifika Education Plans which involve the provision of language support, although this continues to be focused around English rather than Pasifika languages and/or the promotion of bilingualism (Ministry of Education 2012). These have the aim of improving educational outcomes for Pasifika students, but analysis of targets set for Pasifika education show that, as yet, there is little evidence of any system-wide improvement resulting from these plans (Education Review Office 2012).

Access to languages for everyone

Access includes translation and interpreting services, but it also encompasses English literacy which is vital for a full and deep interaction with society. The 2006 Adult Literacy and Life Skills Survey shows that whilst the average level of English 'prose' literacy has risen in New Zealand European, Māori and Asian ethnic groups since 1996, English 'prose' literacy skills of Pacific Island groups have actually reduced, although a partial explanation of this may be immigration effects (Satherley & Lawes 2008).

Requirements for translation and interpreting services vary between different sectors. Until very recently there was no quality control for anyone interpreting in court and it remains the case that there is no requirement for certification (Charter of Working Together 2012). The lack of formal recognition of translation or interpreting qualifications increases the possibility of problems when seeking access to public services.

In order to provide some assurance of professional capability, service contractors may rely on translators that have been certified by the Australian National Accreditation Authority for Translators and Interpreters. However, this certification is not a requirement in any service sector and interpreting regionally is often left to family members, friends or amateur bilingual volunteers.

For the Deaf, access to interpreting services is the primary requirement to interact with society and its provision is internationally recognised in conventions on the rights of the child and the rights of persons with disabilities (United Nations 1990, United Nations 2008). The later convention requires the provision of 'forms of live assistance and intermediaries, including guides, readers and professional sign language interpreters'. NZSL services are funded to some extent by Government, but availability is limited regionally and in some contexts the economic burden rests with the user of the services.

The case for a national language policy in New Zealand

New Zealand is home to a very diverse society and linguistic environment, and this diversity is only expected to increase in the future. The role of languages is already significant in New Zealand and will become more so. Understanding the profound impacts from transitioning to a multilingual country will be important if we are to succeed culturally, socially and economically. Substantial cultural and social issues will relate to the development and maintenance of te reo Māori and the recognition of the pervasive use of languages additional to English in New Zealand. Developing high levels of multiliteracies for all New Zealanders will be crucial if we are to utilise the latent skill base of our society in order to prosper and flourish.

The development of a national language policy will have to take place in the context of recognising New Zealand's biculturalism as well as a linguistically and ethnically complex society, especially in larger cities such as Auckland. However, the national and international evidence outlined here offers a good base, and we have an exciting opportunity to focus on the place of languages in a national framework.

References

Armstrong, P.W. & Rogers, J.D., 1997, Basic skills revisited: the effects of foreign language instruction on reading, maths and language arts, Learning Languages, 2, 3

Austin, P.K. & Sallabank, J., 2011, *Cambridge Handbook of Endangered languages*, Cambridge University Press, Cambridge

Baker, C., 2006, Foundations of bilingual education and bilingualism, Multilingual Matters, Clevedon, Bristol

Barton, B., 2007, Multilingual Issues in Mathematics Education, Educational Studies in Mathematics, 64, 2

Boyd, C., 2003, <u>Migrants in New Zealand</u>, New Zealand Immigration Service, Wellington

Bialystok, E., 2011, Reshaping the Mind: The Benefits of Bilingualism, Canadian Journal of Experimental Psychology, 65, 4

Byram, M., 2012, Language awareness and (critical) cultural awareness, Language Awareness, 21, 1-2

Charter of working together, February 2012, Ministry of Justice and NZSTI, Wellington

Commonwealth of Australia, 2012, <u>Australia in the Asian</u> <u>Century White Paper</u>, DPMC, Government of Australia, Canberra

Cooper, T.C., 1987, Foreign Language Study and SAT-Verbal Scores, The Modern Language Journal, 71, 4

Council of Europe, 2007, <u>Common European Framework of</u> <u>Reference for Languages</u>, Strasbourg

Craik, F.L., Bialystok, E. & Freedman, M., 2010, Delaying the onset of Alzheimer disease: bilingualism as a form of cognitive reserve, Neurology, 75, 1726

Crozet, C. & Liddicoat, A., 2000, *Teaching culture as an integrated part of language*, Applied Linguistics Association of Australia, Melbourne

Earle, D., 2009, <u>The effect of first language and education on literacy, employment and income</u>, Ministry of Education, Wellington

East, M., Shackleford, N. & Spence, G., 2007, *Promoting a multilingual future for Aotearoa/New Zealand,* Journal of Asian Pacific communication, 17, 1

Education Counts, 2012, <u>Subject Enrolment Statistics and Roll</u>
<u>Return information</u>, Ministry of Education, Wellington
Education Review Office, 2012, <u>Improving education</u>
<u>outcomes for Pacific Learners</u>, Wellington

Enderwick, P. & Gray, D., 1992, Foreign languages in international business: the case of New Zealand, Journal of Teaching in International Business, 4, 1

Foreman-Peck, J., 2008, Costing Babel, Quarterly Economic Bulletin, Julian Hodge Institute of Applied Macroeconomics Garfinkel, A., & Tabor, K.E., 1991, Elementary School Foreign Languages and English Reading Achievement a New View of the Relationship, Foreign Language Annals, 24, 375

Grin, F. & Vaillancourt, F., 1998, Language Revitalisation Policy, New Zealand Treasury Working Paper 98/06, Wellington

Grin, F., 2004, On the costs of cultural diversity, In Philippe van Parijs (ed), Linguistic Diversity and Economic Solidarity, de Boeck-Université, Brussels, Belgium

Hallett, D., Chandler, M.J. & Lalonde, C.E., 2007, Aboriginal language knowledge and youth suicide, Cognitive Development 22, 392

Holmes, J., 1997, *Keeping tabs on language shift in New Zealand: some methodological considerations*, Journal of multilingual and multicultural development, 18, 1

Houkamau, C. & Sibley, C., *The Multi-Dimensional Model of Māori Identity and Cultural Engagement,* New Zealand Journal of Psychology, 39, 8

Keysar, B., Hayakawa, S.L. & Gyu An, S., 2012, The foreign-language effect: thinking in a foreign tongue reduces decision biases, Psychological Science, 661, 8

Kovács, A. & Mehler, J., 2009, *Cognitive gains in 7-month-old bilingual infants*, Proceedings of the National Academy of Sciences, 106, 16

Krizman, J., Marian, V., Shook, A., Skoe, E. & Kraus, N., 2012, Subcortical encoding of sound is enhanced in bilinguals and relates to executive function advantages, Proceedings of the National Academy of Sciences of the United States, 109, 20 Lewis, M.P. & Simons, G.F., 2010, Assessing Endangerment: Expanding Fishman's GIDS, Revue Roumaine de linguistique, 55, 2

Le Métais, *New Zealand Stocktake: An International Critique*, <u>Learning Policy Division</u>, Ministry of Education, Wellington Lo Bianco, J., 1987, *National Policy on Languages*, Australian Government Publishing Service, Canberra

Marsh, D., Beardsmore, H., Bot, K., Mehisto, P. & Wolff, D., 2009, <u>Study on the Contribution of Multilingualism to Creativity</u>, European Commission, Brussels

May, S., Hill, R. & Tiakiwai, S., 2004, <u>Bilingual/immersion</u> <u>Education: Indicators of good practices</u>, Ministry of Education, Wellington McGee, C., Jones, A., Bishop, R., Cowie, B., Hill, M., Miller, T., Harlow, A., Oliver, D., Tiakiwai, S. & MacKenzie, K., 2003, <u>Report on the New Zealand National Curriculum, 2002 –</u>
<u>Australian Council of Educational Research</u>, Education Counts, Ministry of Education, Wellington

Melitz, J., 2008, *Language and foreign trade*, European Economic Review, 52, pp 667-699

Ministry of Education, 2012, <u>Pasifika Education Plan 2013-2017</u>, Wellington

Nagy, N. & Meyerhoff, M., 2008, *Introduction in Social lives in language*, John Benjamin's Publishing Company, Amsterdam, ISBN 9789027218636

New Zealand Human Rights Commission, 2008, Languages in Aotearoa New Zealand, Te Waka a Reo Statement on Language Policy, Wellington, ISBN: 9780478329269

Prebble, J., 2009, <u>The Victoria Model: The First Four Years A</u>
<u>Cost/Benefit Analysis of the Skilled Migrant Programme: 2005</u>
<u>- 2008</u>, Language in the Workplace Occasional Papers, 9

Ramirez, J., Yuen, S. & Ramey, D., 1991, Final Report: longitudinal study of structured English immersion strategy, early-exit and late exit transitional bilingual education programmes for language-minority children, San Mateo, CA, Aguirre international.

Satherley, P. & Lawes, E., 2008, <u>The Adult Literacy and Life Skills Survey: Overview and International Comparisons</u>, Education Counts, Wellington

Spence, G.P., 2004, *The practice of policy in New Zealand,* Current issues in language planning, 5, 4

Spoonley, P. & Bedford, R., 2012, *Welcome to Our World? Immigration and the reshaping of New Zealand*, Dunmore Publishing, Wellington

Statistics New Zealand, 2001, <u>Survey on the health of the Māori language</u>, Wellington

Statistics New Zealand, 2006, *Census*, <u>Statistics Culture and Identity</u>, Wellington

Statistics New Zealand, 2011, <u>National Ethnic Population</u> <u>Projections</u>, Wellington

Te Puni Kōkiri 2011a, 2006, <u>The Health of the Māori</u> <u>Language</u>, Wellington

Thomas, W. & Collier, V., 2002, A National Study of School Effectiveness for Language Minority Students; Long-Term Academic Achievement. Santa Cruz: Center for Research on Education, Diversity and Excellence (CREDE)

United Kingdom Department for Education, 2012, Consultation on the draft Order making modern foreign languages statutory for Key Stage 2, London

United Nations, 1966, <u>International Covenant on Civil and Political Rights</u>, Article 27, 16 December, Resolution 2200A (XXI)

United Nations, 1990, <u>Convention on the Rights of the Child</u>, 2 September 1990, Resolution 44/25

United Nations, 1992, <u>Declaration of the Rights of Persons</u>
<u>Belonging to National or Ethnic, Religious and Linguistic</u>
<u>Minorities</u>, 18 December, Resolution 47/135

United Nations 2008, <u>Convention on the Rights of Persons</u> with Disabilities, Article 9

Waitangi Tribunal, 2011, <u>Ko Aotearoa tēnei: A report into</u> <u>claims concerning New Zealand law and policy affecting</u> <u>Māori culture and identity Wai 262</u>, Waitangi Tribunal report, Wellington

Waitangi Tribunal, 2012, <u>Matua Rautia: the Report on the Kōhanga Reo Claim Wai 2336</u>, Waitangi Tribunal report Wellington

Waite, J., 1992, *Aoteareo: Speaking for Ourselves*, Learning Media, Ministry of Education, Wellington

Wang, H. & Harkness, C., 2007, <u>Senior secondary students'</u> <u>achievement at Maori-medium schools</u>, 2004-2006 Fact Sheet, Ministry of Education, Wellington

Watts, N., 1992, *The use of French in exporting and tourism*, Massey University, Palmerston North

Methodology

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