An investigation into

the extent and application

of bilingual signage

in New Zealand public libraries

by

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ACKNOWLEDGEMENTS

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ABSTRACT

Bilingual signage is important both for the assistance it renders patrons as they navigate through the library, and for the statement it makes about a library's commitment to biculturalism. Good signage enables library users to find their way around a library and locate the information they need. Many Māori report feeling uncertain and alienated in libraries, and bilingual signage has been identified as an important component in the process of making Māori feel welcome in libraries. This study aims to discover to what extent public libraries commit to biculturalism through their bilingual signage, and how bilingual signage is displayed to alleviate library anxiety among Māori users, and as well to determine to what degree the level of signage in public libraries can be related to the proportion of Māori in the local population.

A mixed methods research design has been applied to investigate the quantitative and qualitative information collected in the first phase of the research (an online survey sent to 330 public libraries throughout New Zealand), followed by the second phase of qualitative in-depth data gathering in the form of personal visits to 12 Auckland public libraries to conduct a qualitative content analysis of their signage.

The findings reveal that over 50% of New Zealand public libraries have some form of bilingual signage, but they also show that much bilingual signage is employed at the upper level of signage rather than the deeper levels applicable to wayfinding. Practices in bilingual signage that need to be addressed are identified. Suggestions are made for further research.

Keywords: Bilingual signage, Māori, biculturalism, wayfinding, library anxiety

1. INTRODUCTION

Bilingual signage is important both for the assistance it renders patrons as they navigate through the library, and for the statement it makes about a library's commitment to biculturalism. This research project explores both these aspects of bilingual signage and attempts to define the relationship between these two approaches. It is hoped that the outcomes of this research will benefit public libraries by showing trends in bilingual signage nationwide, and give an indication of best practice for bilingual signage in the public libraries of Aotearoa New Zealand.

2. PROBLEM STATEMENT

Good signage enables library users to find their way around a library and locate the information they need. If the signage is easy to read and understand it will encourage patrons to feel comfortable and confident in the library environment. However, in a number of studies many Māori report feeling uncertain and alienated in libraries (Worth, 1995, p. 9); (Szekely, 1997, p. 54). As libraries have worked with Māori to built better relationships and encourage them to use the library, bilingual signage has been identified as an important component in the process of making Māori feel welcome in libraries (MacDonald, 1993, p. 85); (Wilson & Nathan, 2001, p. 10). The incorporation of biculturalism into the mission statements of libraries is reflected in the increased use of bilingual signage in libraries. Up till now there has been no research concentrated on

bilingual signage in New Zealand libraries. The current research project arose from a small earlier study by this researcher in 2009, which highlighted questions about the extent, application and consistency of bilingual signage in libraries (INFO523 2009, Assignment 1).

This research project is designed to discover to what extent the demographics of the local population is reflected in the levels of signage in public libraries, to examine how bilingual signage is used by libraries, and to explore the application, extent, and consistency of bilingual signage in New Zealand libraries.

3. THEORETICAL FRAMEWORK

The rationale for this research is underpinned by the principles of biculturalism, and informed by theories of library anxiety, and of wayfinding in a library. These theories are discussed in the review of the literature.

4. REVIEW OF THE LITERATURE

Relevant literature on bilingual signage covers the historical background – in New Zealand society in general and in the library world in particular; theories on library anxiety and wayfinding in the library environment which pertain to this problem; international research on welcoming minority language-speakers into the library; best practice for library signage; and current bicultural awareness in New Zealand libraries and initiatives to make libraries more welcoming to Māori.

4.1. Background

A number of studies provide background to this research by covering the development of biculturalism in the wider New Zealand society. The research edited by Yensen, Hague and McCreanor (1989) argues for the responsibility of Pakeha under the Treaty of Waitangi to accord equal respect and honour to Māori rights and culture and language. Yensen finds racism deeply embedded in our national structures, and cites the UN draft Declaration on the rights of Indigenous peoples as a model for New Zealand to follow:

> The right to maintain and use their own languages, including for administrative, judicial and other relevant purposes [clause 9] (United Nations Commission on Human Rights, 1988), cited in (Yensen, Hague, & McCreanor, 1989, p. 145).

Vasil (2000) further argues that the uniqueness of Māoritanga in the world makes it vital both to Māori and to Pakeha that the distinctive Māori identity, tradition, values and language should be preserved, and official documents should be published in both Māori and English (Vasil & Victoria University of Wellington. Institute of Policy Studies, 2000, p. 55). Orange (2004) recounts the progress of efforts to highlight the Treaty of Waitangi as integral to the fabric of New Zealand society. It was the recommendation of the Waitangi Tribunal which led to the recognition of te reo Māori as an official language of New Zealand and the establishment of the Māori Language Commission (Orange, 2004, p. 164).

4.2. Libraries and Māori – the problem

Research within the New Zealand library community highlights the problems experienced by Māori in the library environment. Hemara (1985) argues that as the indigenous people of the country, Māori must be heard and their needs met. She observes

that Māori find it traumatic to enter a public library, and suggests that in order to encourage them into the library, the surroundings should communicate a 'sense of Māoriness or at least biculturalism' (Hemara, 1985, p. 29). Worth's (1985) survey on services to Māori at Auckland Public Library confirms Hemara's finding, as nearly a third of participants reported feelings of discomfort in a library. The most frequently cited reason for this discomfort is that the library is too Pakeha (Worth, 1995, p. 9). While Wilson's (2001) follow-up survey reports an improvement to the situation over the following five years, 20% of participants still experienced feeling uncomfortable in the library some or all of the time (Wilson & Nathan, 2001, p. 9). A reason for this may be found in McRae's (1990) argument that bicultural initiatives have been introduced in a piecemeal fashion rather than in an integrated nation-wide programme, with the suggestion that these bicultural projects have not been developed in consultation with Māori. McRae advocates consultation between the library profession and Māori in order to create libraries which serve the needs of both cultures (McRae, 1990, p. 12). However, Winiata (2002) maintains that the sense of discomfort experienced by Māori in libraries is a result of the two cultures of New Zealand being required to 'co-exist' within the limited space of a library, and he goes against the trend towards biculturalism by calling for separate library settings for each culture to develop independently (Winiata, 2002). While this argument has valid points, its suggested move against biculturalism towards separatism has not gained wide acceptance in New Zealand library literature.

4.3. Relevant theories

4.3.1. Biculturalism

Dennis (2008) comments, 'Biculturalism is [...] one of the tests of a nation's sensitivity and sensibility regarding the care and value of the individual and the group in a civilised society.' (Dennis, 2008, p. 27). The study of bilingual signage in a library is in effect a study of how libraries care for and value the individuals in the libraries' catchment areas. However, the discussion of bilingual signage in other parts of the world generally assumes there is a standard language and a minority alternative. Biculturalism in New Zealand takes a different stance from anywhere else, and as Yensen, Hague & McCreanor (1989), Ritchie (1992), and Vasil (2000) have argued, it requires that both languages and cultures should be treated as of equal value.

A completely different view of biculturalism is taken by Ballantyne (2005) after encountering the public image of the National Library, which he sees as shaped by a commitment to biculturalism. The library's bilingual signage and the resources allocated to Māori language materials, artwork and historical objects are regarded as the medium for a specific ideology which is integral to the national identity in contemporary New Zealand. As Ballantyne sees it, the framework of biculturalism is implicated in rewriting the nation's past, and prioritising national identity at the expense of other histories of ethnic and religious identity (Ballantyne, 2005). Ballantyne's problematising of the concept of biculturalism requires the library community to approach the question of bilingual signage with a very clear idea of what they want to achieve and how they will go about it.

Research conducted by Macdonald (1993), Garraway and Szekely (1994) and Szekely (1997) focuses on the status of biculturalism in New Zealand libraries; these studies have inspired the current research project.

4.3.2. Information rich, information poor

A further hypothesis with relevance to the topic of bilingual signage is Wresch's (1996) theory of information rich, information poor. Wresch contends that the flow of information is all one way, from the information rich to the information poor, with the result that the voice of the information-rich culture drowns out that of information-poor cultures (Wresch, 1996). As applied to the New Zealand situation, this means that if all the information in New Zealand libraries is indicated by signage in the language of the dominant culture only, the minority culture is disadvantaged and experiences difficulty in accessing that information.

4.3.3. Library anxiety

Mellon's (1986) Library Anxiety theory identified the factors which contribute to anxiety among college students when using the library. Two of the sources of library anxiety suggested by Mellon's research are relevant to this project:

> (b) a lack of knowledge about the location of materials, equipment, and resources; [...] and (d) a lack of knowledge about how to proceed with a library search. (Mellon, 1986), as reported in (Onwuegbuzie, Jiao, & Bostick, 2004, p. 33)

Mellon's findings were built on by Bostick's (1992) research which established a tool for quantifying library anxiety in the Library Anxiety Scale. Feelings of being lost and confused are themes identified by Mellon, corroborated by Bostick's finding that one of the key factors in library anxiety is that of comfort with the library (Mellon, 1986),

(Bostick, 1992). These themes are reflected in research by Worth (1995) and Wilson (2001) into biculturalism in Auckland City Libraries, which found that a significant proportion of respondents reported feeling uncomfortable in the library some or all of the time. Effective library signage is intended to allay patron anxiety by guiding them easily through the library. The present research explores the extent to which bilingual signage in New Zealand public libraries addresses these themes.

Onwuegbuzie, Jiao and Bostick (2004) suggest further sources of library anxiety are associated with how approachable the library staff are, and how much comfort the library generates. This relates directly to the Māori experience of discomfort in libraries. Onwuegbuzie, Jiao and Bostick find that while library-anxious users have an exaggerated perception of danger or threat, library signs and graphics can help users feel more oriented, encourage them to feel welcome, and can spare them the discomfort of asking for assistance (Onwuegbuzie et al., 2004, pp. 235-240).

4.3.4. Wayfinding in the library

Exploring a particular aspect of the library anxiety syndrome, Eaton's (1991) study on wayfinding in the library concludes that users are affected, consciously or unconsciously, by messages coded in the building itself, as well as in its signs.

4.4. Studies on signage

Gibson's (2009) work on wayfinding suggests categories of signs that provide a useful standard for measuring levels of signage in libraries. Gibson identifies four main categories of signs: identification, directional, orientation and regulatory. In the library environment, **identification signs** are the name of the library, and names above different

areas within the library, such as Reference or Issues. **Directional signs** show the patron where to go for particular resources, such as the different subject areas within the library. They also include the signs on the end of a row of shelves to lead the patron to the resources in that section. **Orientation signs** offer patrons an overview of their surroundings. These are usually maps or plans, and often found just inside the entrance to a library, showing the general layout. Library classification charts, showing the breakdown into different subject areas of the Dewey classification scheme, also come into this category. **Regulatory signs** are both instructional – how to use a piece of library equipment, for example, and admonitory – for example warnings not to consume food or drink near the computers. Gibson also mentions a fifth category, **vernacular signage** or "undesigned signs" which are ad hoc signs put up for an immediate need (Gibson, 2009, p. 47). In the library environment these include temporary signs created for a one-off or short-term occasion, such as a sign to say that borrowing is closing half an hour early today. Personal observation suggests that libraries may have prominent identification signage in both Māori and English, but that the signage at other category levels is less consistent. The outcomes of this study give an indication of the extent to which libraries utilise bilingual signage at all category levels.

The majority of signs discussed in wayfinding theory are verbal signs, but non-verbal signs and pictographs are also considered in this research as further insights into bilingual signage in libraries.

Tufte's (1990) study on the visual presentation of information shows the importance of non-verbal factors in signs. Variations in font type and size and the relative position of words on the sign can influence which part of the sign stands out (Tufte, 1990, p. 31).

The literature on library signage looks at both the reasons for having signage in libraries, and at what the signs are designed to achieve. Although much of the available literature dates from twenty or thirty years ago, it is still relevant today. Cohen (1979) points out that most libraries expect users to find materials for themselves, and good signage is essential to help them do so. To achieve this purpose the content of signs should consist of simple words and good use of colour. Pollet & Haskell (1979) contend that signs function both as communication and as public relations media, and are more effective if they build on the meanings and expectations that patrons bring with them. The essential quality that a library user seeks in a library is *legibility*, so both Pollet & Haskell, and de Miribel (1998) argue that a profusion of signs will only add confusion. De Miribel also points out the difficulty for library staff in putting themselves in the place of someone who is unfamiliar with the library's layout. They make assumptions about the ability of patrons to navigate around the library based on their own familiarity with the library, and therefore underestimate the importance of library signage (de Miribel, 1998, p. 88). In a report on findings from their user survey on library signs, Bosman & Rusinek (1997) recognise that good signage helps the user move efficiently and accurately through buildings and reduces questions at service points.

More recently, Bundy (2004) argues that libraries have a social function as places of connection, operating not just as a place but an experience, and commends trends in the design of public and academic libraries in Australia and New Zealand, to create 'readable' spaces through layout and good signage.

4.5. International studies on bilingual signage

Of the many research papers dealing with multicultural, bicultural or bilingual patrons in libraries worldwide, few address the issue of signage. Boyd's (1993) research on designing signs for multicultural patrons in Ottawa Public Library offers helpful and practical advice. Multicultural signage is advocated for libraries frequented by multicultural patrons, but only when the need is established. Signage is seen as a tool for increasing access to library services and both libraries and users are expected to benefit from the transaction. However, Boyd's suggestion for using simplified terms in the minority language implies that multicultural patrons are illiterate in their own language.

Boyd believes the purpose of signage is to enable speakers of minority languages to find their way around the library more easily. Ocón (2000) takes a wider perspective that bilingual Spanish/English signage can not only improve access to library services for the Latino community in the United States, but help create a welcoming environment. However, like Boyd's, his suggestion for simplified signage in the minority language seems condescending.

Other researchers consider the issue from an ideological standpoint. Roy (2007) endorses the presence of indigenous languages on library signs because it acknowledges the identity of indigenous peoples (Roy, 2007). However, whereas Roy supports the concept of making public libraries more welcoming to indigenous patrons, contributors to the book on indigenous librarianship edited by Szekely (1999) favour the establishment of separate libraries set aside for indigenous peoples. This is in contrast to many views in New Zealand library literature where, apart from a few voices (see (Hemara, 1985)), the weight of opinion is that biculturalism in New Zealand libraries should be developed and

extended within all New Zealand libraries, and not relegated to specialist indigenous libraries (see, for example: (Murphy, 1979); (McRae, 1990); (Garraway & Szekely, 1994); (Cullen, 1996a); (McCauley, 2010; Tashakkori & Teddlie, 2010)).

4.6. Library signage in New Zealand

MacDonald (1993) reports on the survey *Te Ara Tika* that Māori signage is seen as a key feature in drawing attention to Māori special collections. (It is important to note that Māori signage as designated here identifies the collections as something set apart, and as such functions very differently from bilingual signage, which identifies areas of a library usable by both Māori and Pakeha.) However, in the follow-up survey (Szekely, 1997), some respondents rejected the idea of separate Māori collections and endorsed the need for libraries to have a Māori name and bilingual signage (Szekely, 1997, p. 54).

Grace (1994), and Campbell, Hutton & Reweti (2004) argue that biculturalism in New Zealand libraries should be 'not just about . . . providing Māori signage' (Grace, 1994), (Campbell, Hutton, & Reweti, 2004). This implied disparagement of bilingual signage is countered by Cullen (1996), who acknowledges that bilingual signage has a part to play in the biculturalisation of libraries in New Zealand (Cullen, 1996b).

Garraway and Szekely (1994) found that just over half the libraries surveyed in 1992-1994 had some bilingual signage or their library names displayed in both Māori and English. Some (but not all) of this signage was created in consultation with local Māori (Garraway & Szekely, 1994).

An early initiative for bilingual signage in libraries is recorded by Murphy (1979), emphasising that libraries should engage fully with local iwi, and that bilingual signage

should be an indication of the library's full engagement with Māori values. Other initiatives include the 5-point submission from Te Taura Whiri o te Reo Māori (MacDonald, 1993) which calls for Māori signage in all areas of the library. McCauley (2010) records recent initiatives in Tauranga but shows that there is a need for further action.

The Standards for New Zealand Public Libraries (2004), include among the responsibilities of the Library Manager:

N.G 2.1   To provide signage in Te Reo Māori, and
N.G. 2.3 To consider the use of Te Reo Māori in the naming of new library buildings
<div align="right">(Standards for New Zealand public libraries, 2004, 2004, p. 75)</div>

Mangan & Szekely (1995) have produced a manual of bilingual terminology for use in libraries, but there is still a lack of consistency in bilingual signage, not only from one library to another, but even within libraries.

4.7. Conclusion

An assessment of the literature highlights the need for research on the state of bilingual signage in New Zealand libraries. Up until now no survey has been conducted on the consistency of signage from one library to another, or within libraries. The present research addresses this issue. A theoretical framework of biculturalism and library anxiety supports this research and the standards for good signage provide a model for appraising the current status of bilingual signage in libraries.

5. OBJECTIVES

The objectives of this study are to discover the extent to which public libraries commit to biculturalism through their display of bilingual signage, and alongside this to determine to what degree the level of signage in public libraries can be related to the proportion of Māori in the local population, and how bilingual signage is displayed to alleviate library anxiety among Māori users.

6. RESEARCH QUESTIONS

6.1. What is the extent of bilingual signage in New Zealand public libraries?

6.2. To what extent does the level of bilingual signage in public libraries reflect the demographics of the libraries' catchment populations?

6.3. To what level of signage in New Zealand public libraries is the signage bilingual? To what extent is bilingual signage displayed as a wayfinding aid?

6.4. How is the signage represented? What are the variations in content and placement of bilingual signage?

7. LIMITATIONS AND DELIMITATIONS OF THE STUDY

7.1. Delimitations

The issue of bilingual signage in libraries is significant not only in public libraries but in other types of libraries accessible to much of the population, notably academic and school libraries, and special libraries in the GLAM sector (Galleries, Libraries, Art

Galleries and Museums). However, because of the size of the project and the time-frame required for completion, it was not possible to include all these libraries in this research. Nor was it feasible in the time-frame to construct a research instrument to sample all libraries and return a valid response. For this reason the proposed research was limited to the public library sector.

Many libraries with multicultural user populations incorporate signage in languages other than English and Māori. Important as these languages are in their local communities, the issue of multilingual signage falls outside the scope of this study, which focuses on libraries' attitudes to biculturalism as reflected in bilingual signage.

7.2. Limitations

An analysis of the bilingual signage in a small sample of public libraries forms part of this research. The sample chosen was a convenience sample of public libraries which are accessible to the researcher at a journey of not more than an hour, and the selection of libraries was made using purposive sampling. Since the sample is not random, the results of the analysis can not be generalised to the library population as a whole. Having said that, the researcher believes that the results from the small sample constitute a useful test against the large-scale survey, since the environments are of the same type.

8. RESEARCH PARADIGM

A postpositivist paradigm is the preferred perspective for this research. Including aspects of both positivism and interpretavism, it emphasizes the importance of multiple measures and observations, and thus encompasses the widest possible critical

examination of a problem (Williamson, Bow, & Charles Sturt University. Centre for Information, 2002). Signs initially appear to be fixed and static, suggesting a positivist reading, since the positivist view of the world is as a collection of observable events and measurable facts. In fact the content and context of signs varies significantly. The logical approach for this research is therefore the postpositivist paradigm, taking the view that a perception of reality cannot be an objective picture, but instead is based on empirical observation and existing theory (Pickard, 2007).

An major component of the current research is an assessment of the content and context of bilingual signage. On its own this methodology would sit comfortably within an interpretavist paradigm, which seeks to understand and interpret the social, human-constructed world. However, in order to asses the extent of bilingual signage in New Zealand libraries as well as its content, a more structured approach was needed than is normally associated with the interpretavist paradigm. Therefore, the postpositivist paradigm has been chosen rather than the interpretavist, as the postpositivist paradigm offers a more flexible approach. The ontology of postpositivism acknowledges the existence of cause-and-effect relationships but accepts that it may not always be possible to understand these relationships in their entirety (Pickard, 2007).

9. METHODOLOGY

The methodology selected for this research is mixed methods research (MMR), as this offers a broader understanding of the problem under investigation than either a straightforward qualitative or quantitative methodology can do. MMR incorporates elements of both qualitative and quantitative research, for example data collection,

analysis, and the use of quantitative and qualitative viewpoints, in order to achieve breadth and depth of understanding, and corroboration of results (Johnson, Onwuegbuzie, & Turner, 2007, p. 123).

A primary advantage of MMR is its tendency towards balance and compromise. This makes it a useful tool in cross-cultural research, as it has the flexibility to use cultural knowledge and systematic or anecdotal field observations as research data and evidence in different types of research (Tashakkori & Teddlie, 2010, p. 33).

The main reason for using MMR with this research is that it enabled the researcher to gain the wider picture available to quantitative research while harvesting the rich contextual information to be gleaned from qualitative research. This provided the opportunity to bring two methods of enquiry into complementarity with one another to obtain a more comprehensive account of the investigation, see (Bryman, 2008, pp. 608-609).

10. RESEARCH METHOD

10.1. Content analysis

This research reads the signage systems in public libraries as texts in order to extract their underlying meaning and purpose. Since the basic purpose of a sign is to convey a message, the ideal method to carry out research into signs is a content analysis, which requires that the unit of data collection must be a message unit (Neuendorf, 2002, p. 14). A scrutiny of these texts using content analysis methods identifies patterns of usage and application and shows the frequency and range of these patterns. The most useful and

appropriate method to carry out this study was a mixed methods content analysis, or 'hermeneutic content analysis'(Bergman, 2010, p. 388). This provided for an overall quantitative content analysis of the signage in the public library sector, followed by a qualitative content analysis administered to a sub-section of the main sample group. The answers to Research Questions 6.1 to 6.3 were sought in the large-scale survey, while the sub-section in-depth analysis was undertaken to gather richer data for 6.3 and answers for 6.4. This second group of answers tests the findings of the large-scale content survey.

10.2. Population

The population selected for this research is the public libraries of New Zealand for these reasons:

10.2.1. Catchment population.

The research aimed to discover the relationship between the level and extent of bilingual signage in libraries and the proportion of Māori in the local population. As the population served by a public library is the same population served by its local body, information on the proportion of Māori in the population could be obtained from census figures or from local body demographic statistics. Access to comparable figures for the populations of academic or corporate libraries would have been extremely difficult to obtain.

10.2.2. Representativeness.

Public libraries are available to everyone, and so the population served is not restricted by academic eligibility or work conditions. It can therefore be assumed that the signage in a library is available to assist everyone.

10.2.3. Size of study.

There are 50 public library systems in New Zealand, constituting a total of over 340 libraries. These figures were extracted from the Public Libraries of New Zealand website, http://www.publiclibrariesofnewzealand.org.nz , retrieved 6th December 2010 (See Appendix 1), and the libraries' and councils' websites. The researcher was able to contact 330 of these libraries, and from this number received 106 valid responses (32%). Using an online calculation tool ("Sample Size Calculator," n.d.) and table (2006), these figures gave a confidence level of 95% at a margin of error / confidence interval of 7.85%.

10.2.4. Sample for in-depth analysis.

A convenience sample of 12 libraries in the Auckland area was visited by the researcher in order to conduct an in-depth content analysis of their signage. There was a danger that a randomised selection of libraries in such a small sample would not present a good range of libraries to assess. It was therefore decided to select libraries for the sample using a non-probabilistic technique called 'purposive sampling' (Bryman, 2008, p. 458). Public libraries within the Auckland area were grouped, first into the geographical areas of the four former cities of Auckland, and then into groups of small, medium and large libraries within each area. Although the 55 libraries of the Auckland area now form one library system, it was hoped that historical differences of location and differences of size would provide a good variety of data. Nevertheless, it is important to emphasise that this was not a representative sample and it is not possible to generalise from this sample to the wider public library population. This analysis was

carried out to provide a richer context for the assessment of bilingual signage in libraries.

10.3. Data collection

Human Ethics Approval from the School of Information Management at Victoria University of Wellington was obtained prior to beginning data collection from public libraries. Before launching the second part of the project, a courtesy email was sent to the Manager, Auckland Libraries, informing her of the researcher's intention to visit twelve of the Auckland libraries to conduct a content analysis. Permission was obtained from the Marketing Manager of Auckland Libraries to photograph signs in these libraries.

10.3.1. Large-scale study.

In order to collect survey data from as wide a group of public libraries as possible within the time constraints of this study, a survey questionnaire was the instrument chosen for this section of the research. Although a content analysis is usually conducted by a direct interface between the researchers or coders and the text, a survey questionnaire is also consistent with this research method (Neuendorf, 2002, p. 49). Specific questions on the content of bilingual signs and the sign content of the library (see Appendix 2), were uploaded onto the SurveyMonkey web-based survey application, www.surveymonkey.com. Where an email address was available, the researcher contacted libraries by email inviting them to participate in the online questionnaire (see Appendix 4). The questionnaire on the SurveyMonkey website opened with the participant information page, and participants were required to give their consent to participate before proceeding with the questionnaire. The survey

requested information on the extent, content and placement of bilingual signage, which fitted within the parameters for a content analysis. Sections were available for free text comments, providing opportunity for contextual data to be included. A follow-up email was sent through the NZLibs mailing list about ten days before the end of the time-frame to remind participants to complete the questionnaire. For the 90 libraries where no email contact information was available, an invitation to participate in the survey was sent by post to these libraries, accompanied by a participant information sheet, a consent to participate, and a printed questionnaire with a stamped addressed return envelope. Libraries were asked to complete the questionnaire by the 30th April 2011. Survey participants were given the option to withdraw their information from the survey by 30th April 2011. No participants chose to withdraw.

10.3.2. Sub-section in-depth analysis.

The collection of content data from twelve libraries in the Auckland region took place during the month of May 2011. The researcher visited each library in this sample over a period of two weeks from the 6th of May, and conducted a qualitative semiotic content analysis of each library's signage. Taking into account the five categories of verbal signage identified by Gibson (Gibson, 2009, pp. 46-54) and the non-verbal design elements of signs discussed by Tufte (Tufte, 1990), signage was surveyed according to the survey questionnaire and with consideration of the following themes:

- what signs are bilingual and what signs are monolingual (Māori or English)
- their context in the library, i.e. how and where in the library they are displayed; and what they are signs to;
- visibility and line of sight; the size of the signs; and legibility;

- relative placement of Māori and English signage on a bilingual sign;

- relative font size; and colour of the text of each language on the sign.

Photographs were taken to provide further contextual data.

10.3.3. Demographic research.

Statistics on the percentage of Māori in the catchment populations of each participant library were located from the 2006 Census data, the most recent data available on the Statistics New Zealand website ("About a place : 2006 census data," 2006). In the case of suburban libraries, an average percentage was calculated from an aggregate of suburbs immediately surrounding the library, whose residents are likely to be using the library. In order to maintain validity of data, it was proposed that where no population information was available for a particular area, the questionnaire responses from that particular library would not be used in the final analysis. In fact population data was obtained for the localities of all libraries which submitted a response to the questionnaire. An additional section to the online questionnaire was created and the relevant statistical data was manually entered for each participating library.

10.4. Data Collation

93 valid responses to the online questionnaire were received; 3 participants also sent photographs as illustrations of the signage in their libraries, and gave permission for these photos to be used in the report. A further 13 postal questionnaires were returned. The responses from the postal questionnaires were manually entered by the researcher into the SurveyMonkey online questionnaire.

10.4.1. Survey questionnaire

The data gathered from the survey questionnaire was downloaded from the SurveyMonkey website, and included automatically generated reports and charts. Open-ended responses and comments were analysed to supply additional and contextual information, and grouped into relevant clusters. The main focus was on analysing trends in the application of bilingual signage in different library settings, particularly in relation to the population profile of the area where each library is situated.

10.4.2. Data from library visits

Coding was analysed using a constant comparative analysis (Pickard, 2007, p. 242) as data was extracted from each site in the sub-section research exercise. This was coded using an open coding process. These results were cross-checked against the results from each subsequent library in the smaller sample as the research proceeded. A process of axial coding was then undertaken, to group the data into thematic categories (Pickard, 2007, p. 245). This final coded set was applied to test the findings of the large-scale research and to supply additional contextual perspectives (Bergman, 2010, p. 392).

11.   TERM DEFINITIONS

Bilingual sign   Sign conveying a message in both English and Māori

Library Name sign   the sign displaying the name of the library on the outside of the building where the library is housed.

Library information sign   A sign, normally at the front entrance to the library, showing the hours when the library is open, and sometimes contact

	information.
Main Service points	Places in the library for returning and borrowing books, using computers, and asking for information assistance.
Main collection areas	the larger sections of the library's collection, such as Children's Fiction and non-fiction, Adult Fiction and non-fiction. Libraries have varying criteria for what divisions work for them.
Māori collection	Books on subjects about Māori and of interest to Māori, including books in Te Reo, and held together in a discrete section of the library
Directional sign	Sign indicating where to go to find information and materials, e.g. signs on the ends of rows of bookshelves to indicate what is in these sections (such as Biography, Travel, etc.)
Orientational sign	Sign to help a library user navigate through the library, such as a map or floorplan, or a chart to show subject classifications
Regulatory sign	Sign showing rules to be observed in the library. These can be an **Instructional** sign telling people how to use equipment such as self-issue machines, or an **Admonitory** sign giving instructions on behaviour, (e.g. *please supervise your children*; or *No Eating or drinking*).
Vernacular sign	A temporary sign created by library staff within the library for an immediate and short-term need.

12. RESULTS

The results present the data from the large-scale survey, grouped according to the five levels of signage discussed by Gibson (2009). The tables with each question present a summary of the raw data in the same format as downloaded from the SurveyMonkey application. The questions for the different levels of signage follow the same format, so apart from a fuller discussion of the first question, the results are presented in summary, with comments on notable points of interest. Population data sourced from the Statistics New Zealand website was also gathered for each library which responded to the questionnaire and the results were grouped into broad population bands. The exception was two respondents who abandoned the questionnaire after attempting the first question; no population data was collected for these libraries.

The calculated percentage of Maori population in the library's zone, as per 2006 census figures from Statistics New Zealand.		
Answer Options	Response Percent	Response Count
less than 5 percent	5.7%	6
5 to 9 percent	40.6%	43
10 to 19 percent	33.0%	35
20 to 29 percent	12.3%	13
30 to 39 percent	4.7%	5
40 to 49 percent	2.8%	3
50 to 59 percent	0.9%	1
60 percent or more	0.0%	0
answered question		106
skipped question		2

Table 1. Population data for the percentage Maori in the library's zone (calculated from Statistics NZ figures)

This data was collected in order to provide a perspective on whether the presence or absence of bilingual signage might be influenced by the percentage level of Māori in the population of the library's community. These results were cross-tabulated with the main survey questions to detect any emerging patterns. However, after checking the results of

these tests, it became evident that no clear patterns or trends in the incidence of bilingual signage could be traced back to the level of Māori in the population.

The questionnaire results are further expanded by contextual data provided by the comments in the survey and by data collected from the library visits made by the researcher, and illustrated with photographic examples taken by the researcher or supplied by survey respondents.

12.1. Identification Signage

This is the most extensive category of signage found in all public libraries. Most of these signs are fixed permanent installations, although there are some which overlap with the vernacular category discussed later.

12.1.1. Library Name.

The purpose of these questions is to discover how libraries identify themselves to their wider community by the name exhibited on the outside of their building, specifically by the presence or absence of bilingual signage. Where there is bilingual signage, further questions are asked about how the bilingual signage is represented.

Qu. 1. **How is your library name displayed on the outside of the building?**

How is your library name displayed on the outside of the building?		
Answer Options	Response Percent	Response Count
English only	62.6%	67
Maori only	0.0%	0
Māori and English	27.1%	29
Other	10.3%	11
answered question		107
skipped question		1

Table 2. Comparative figures for signage of external library name

Responses to the survey came from all areas of New Zealand and from public libraries of all sizes. One respondent explained the lack of signage on the outside of their building in this way: "We live in a small place that everyone knows where the library is." Other comments made it clear that many libraries are too small to have much space available for any signage at all, and they are also often required to operate on limited funding which is

Figure 1. The exterior signage of a small rural library

earmarked for other projects than signage. Other libraries share their premises with other council facilities, and jostle for space for any library signage on the outside of their building. In these situations bilingual signage is not felt to be a priority.

Even so, over a quarter of all responding libraries identify themselves with bilingual library name signage.

A cross-tabulation comparison of these figures with the population demographic table data above was conducted. In the interests of providing a clearer picture, the data for libraries with a Māori population of 40 - 49% and 50% and over was not included, as there were too few libraries responding in these groups to offer a valid comparison. The cross-tabulation gives the following result:

2. How is your library name displayed on the outside of the building? (please tick one box only)	❖ Create Chart ↓ Download					
	The actual percentage of Maori population in the library's catchment area, based on 2006 census figures from Statistics New Zealand.					
	less than 5 percent	5 to 9 percent	10 to 19 percent	20 to 29 percent	30 to 39 percent	Response Totals
English only	66.7% (4)	55.8% (24)	71.4% (25)	69.2% (9)	40.0% (2)	62.7% (64)
Maori only	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Māori and English	16.7% (1)	30.2% (13)	20.0% (7)	30.8% (4)	60.0% (3)	27.5% (28)
Other (please specify)	1 reply (16.7%)	6 replies (14.0%)	3 replies (8.6%)	0 replies (0.0%)	0 replies (0.0%)	9.8% (10)
answered question	6	43	35	13	5	102
					skipped question	0

Table 3: Population data cross-tabulated with responses to Question 1

This table shows that libraries with a higher percentage of Māori in their population do not have a greater incidence of bilingual library name signage. Further cross-tabulation comparisons were conducted for each of the subsequent questions, but again, there were no discernible trends to be found.

The libraries which had bilingual library name signage were then asked further questions about the content of that signage.

Qu. 2.   **Relative placement of Māori and English names on the sign**

How is the bilingual library name sign displayed?		
Answer Options	Response Percent	Response Count
Māori and English side by side	8.8%	3
Māori above, English below	5.9%	2
English above, Māori below	55.9%	19
Other	29.4%	10
answered question		34
skipped question		74

Table 4. Relative placement of Maori and English names on the library name sign

The results show that the most popular format for bilingual library name signs is for the English name to be positioned above the Māori name. Other methods of display

commented on by respondents were: English and Māori names on two separate signs in different places on the building, and one library where "[T]he English is printed in the middle with the Maori around the outside in a circle." However, on the whole the answers to this question show that the English name is privileged above the Māori name by its more dominant position.

Further questions on the comparative font style of English and Māori names show that a third (34%) of bilingual library name signs use the same size font for both English and Māori names, while just under half (46%) have the English name in a larger font than the Māori name. While the distribution of emphasis is not as pronounced as in the placement of the names, these results also show that prominence is more frequently accorded to the English name than to the Māori name. Most signs use the same font style (59.4%), though in some of these cases the English name is bold or in uppercase, or the Māori name is in italics. As Gibson (2009) points out, font styles with a more open void inside the letters are more legible from a distance, so an italic form is often not as easy to read as its non-italic counterpart (Gibson, 2009, p. 80).

Of the twelve Auckland libraries visited by the researcher in a semiotic content analysis, two were opened since 2004. Since a recommendation of the Standards for New Zealand Public Libraries (2004) was 'To consider the use of Te Reo Māori in the naming of new library buildings', one of the objectives of the visits was to discover if this suggestion had been carried out. It was found that neither of these new buildings display the library name in Te Reo Māori. The uniform Auckland Libraries signage (in English only), has been displayed outside all Auckland libraries since the cities amalgamation in November 2010, but also the existing signage on each library building is still in place. However, in only one of these 12 libraries is the signage bilingual. The Māori and English library

names are positioned side by side, although the Māori name is longer and extends further across the sign. The lettering for the Māori name is smaller to allow room for it on the sign, but still large enough to make the name easy to read. The relative size of two names is may be an indication of their relative status, or, as it seems to be in this case, it may be a measure of expediency to ensure both names fit comfortably on the sign.

Figure 2. Relative size of English and Maori library names

However, it is important to bear in mind that printed texts in Western society are left-anchored, that is, they are read from left to right. This means that when scanning any text it is the habit of the reader to direct the eyes to the left-hand side of the text and begin to read there. In terms of semiotics this means that if two signs are side-by-side, and if all other conditions of font size and emphasis are equal, the left-hand sign will be read first, and thus holds a privileged position.

12.1.2. General Library Information and Opening Hours

The function of these signs is to welcome patrons implicitly by informing them when they can use the library.

Qu. 3.   **How is the information for General Library Information & Opening Hours displayed?**
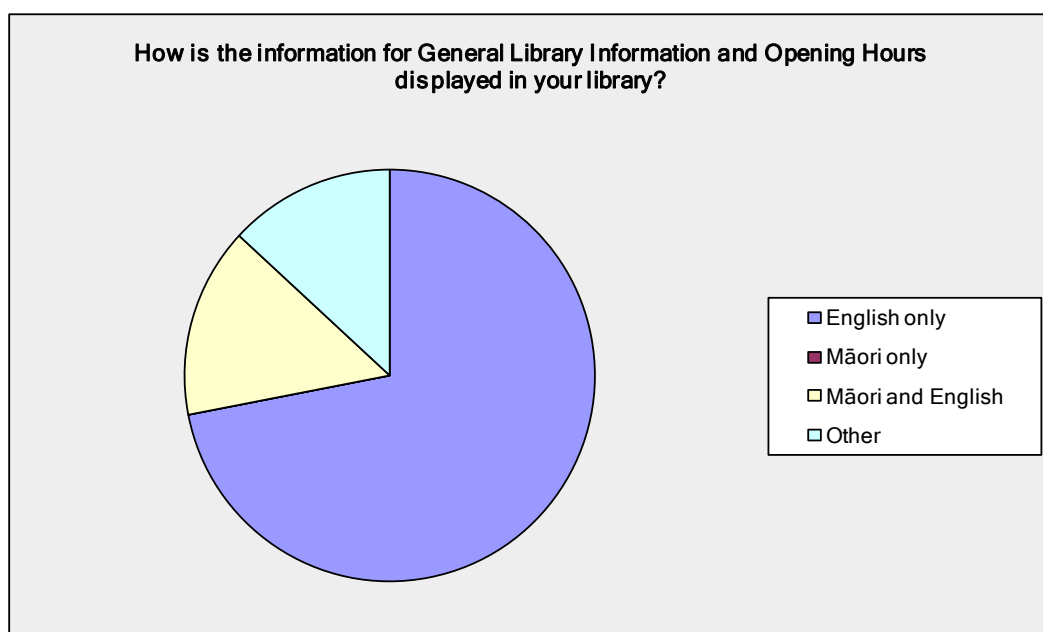
Figure 3. Graph showing relative signage used for library information and opening hours.

The choice of language for this informational sign is predominantly English (72%), with 15% reporting bilingual signage. However, many respondents comment that a welcome message in both Māori and English is often displayed on this sign as well.

Figure 4. Bilingual welcome message

The Māori words of welcome are familiar to both Māori and non-Māori speakers through their use on ceremonial occasions, and the display of the words in both languages serves to reinforce the message. Several comments pointed out that non-verbal signage can also convey a bicultural message:

"At our library, the Maori signage is definitely less prominent than the English. (Howerver, we do have a fabulous Maori artwork in the entrance foyer which to me in some way compensates for this!"

And a comment that although the signage is in English, "The front doors also have Māori designs on the glass."

The sub-section analysis of local library visits reveals a similar pattern. Although the library information signs follow the Auckland Libraries style, variations in detail are allowed for. All libraries carry the welcome message shown in Figure 4, and in addition several libraries have an arrow pointing to the after hours return slot, with the message in both English and Māori. In most cases the hours are displayed in English only, but one very large library gives the library hours in both languages. Interestingly, although this library is in an area where Māori make up 15% of the population, two other smaller libraries with an even higher percentage of Māori (30% and 21% respectively) have only English signage on their equivalent sign.

Qu. 4. **Does the library information displayed have the same meaning in Māori and English?**

Does the library information displayed have the same meaning in Māori and English?		
Answer Options	Response Percent	Response Count
All information signs have exactly the same meaning in Māori and English	31.6%	6
All have the same general meaning but worded differently	15.8%	3
All signs have slightly different meanings in Māori and English	5.3%	1
Some signs are the same, and some are different	5.3%	1
Don't know	42.1%	8
Please add comments on the meanings of library information signs		11
answered question		19
skipped question		89

Table 5. Data on the relative meanings of Maori and English information on bilingual signs

Although many respondents did not know whether their signs carried the same meaning in Māori and English, a greater number were confident that overall the meaning conveyed the same message. This question was attached to each of the main areas of signage covered in the questionnaire. As the responses are deemed to be similar in style and content, they have been grouped together, and the response to any questions on the relative meaning of the two signs will apply to all of these questions.

Several respondents commented that there had been careful consultation with kaumātua on the appropriate wording; however another commented that in their library not enough care had been taken:

"Sometimes comments are made on the dialect – spelling or word used. Should be translated by the local iwi."

"The Māori terms we chose for our signage is conceptual in meaning rather than a direct translation eg: Community Information - Descriptive "Village."

"Maori does not translate perfectly in Te Reo, I am aware that the signage conveys a meaning rather than an exact translation of the english word."

"As far as I know, Maori translations were obtained which were as close as possible to the English meaning."

"We asked our local Kaitiaki to translate the signage for us to ensure we had a local translation."

It is clear from these examples that the creation of bilingual signage was considered very carefully in conjunction with experts in sign-making, te reo, and Māori tradition.

12.1.3. Main service points

These are the sections of the library where patrons are most likely to interact with library staff and seek assistance. Service points include Issues, Returns, Information and Enquiries, and specialist librarians' services.

Qu. 5.   **How are the main service points signposted?**

How are the main service points signposted?		
Answer Options	Response Percent	Response Count
English only	37.7%	40
Māori only	0.0%	0
Māori and English	48.1%	51
Other	14.2%	15
answered question		106
skipped question		2

Table 6. Data on the relative signage for main service points

Almost half of all responding libraries have bilingual signage at their main service points, an acknowledgement that service points as the first point of contact for people coming in the door can make a significant difference to whether or not a library is seen as welcoming place. One respondent commented, "... for Maori customers, the signage & Maori art are initial indicators that these institutions welcome them and may cater for their information needs."

Data on the content of bilingual signs shows that three quarters of signs (75.6%) display the English text above the Māori, while half (51.2%) of respondents reported that the English text on these signs is bigger than the Māori. A majority of libraries (85%) use the same colour font for both languages, but a few variations of emphasis were commented on: the English name sometimes appears in block letters or a bold typeface, and the Māori name is sometimes represented in an italic typeface. These positions are never reported the other way round.

The researcher's visits to local libraries highlighted some further aspects of main service point signage.

- Visibility and line of sight is an important factor to consider in all signage, but especially in bilingual signage which is attempting to make a statement about welcoming both cultures to the library. One library has an excellent bilingual sign on the face of the information desk, represented thus:

<div align="center">

library information and membership
_____

wahi pātai   whakauru

</div>

  Unfortunately the chairs in front of the information desk obscure the sign, so a visitor to the library would have trouble locating this service point. The researcher did not notice this sign until the second visit to this library.

- Some bilingual signage is so difficult to read it appears to fulfil no useful purpose, for example the Returns sign printed on glass inside one library:

Figure 5. Returns sign printed on glass

- The use of the macron in preference to the doubled vowel in the Auckland Libraries' style is not yet standardised; some libraries have signs for Returns in both styles, **Waahi whakahoki** in the old style, and **Wāhi whakahoki** in the new

style. The inconsistent use of macrons was also the subject of comments from the questionnaire that this usage should be standardised.

- Although libraries may have bilingual signage for the main service points, they can also have English-only signage in the same area, which tilts the balance of signage towards the English. This library's Returns section is a case in point:

Figure 6. Returns slot with 3 different signs

12.1.4. Main collection areas

Signs for main collection areas are intended to help library users locate books and library materials. They are most effective when there are enough of them to provide the guidance necessary for locating material, and not so many as to clutter up the visual field. In their work on designing sign systems for libraries Pollett and Haskell (1979) point out that there needs to be a trade-off between the number of signs and their utility(Pollet & Haskell, 1979, p. 29). Szekely's (1997) Māori informants report on their anxiety about 'looking silly' by asking for assistance(Szekely & Weatherall, 1997, p. 27); the solution that Onwuegbuzie, Jiao, & Bostick (2004) recommend is library signs and graphics that spare users the discomfort of asking for assistance (Onwuegbuzie et al., 2004, pp. 235-240).

Qu. 6.   **How are the main areas of the collection signposted?**

How are the main areas of the collection signposted?		
Answer Options	**Response Percent**	**Response Count**
English only	30.2%	32
Māori only	0.0%	0
Māori and English	58.5%	62
Other	11.3%	12
answered question		106
skipped question		2

Table 7. Data for the signage of the main collection areas

The results show that in this sample bilingual signage is the most common type of signage for the main collection areas. Out of all the areas of signage assessed in this research, the main collection areas also have the greatest incidence of bilingual signage. Most respondents (67.8%) were confident that their bilingual signs conveyed the same message overall in both English and Māori, though some commented that the translations were conceptual rather than verbatim:

"Conceptual meanings eg Recent returns - Ngā hokinga hou (Descriptive term = New returns); Relationships - Nga~Tuitui a Tāngata (Descriptive term = Human bindings)."

"Large Print = Purakau Tuhituhi; Catalogue = Panui"

The content of the signs follows the trend of the previous groups of signs in its weighting towards the English name, with three quarters (75.9%) of signs positioning the English name above the Māori name on the sign, and half (50.9% displaying a larger font in the English name than in the Māori name.

Visits to local libraries showed the practical implications of this format. Signs for the main collection areas are normally large and installed so as to be seen from a distance.

However, in many cases it is only the larger name on the sign which can be seen from a distance. In even a small library, the name in smaller, less emphasised type is difficult to see until close up.
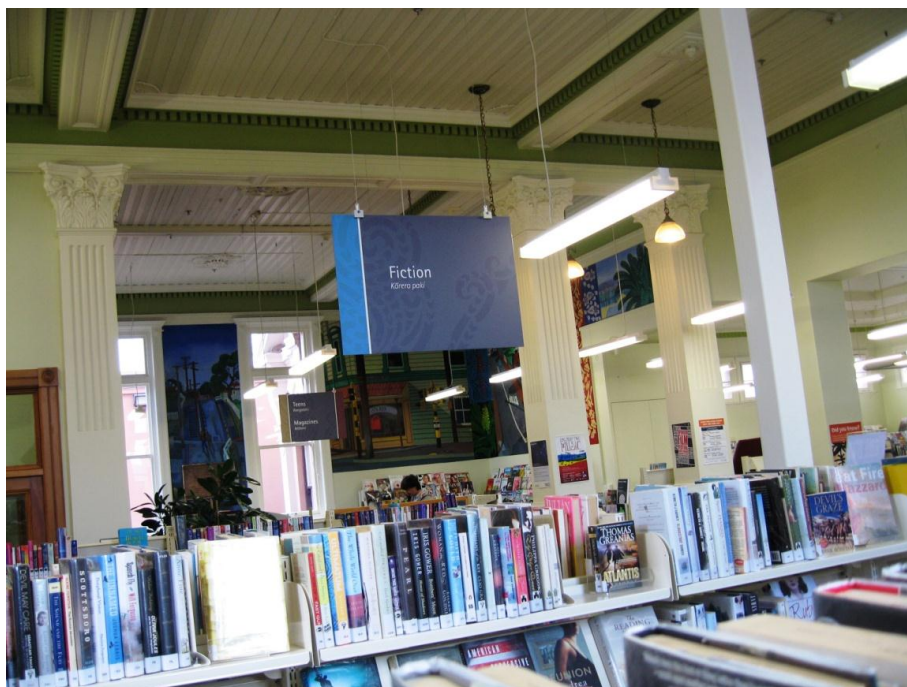
Figure 7. Legibility issues with bilingual signs for the main collection areas

In all the libraries visited the principal signage in the main collection areas is bilingual. However, there are often extra signs in English displayed with these bilingual signs, either to provide further information, (such as a printed sign under **Magazines** | Moheni saying: Our magazines are shelved alphabetically according to titles), or to indicate sub-sections of the main area, (for example, under **Children's fiction** |*Kōrero paki mā te hunga tamariki* , a sign for **Children's graphic collection**). English signs outnumber bilingual signs in all libraries, but verbal signage is just one of a number of instruments that can be used in creating a welcoming environment for Māori. Hemara (1985) suggests that to encourage Māori into the library, the surroundings should communicate 'a sense of Māoriness or at least biculturalism'(Hemara, 1985). An example

of the way this can be achieved is demonstrated in one of the libraries visited, where a sense of biculturalism is created by the use of vibrant Māori-themed artworks teamed with English signage:

Figure 8. Māori-themed artwork creates a strong bicultural atmosphere

One of the problems to be considered with the design of bilingual signs is how to avoid privileging one language over another. The signs discussed privilege the English text over the Māori, but if the emphasis is reversed, it just means the Māori text would be privileged over the English instead. One respondent sent photos of a solution that works for their library:

"They are double sided. On one side the Maori is first and the English second, on the reverse the English is first and the Maori is second. Because they are vertical signs with the wording on a separate line for each language

Figure 9. Double-sided signs for Main Collection area.

they are side-by-side, even though one is "above" and the other "below"."

12.1.5. Māori Collection

In order to gain an understanding of the wider context of bilingual signage in public libraries, a perspective was sought on the way specifically Māori collections are housed and signposted within the main collection areas. Respondents were asked first of all if their library had a Māori collection.

Qu. 7.   **Does your library have a separate Māori Language collection?**

Does your library have a separate Māori language collection?		
Answer Options	Response Percent	Response Count
No	22.6%	24
Yes, both adult and children's books in same Māori language collection	11.3%	12
Yes, but only a collection for Māori children's books	12.3%	13
Yes, a main Māori language collection plus a separate collection for Māori children's books in the children's section	27.4%	29
Yes, a separate collection in the Māori language for adult books	4.7%	5
Other	21.7%	23
answered question		106
skipped question		2

Table 8. Māori collections in public libraries

The results show that 59 libraries (56%) have a Māori collection of one kind or another. A cross-tabulation with the population data shows that there is no marked variation in these figures across all population groups, so that even in the areas where 0-5% of the population is Māori, 50% of libraries have a Māori collection, while in other areas with a higher Māori population, up to 60% of libraries have a Māori collection.

While library visits were not able to establish any correlation between the size of the local Māori population and the presence of a Māori collection, it was found that newer libraries with low to medium numbers of Māori in the population (5% to 11%) are less likely to have a Māori collection than older libraries with similar population figures. In Szekely's (1997) research, opinion among Māori informants was divided on whether a library should have a separate Māori collection or not (Szekely, 1997, p. 23), and it seems that there is still a lack of consensus in the library world about the need for a separate Māori collection.

The next section of the questionnaire seeks to establish whether in a bicultural setting, signage for the Māori collection privileges the Māori names above the English names.

Qu. 8.   **How is the Māori language collection signposted?**

How is the Māori language collection signposted?		
Answer Options	Response Percent	Response Count
English text	9.2%	6
Māori text	9.2%	6
Māori and English text – no pictorial signage	29.2%	19
English text only, but with Māori artwork or symbol	12.3%	8
Māori text with Māori artwork or symbol	6.2%	4
English and Māori text with Māori artwork or symbol	15.4%	10
Other	18.5%	12
answered question		65
skipped question		43

Table 9. Variations in signage for the Maori collection

Qu. 9.   **How is bilingual signage for the Māori collection displayed?**

How is bilingual signage for the Māori language collection displayed?		
Answer Options	Response Percent	Response Count
No bilingual signage in Māori language collection	28.6%	14
Māori and English side by side	6.1%	3
Māori above, English below	22.4%	11
English above, Māori below	26.5%	13
Other	16.3%	8
answered question		49
skipped question		59

Table 10. Placement of names on the signs for the Māori collection

Qu. 10.   **How are the fonts displayed on the signs for the Māori collection?**

How are the fonts displayed on the signs for the Māori collection?		
Answer Options	Response Percent	Response Count
Same size font for Māori & English	38.5%	15
Māori font bigger, English font smaller	15.4%	6
English font bigger, Māori font smaller	25.6%	10
Other	20.5%	8
answered question		39
skipped question		69

Table 11. Relative font sizes in signage for the Māori collection

The response summaries above show that the bilingual signage is present in Māori collections more often than either English or Māori signage on their own. However, even in these libraries, bilingual signs often display English in the dominant position at the head of the sign, as is demonstrated by this picture sent by a respondent:

Figure 10. Bilingual signage in a library's Māori collection

Many comments express dissatisfaction with the current status of signage in their libraries' Māori collections:

"poor really, but like much of the rest of our signage"

"Sadly, not all of our libraries have bilingual signage…YET"

"[I] do not think that the signage for the Maori collections in our library (both adults and childrens) is adequate to alert people to the presence of the collections."

Other comments highlight the fact that lack of space is a factor in decisions about signage for a Māori collection:

"Due to size of library there is only a small area available for separate Maori language childrens collection ."

"English font bigger because it takes less room."

Library visits confirmed this position. Māori collections in larger libraries have magnificent signs, clearly displayed, like this one:

Figure 11. Signage for Māori collection in a large library.

Smaller libraries, on the other hand, have trouble finding room for books, and signage takes second place. The Māori collection illustrated below, with overcrowded shelves, had to make do with two shelf flags about 15 x 7cm large to advertise its presence:

Figure 12. Shelf flags advertising Māori collection in a small library

However it is notable that though small, the signage is nevertheless in Te Reo, while libraries larger than this have only English signage for their Māori collections:
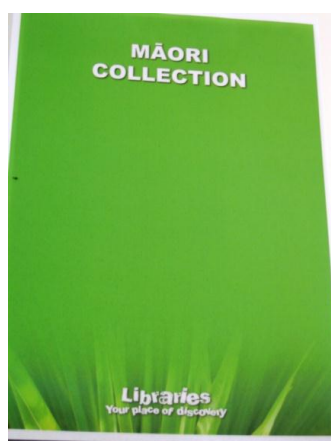
Figure 13. Sign in English for Māori collection

12.2. Directional signage.

At this point the questionnaire moves away from identification signs to focus on signs with different functions. Directional signs show library users the way to the correct aisles and bookshelves for their search. These signs are often found at the ends of bookstacks to indicate what books can be found in those shelves, and can be less prominent than identification signs. As an aid to wayfinding in a library, they are an important component in the efforts of libraries to counter library anxiety.

Qu. 11.   How are the labels at the end of rows of bookshelves displayed?

How are the labels at the ends of rows of bookshelves displayed?		
Answer Options	Response Percent	Response Count
English only	70.0%	63
Māori only	2.2%	2
Māori and English	15.6%	14
Other	12.2%	11
answered question		90
skipped question		18

Table 12. Relative frequency of English and Māori names in directional signs

The results show that at this less prominent level of signage there are far fewer bilingual signs than there are English signs.

Respondents had little to say about this situation:

"Most are English only, but there is a smattering of I Love Te Reo signage on various shelf display ends."

Library visits revealed that in a few libraries directional signage is combined with main collection area signage. In these cases the signage is bilingual, and carries the same features of relative font size and relative placement of English and Māori discussed in previous sections:

Figure 14. Directional signage combined with main collection area signage

In other libraries the directional signage is kept deliberately light, focusing on popular subject areas only, and resulting in signs which are clear and easy to read:

Figure 15. Directional signage in English only

It is evident that a bilingual sign (with double the number of words on it) would look much more cluttered and be less easy to read. Pollett and Haskell (1979) argue that there needs to be a trade-off between the number of signs and their utility (Pollet & Haskell, 1979, p. 29), but it is clear that libraries installing bilingual signs will need to balance the number of words on a bilingual sign with its legibility.

12.3. Orientational signs

These signs are most useful in a large and busy environment such as a big city library, where they can help people locate the area of the library they need to find the resources they are seeking. In a library situation they are most often found in the form of floorplans or subject charts.

Qu. 12. **If you have maps or floorplans to help people navigate around the library, how are they displayed?**

If you have maps or floorplans to help people navigate around the library, how are they displayed?		
Answer Options	**Response Percent**	**Response Count**
No maps or floorplans in my library	69.4%	59
English only	22.4%	19
Māori only	0.0%	0
English and Māori	1.2%	1
Other	7.1%	6
answered question		85
skipped question		23

Table 13. Relative language distribution found on orientational signs.

As the results show, nearly 70% of respondents had no need of a map or floorplan in their library, and of those libraries which did have one, only one library displayed a map or floorplan in both English and Māori. A cross-tabulation comparison with the population data shows that this library is in an area with a high proportion of Māori (30-39%), but it is impossible to assign any statistical significance to such a small section of the sample.

The results from a further question on subject charts revealed that libraries are more likely to have subject charts than floorplans (56% of respondents) but most charts are in English - only 3.6% of respondents have bilingual charts.

These findings are borne out by the library visits. Most libraries visited have subject charts and floorplans in English only, and just one large library has a bilingual list of the subject areas found on the different floors of the library:

Figure 16. Bilingual list of subject areas around the library.

As with most previously-discussed bilingual signs, the English is privileged above the Māori; however, the fact that it is bilingual at all is probably more significant, when most subject charts are in English only.

12.4. Regulatory signage

This kind of signage includes both **instructional** signs which tell people how to carry out a procedure, such as using the self-check machine, and **admonitory** signs, which give guidelines on the appropriate behaviour expected in the library environment.

12.4.1. Instructional signage

Qu. 13.   **Please indicate how signs giving instruction are displayed**

Please indicate how signs giving instruction on using equipment in the library are displayed.		
Answer Options	Response Percent	Response Count
No instructional signs in my library	23.0%	20
English only	73.6%	64
Māori only	0.0%	0
English and Māori	1.1%	1
Other	2.3%	2
answered question		87
skipped question		21

Table 14. Instructional signage

The responses to this question indicate that instructional signage in libraries is exhibited almost entirely in English. This result is corroborated by the findings of the library visits, where no examples of bilingual instructional signage were detected. It might have been expected that messages directed at the wider community, for example a sign instructing people how to join the library, would have been presented in both English and Māori, but this was not the case.

Figure 17. Instructional sign in English.

12.4.2. Admonitory signage

Admonitory signs can be viewed quite negatively, as often they are instructions on what *not* to do, rather than guides for helping people achieve a procedure.

Qu. 14.   **If your library has signs indicating preferred behaviour, how are they displayed?**

If your library has signs indicating preferred behaviour, e.g. No Eating or Drinking; No talking (admonitory signage), how are these signs displayed?		
Answer Options	**Response Percent**	**Response Count**
No admonitory signs in my library	33.3%	29
English only	56.3%	49
Māori only	0.0%	0
English and Maori	3.4%	3
Other	6.9%	6
answered question		**87**
skipped question		**21**

Table 15. Admonitory signage

Although very few libraries report having bilingual admonitory signage, comments provide additional insights. Some admonitory signage is not exclusively bilingual as such, but presented in a number of different languages, including English and Māori.

"We have posters asking parents to keep an eye on their children in English, Maori and other locally used languages. They all say pretty much the same thing and are placed randomly around the library."

Another respondent commented on the need to handle admonitory signage with cultural sensitivity:

"U need 2 b mindful of wt & who yt community is made up of & maori signage needs 2 b a collaborative project with key Iwi leaders of the rohe n Wich the library services."

[You need to be mindful of what and who your community is made up of, and Māori signage needs to be a collaborative project with key iwi leaders of the rohe, and with the library services.]

This is an important point and any future initiatives to introduce more widespread admonitory signage in both English and Māori will need to be handled very carefully.

Library visits revealed the same trends reported in the questionnaire. One library has a bilingual sign asking caregivers not to leave children unattended. Another library has a sign, in English, asking patrons not to eat or drink in the Māori collection area:

Figure 18. Admonitory sign asking patrons not to eat or drink in Māori Collection

The library has no equivalent sign in Māori, even though the sign relates to behaviour in the Māori collection, but it is clear this sign should be regarded as a **bicultural** sign, as it encourages patrons to behave with bicultural sensitivity.

12.5. Vernacular signage

The final category of sign is for temporary or vernacular signage; signs put up quickly and for a limited time, such as a sign to say the library is closing early on that day. These signs are normally created in the library and in a hurry, without the time to pay attention to details of design.

Qu. 15.   **Please indicate how temporary signs are displayed**

Please indicate how temporary signs are displayed. (e.g. signs to say the library is closing early or a special activity is being run in the library next week)		
Answer Options	**Response Percent**	**Response Count**
English only	98.8%	85
Māori only	0.0%	0
English and Māori	0.0%	0
Other	1.2%	1
answered question		86
skipped question		22

Table 16. Vernacular signage

Although the survey responses report an almost universal prevalence of English as the language of vernacular signage, the comments show that in some cases vernacular signage may also be bilingual:

"some temporary signs may have translation to Māori...Merry Christmas one comes to mind."

"Mostly English only but if a Maori activity or event is being run then there may be Maori text as well."

By its very nature, vernacular signage is not regulated, so it is an interesting category to explore, and anecdotal evidence for its use is probably as reliable as statistical evidence.

No bilingual vernacular signage was detected in library visits during the timeframe when the visits were made. It was too early for signs to be displayed for Matariki, so it is not known whether bilingual vernacular signage for Matariki would be displayed at a later date. There was abundant vernacular signage on display, but it was all in English, as in the example below.

Figure 19. Vernacular signage

12.6. Further comments

Opinion amongst respondents was divided regarding the need for bilingual signage. A few thought there was no need for it:

"No maori members."

"I would guess that most people here who identify as Maori don't actually read or speak Maori to the degree required for bilingual signage to be of use to them."

"Our library is 14 metres x 12 metres. By the time we get shelves etc. into the library we have very little room, so putting multi-lingual signage throughout the library would detract from the actual reason for the library. Our Asian population is almost as big as Maori/Pacific Islanders so if we were to put up signage we would have to include Japanese, Korean, Mandarin, Indian & Srilankan - not an option."

"We have several Asian families."

"72% of our population are Pacific peoples, 13% European, 18% Māori."

Others were in favour of it, but hamstrung by lack of funds or by bureaucracy:

"It is very sad that we are not able to do more in the way of te Reo signage for our customers, We listened to Maori feedback to create our separate collections, and it would also be nice to sign the rest of our collection in a bi-lingual way."

"Local runaka has been contacted to provide us with a Maori name for library with the plan to place on outside of building & to include in updated signage."

"I feel that if our Maori signage was more prominent, members of the local Maori population might feel more welcome when visiting our library."

Other comments pointed out that bilingual signage was only one component of biculturalism, and that it is also important to increase the number of Māori working in libraries:

"For many Maori working in libraries, bilingual signage is not the big issue anymore with regard to services for Maori but more so having more Maori working in the library industry. "

A further comment made the point that bilingual signage simply used as tokenism might do more harm than good:

"The 'why' of bilingual signage is important, that it is not just token (eg. we've got signs, we must be bicultural). Signs as the only evidence of biculturalism might in fact be worse than a library with limited or no bilingual signs but instead a genuine engagement with the Treaty and needs of Maori in the community. This might apply especially for smaller libraries with limited funding to invest in signage." This is an important point, and will be discussed in the next section.

13. DISCUSSION

The previous section discussed the results of a wide-ranging survey into bilingual signage in public libraries throughout New Zealand, and a complementary content analysis of the bilingual signage of a selection of libraries within visiting distance of the researcher. As discussed in the Population section above, the response figures from the survey gave a confidence level of 95% at a margin of error / confidence interval of 7.85%.

What is the extent of bilingual signage in New Zealand public libraries?

The findings of the survey questionnaire show that over half of New Zealand's public libraries are likely to have some form of bilingual signage. The recommendations in the Standards for New Zealand Public Libraries (2004) that library managers should 'consider the use of Te Reo Māori in the naming of new library buildings' led the researcher to expect that more libraries would display their library name in Māori as well as English. However, as respondents commented, many libraries throughout the country share premises with council services or other organisations, so the library name may only be one of a number of names displayed. Other libraries are extremely small and underfunded, and don't have the space or the financial resources to invest in exterior signage. Repeated comments in various sections of the questionnaire reinforce the idea that a small library is less likely to have bilingual signage.

The area of a library that is most likely to display bilingual signage is the Main Collection area.

To what extent does the level of bilingual signage in public libraries reflect the demographics of the libraries' catchment populations?

Results from this question demonstrate that a number of survey respondents believe that the level of bilingual signage in a library is related to the number of Māori living in an area; since they believe they have few Māori living in their area they see little need for bilingual signage. However, the population data cross-tabulated against the other questions shows that overall the different levels of signage are spread evenly across all population groups, and there is little relation between the level of bilingual signage in a library and the population demographics. Since this is the case, it opens up the question as to whether the level of bilingual signage in a library is occasioned by ideology rather than demographics.

To what level of signage in New Zealand public libraries is the signage bilingual?

This question seeks to establish whether the bilingual signage in a library is a reflection of the library's commitment to biculturalism, or whether it is employed at a superficial level to proclaim a hollow biculturalism which is not supported by other practices of the library.

Bilingual signage is most often displayed in the area of identification signage, the most widely used area of signage in New Zealand public libraries. Identification signage carries with it elements of status, so that an identification sign carries a subtext about the kind of thing that is being signposted, as well as its actual name. This is especially true for bilingual signage, which can carry the messages of being welcoming to Māori, to declaring a commitment to the Treaty of Waitangi, and embracing biculturalism. Perhaps

because of its status level, identification signage is more likely to carry these kinds of messages than the more functional kinds of signage such as directional, orientational and instructional signage.

However, if the bilingual signage were used purely as a false advertisement for an insincere show of biculturalism, it would create the greatest effect if the signage were bilingual at its most public level, that of the library name sign. The fact that the highest incidence of bilingual signage is found inside the library indicates that it is designed to work within the library environment rather than as an empty show to the world.

One of the most interesting aspects of the research was the low reported level of bilingual vernacular signage, accompanied by a number of comments about how it might be used in a bilingual context. Since it is so temporary and disposable, the reported level of vernacular signage may have represented the situation in the library **at that time**, and at other times the level of vernacular bilingual signage might be greater.

To what extent is bilingual signage displayed as a wayfinding aid?

Identification signs, directional signs and orientational signs can all be used as wayfinding aids. The findings of the survey have shown that currently bilingual signage is mainly displayed as an identification marker. This means that Māori can come into the 58% of libraries with bilingual signage and read the signs in Māori to identify the main areas of the collection. In about one sixth of libraries (15.6%), directional bilingual signage is available to assist in their search. However, there are very few libraries, only about 3%, which can provide bilingual orientational facilities, such as floorplans and subject guides, to assist a more complex search, requiring deeper-level navigation through the library.

How is the signage represented?

In about half of all bilingual signs, the English name or words are in a larger font than the Māori. Other font choices display the English in block letters or a bold typeface in contrast to regular typeface for the Māori words, or else display the Māori words in an italic typeface. These choices have been made because many libraries want to differentiate the two languages, so as to give each one its own identity. However, the cumulative effect of these choices has resulted in the English being privileged over the Māori in almost all bilingual signs.

Signage for Māori collections is more even-handed; about half the signs reverse the normal practice and privilege the Māori over the English, while half still use the same styles as in the rest of the library. A fairer way of approaching bilingual signage might be to alternate the prominence of each name across a number of signs, or as in the photo shown above (Figure 9) show two-sided signs with the Māori and English displayed in alternate modes on each side.

What are the variations in content and placement of bilingual signage?

More than half the bilingual signage in all areas positions English in the dominant position on the sign. This is usually represented with the languages displayed one below the other, with English at the top. However, as Gibson (2009) points out, if an environment is to be truly bilingual, signs should be designed with both languages side by side(Gibson, 2009, p. 63). Even in this scenario, we need to be aware that our left-anchored literacy culture privileges the left-hand name on the sign before the right-hand name, unless adjustments are made to the relative font styles to bring the other name into

prominence. In existing bilingual library signs designed with both languages side by side, English is invariably on the left-hand side.

The survey also asked questions about the policies and decision-making process that drove the introduction of bilingual signage in the respondent libraries. There was a wide range of responses, and overall it appears that decisions on signage these days are made by the library management and/or marketing teams, often (but not always) in consultation with local iwi. In the case of smaller libraries, decisions are often made by the library manager acting alone. Some librarians working alone recognise the importance of incorporating the local dialect into library signage, but have commented on the difficulty of obtaining language support to pursue bilingual signage.

14.   DIRECTIONS FOR FURTHER RESEARCH

The next step in this area of research should be to conduct a study of Māori library users and explore their attitudes to bilingual signage. This has already been done in part the studies by Macdonald (1993) Garraway and Szekely (1994) and Szekely (1997), but it is now nearly fifteen years since the last portion of that study took place, and changes since the study was first conducted are likely to result in different concerns coming to the fore; for that reason the study should be revisited.

The survey does not ask about the effect of the size of a library on its bilingual signage, but this question has surfaced in the course of the research. One respondent commented that many libraries in NZ are at different stages in their journey towards bilingual signage, with the large public libraries leading the way. While large libraries lead the way in bilingual signage, it would be useful to explore the attitudes of Māori to

using large libraries and small libraries, possibly in conjunction with the research suggested above.

In this electronic age bilingual signage in libraries is now extended through the computer screen on library websites and search interfaces. This is likely to grow even faster in the next few years. A library website is both public and private – public in that anyone can go to it and look at it, private in that people will only go to a website if they are searching for it, whereas a physical building can be seen by anyone going past. The assessment and analysis of bilingual signage on library websites is an important project that should be undertaken.

15. CONCLUSION

The results of this study have shown that although there is bilingual signage in over half of New Zealand public libraries, its application in many cases is patchy to say the least. One of the areas that needs most urgent attention is the signage in the Māori collections, where frequently English signage is the only marker. To have English-only signage in a Māori collection could be regarded as disrespectful, and priority should be given to the installation of bilingual signage.

The results of this study have also shown that even where there is bilingual signage, there are inequities in the signage that should be addressed. There is a lot of work still to be done to develop a truly bilingual signage in many libraries.

An area where bilingual signage seems to be flourishing is in the main collection areas. However, even here there are inconsistencies in what is signed and what is not, and in the use of the macron. Standardisation of Māori signage throughout the country is

neither practicable nor desirable, as local dialect varieties should be supported and preserved. However, consistency of language should be encouraged within each library.

The results of this study have shown that it is possible to create a bicultural environment through other means as well as bilingual signage, such as artworks and installations. In areas where the installation of new bilingual signage is not financially viable, it may be possible to borrow artworks on a Māori theme to give the library a bicultural ambience and make it a welcoming place for both Māori and Pakeha.

END

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APPENDICES

Appendix 1 - Public libraries of New Zealand

The information in this table was extracted from the website of the Public Libraries of New Zealand http://www.publiclibrariesofnewzealand.org.nz, and from library and council websites.

Public Libraries	Website	Libraries	Method of Contact
Northland / Auckland area			
Far North district libraries	www.fndc.govt.nz		
		Kaitaia Library	email
		Kerikeri- Procter Library	email
		Kaikohe Library	email
		Kawakawa Library/Service Centre	email
		Paihia Library -Williams House	email
		Kaeo Library	email
Whangarei Libraries	www.whangarei-libraries.com		
		Whangarei Central Library	email
		Kamo Library	email
		Onerahi Library	email
		Tikipunga Library	email
		Hikurangi Community Library	email
		Mangakahia Community Library	email
		Matapouri Community Library	email
		Ngunguru Community Library	email
		Ruakaka Community Library	post
		Tauraroa Community Library	email
		Waipu Community Library	post
		Whananaki Community Library	email
Auckland Libraries - includes libraries from the former city councils of Rodney, North Shore, Auckland City, Waitakere, Manukau, Papakura and Franklin: www.aucklandlibraries.co.nz			
Rodney Libraries	formerly www.rodneylibraries.govt.nz		email
		Wellsford Library	email
		Warkworth Library	email
		Mahurangi East Library	email
		Kumeu Library	email
		Helensville Library	email
		Orewa Library	email
		Whangaparaoa Library	email
North Shore Libraries	formerly www.shorelibraries.govt.nz		
		Albany Village Library	email
		Birkenhead Library	email
		Devonport Library	email

Public Libraries	Website	Libraries	Method of Contact
		East Coast Bays Library	email
		Glenfield Library	email
		Northcote Library	email
		Takapuna Library	email
Auckland City Libraries	formerly www.aucklandcitylibraries.co.nz		email
		Avondale Community Library	email
		Blockhouse Bay Community Library	email
		Central City Library	email
		Epsom Library	email
		Glen Innes Community Library	email
		Grey Lynn Community Library	email
		Leys Institute Library, Ponsonby	email
		Mt Albert (St Lukes) Community Library	email
		Mt Roskill (Three Kings) Community Library	email
		Onehunga Community Library	email
		Otahuhu Community Library	email
		Panmure (Mt Wellington) Community Library	email
		Parnell Community Library	email
		Pt Chevalier Community Library	email
		Remuera Community Library	email
		St Heliers Community Library	email
		Waiheke Community Library	email
Manukau City Libraries	formerly www.manukau-libraries.govt.nz		email
		Botany Library	email
		Manukau Library	email
		South Auckland Research Centre	email
		Highland Park Library	email
		Howick Library	email
		Māngere Bridge Library	email
		Māngere East Library	email
		Māngere Town Centre Library	email
		Manurewa Library	email
		Otara Library	email
		Pakuranga Library	email
		Papatoetoe Library	
		Te Matariki Clendon Library	email
		Tupu Youth Library	
		Beachlands Library (Rural Library)	email
		Clevedon Library (Rural Library	email
		Kawakawa Bay Library (Rural Library	email
		Maraetai Library (Rural Library)	email
		Orere Point Library (Rural Library)	email
Papakura Library	formerly www.papakuralibrary.govt.nz		
		Sir Edmund Hillary Library	email

Public Libraries	Website	Libraries	Method of Contact
Bookinopolis - Franklin Arts Culture and Library Trust	formerly www.bookinopolis.co.nz		
		Pukekohe Branch Library	email
		Waiuku Branch Library	post
Waikato / Bay of Plenty area			
Thames-Coromandel Public Library	www.thameslibrary.co.nz		
		Thames Library	email
		Mercury Bay Library	email
		Tairua Library	post
Hauraki District Libraries	http://library.hauraki-dc.govt.nz/	pauln@hauraki-dc.govt.nz	email
		Ngatea Library	post
		Paeroa Library	post
		Waihi Library	post
		Kaiaua Library	post
		Turua Library	post
		Whiritoa Library	post
Waikato District Libraries	http://www.waikatodistrict.govt.nz/Facilities/Libraries.aspx		
		Huntly Library	email
		Meremere Library	post
		Ngaruawahia Library	post
		Raglan Library	post
		Te Kauwhata	email
		Tuakau	post
Hamilton City Libraries	www.hamiltonlibraries.co.nz		
		Garden Place Library	email
		Chartwell Library	email
		Dinsdale Library	email
		Glenview Library	email
		Hillcrest Library	email
		St Andrews Library	email
Tauranga City Libraries	www.library.tauranga.govt.nz		email
		Greerton Library - Te Ao Marama ki Tutarawananga	email
		Mount Maunganui Library - Te Ao Marama ki Maunganui	email
		Papamoa Library - Te Ao Marama ki Papamoa	email
		Tauranga Library - Te Ao Marama ki Te Papa	email
Waipa District Libraries	www.waipalibraries.org.nz		email
		Cambridge Public Library	email
		Te Awamutu Public Library	email

Public Libraries	Website	Libraries	Method of Contact
Western Bay of Plenty District Libraries	http://www.westernbay.govt.nz/libraries/		
	(shared facilities & email contact with council offices)	Waihi Beach	email
		Katikati	email
		Omokoroa	email
		Te Puke	email
South Waikato District Libraries	www.swlibrary.org		
		Tokoroa Public Library	email
		Putaruru Public Library	post
		Tirau Public Library	post
Otorohanga District Library	http://www.otodc.govt.nz/Community/Library.htm		
		Otorohanga Library	email
		Kawhia Library	email
Rotorua District Library	www.rotorualibrary.govt.nz		
		Rotorua District Library	email
Kawerau District Library	www.kaweraudc.govt.nz/library		
		Kawerau District Library	email
Whakatane District Libraries	www.whakatane.govt.nz/library		
		Whakatane Library	email
		Edgecumbe Library	post
		Murupara Library	post
		Ohope Library	post
Opotiki District Library	http://www.odc.govt.nz/ServicesFacilities/Pages/Library.aspx		
		Opotiki District Library	email
Te Kuiti Public Library (Waitomo)	http://www.waitomo.govt.nz/library		
		Waitomo District Library	email
		Awakino Community Library	post
		Benneydale Community Library	post
		Mokau Community Library	post
		Piopio Community Library	post
Taupō District Libraries	http://www.taupo.govt.nz/library/		
		Turangi Public Library Te Whare Putea O Turangi	email
		Taupō Library	email
		Mangakino Library	email

Public Libraries	Website	Libraries	Method of Contact
Taranaki			
Puke Ariki - New Plymouth District Libraries	www.pukeariki.com		
		Puke Ariki	email
		Oakura Community Library	post
		Bell Block Community Library	post
		Inglewood Community Library	post
		Waitara Community Library	post
		Urenui Library	post
Stratford & District Centennial Library	http://stratford.govt.nz/content.php/article/library/m/67		
		Stratford District and Centennial Library	email
South Taranaki District Libraries	http://www.stdc.co.nz/serv_libraries.php?b=5		
		Hawera LibraryPlus Centre	email
		Patea LibraryPlus Centre	post
		Waverley LibraryPlus Centre	post
		Manaia LibraryPlus Centre	post
		Opunake LibraryPlus Centre	post
		Eltham LibraryPlus Centre	post
		Kaponga LibraryPlus Centre	post
Wanganui District Library	www.wanganuilibrary.com		email
		Davis Central City Library	email
		Alexander Heritage & Research Library	email
		Gonville Cafe Library	post
Hawkes Bay / Manawatu			
Wairoa Centennial Library	http://www.wairoadc.govt.nz/Library/		
		Wairoa Library	
Napier Libraries	http://library.napier.govt.nz/	Napier Library	email
		Taradale	email
Hastings District Libraries	www.hastingslibrary.co.nz		
		Hastings Library	email
		Flaxmere Library	email
		Havelock North Library	email
Central Hawkes Bay District Libraries	www.chbdc.govt.nz		
		Waipukurau Branch Library	email
		Waipawa Branch Library	email
Ruapehu District Libraries		Taumaranui Library	email
		Ohakune Public Library	post
		Raetihi Library	post
Rangitikei District Libraries	www.rangitikeilibrary.org.nz		email
		Marton Library	email
		Bulls Library	email
		Taihape Public Library	post

Public Libraries	Website	Libraries	Method of Contact
Feilding Public Library	www.mdc.govt.nz/library		
		Feilding Public Library	email
Palmerston North City Libraries	citylibrary.pncc.govt.nz		
		Palmerston North City Library	email
		Ashhurst Library	email
		Awapuni Library	email
		Roslyn Library	email
		Te Pātikitiki	email
Tararua District Library	www.tararuadc.govt.nz		
		Dannevirke Public Library	email
		Pahiatua Library	post
		Woodville Library	post
		Eketahuna Library	post
Horowhenua Library Trust	www.library.org.nz		email
		Levin Library	email
		Foxton Library	email
		Shannon Library	email
		Tokomaru Community Library	post
H. B. Williams Memorial Library (Gisborne)	www.gpl.govt.nz	HB Williams Memorial Library	email
		Waikura Valley Community Library	
		Tokomaru Bay Community Library	
		Tolaga Bay Community Library	
		Rere Community Library	
		Matawai Community Library	
		Motu Community Library	
		Waerenga-o-kuri	
Wellington / Wairarapa			
Masterton District Library	www.library.mstn.govt.nz		
		Masterton Library	email
		The branch library is The Wairarapa Archive	email
Kapiti Coast District Libraries	www.kapiticoastlibraries.govt.nz		
		Paraparaumu Library	email
		Waikanae Library	email
		Ōtaki Library	email
Upper Hutt City Library	www.upperhuttlibrary.co.nz		
		Upper Hutt Central Library	email
		Pinehaven Library	email
Porirua Public Library	http://library.pcc.govt.nz		
		Porirua Library	email
		Cannons Creek Library	email
		Plimmerton Library	email
		Pukerua Bay Library	email
		Titahi Bay Library	email
		Whitby Library	email

Public Libraries	Website	Libraries	Method of Contact
Wairarapa Library Service	www.wls.org.nz		
		Martinborough Public Library	email
		Carterton District Library	email
		Featherston Public Library	email
		Greytown Public Library	email
Hutt City Libraries	www.library.huttcity.govt.nz		
		War Memorial Library	email
		Eastbourne Library	email
		Moera Library	email
		Naenae Library	email
		Petone Library	email
		Stokes Valley Library	email
		Taita Library	email
		Wainouiomata Library	email
Wellington City Libraries	www.wcl.govt.nz		
		Wellington Central Library	email
		Brooklyn Library	post
		Cummings Park Library (Ngaio)	post
		Island Bay Library	*email*
		Johnsonville Library	post
		Karori Library	post
		Khandallah Library	post
		Mervyn Kemp Library (Tawa)	email
		Miramar Library	post
		Newtown Library	post
		Ruth Gottlieb Library (Kilbirnie)	post
		Wadestown Library	post
West Coast / Top of the South Island			
Tasman District Libraries	www.taslib.govt.nz		
		Richmond Library	email
		Motueka Public Library	email
		Murchison Public Library	post
		Takaka Memorial Library	post
Nelson Public Libraries	www.nelsonpubliclibraries.co.nz		
		Elma Turner Library	email
		Stoke Library	email
		Nightingale Library Memorial	email
Marlborough District Libraries	www.marlboroughlibraries.govt.nz		
		Marlborough District Library	email
		Picton Library and Service Centre	email
		Havelock School & Community Library	email
		Mahakipawa Community Library	post
		Rai Valley Area School and Community Library	email
		Renwick Museum & Watson Memorial Library	post
		Seddon Community Library	post

Public Libraries	Website	Libraries	Method of Contact
		Waitaria Bay Community Library	post
		Ward Community Library	post
Buller District Libraries	http://www.bullerdc.govt.nz/library/		
		Sue Thomson Casey Memorial Library, Westport	email
		Reefton Branch Library, Inangahua County Library.	email
Grey District Library	http://www.greydc.govt.nz/council-services/libraries/		
		Grey District Library	email
		Rununga Community Library	post
Westland District Library	http://www.westland.govt.nz/index.cfm/1,312,0,0,html/Libraries		
		Westland District Library	email
		Haast Community Library	post
		Kumara Community Library	post
		Okarito Community Library	email
		Ross School Community Library	email
		South Westland Area School Community Library	email
		Whataroa and District School Community Library	email
		Fox Glacier School Community Library	email
Canterbury			
Kaikoura District Library	http://www.kaikoura.govt.nz/services/facilities/library/		
		Kaikoura District Library	email
Hurunui District Library	http://www.hurunui.govt.nz/library-home/		
		Hurunui Memorial Library	email
		Amuri Community Library & Service Centre	email
		Hanmer Springs Community Library & Service Centre	email
		Cheviot Community Library	email
		Leithfield Community Library	post
		Greta Valley Community Library	post
		Waiau Memorial Library	post
Waimakariri District Library	http://libraries.waimakariri.govt.nz		
		Rangiora Public Library (Trevor Inch Memorial Library)	email
		Kaiapoi Service Centre and Library	x
		Oxford Service Centre and Library	email
Public Libraries	**Website**	**Libraries**	**Method of Contact**
Selwyn Library	www.selwynlibrary.co.nz		

Public Libraries	Website	Libraries	Method of Contact
		Rolleston Library	email
		Darfield Library	email
		Leeston Library	email
		Lincoln Library	email
Christchurch City Libraries	christchurchcitylibraries.com		email
		Akaroa Library	
		Bishopdale Library	email
		Christchurch Central Library	
		Diamond Harbour Library	
		Fendalton Library & Service Centre	
		Halswell Library	
		Hornby Library	
		Linwood Library	
		Little River Library	
		Lyttelton Library	
		New Brighton Library	
		Papanui Library	
		Parklands Library	
		Redwood Library	
		Shirley Library and Service Centre	
		South Christchurch Library	
		Spreydon Library	
		Sumner Library	
		Upper Riccarton Community and School Library	
Ashburton Public Library	www.adc.govt.nz/libweb		
		Ashburton Library	email
McKenzie Community Library	http://www.mackenzie-college.ac.nz/library.php		
		Mackenzie Community Library	email
Timaru District Library	www.timarudistrictlibraries.co.nz		
		Timaru District Library	email
		Temuka Library	post
		Geraldine Library	post
Waimate Public Library	www.waimatedc.govt.nz/Council/library		
		Waimate Public Library	email
Public Libraries	**Website**	**Libraries**	**Method of Contact**
Otago / Southland			
Central Otago / Queenstown Lakes District Libraries	http://libraries.codc-qldc.govt.nz		
		Alexandra Library	email
		Arrowtown Library	email
		Cromwell Library	post
		Queenstown Lakes District Library	email
		Wanaka Library	email
		Clyde Library	email

Public Libraries	Website	Libraries	Method of Contact
		Glenorchy Library	email
		Hawea Library	email
		Kingston Library	email
		Makarora Library	email
		Maniototo School/ Community Library	email
		Millers Flat School/ Community Library	email
		Omakau School/Community Library	email
		Roxborough Library	email
Waitaki District Libraries	http://www.waitaki.govt.nz/ Services/Library/default.htm		
		Oamaru Public Library	email
		Palmerston Public Library	email
		Kurow Community Library	post
		Omarama Community Library	post
		Otematata Community Library	post
		Hampden Community Library	post
Dunedin Public Libraries	www.dunedinlibraries.govt.nz		
		Dunedin City Library	email
		Blueskin Bay Library	post
		Mosgiel Public Library	post
		Port Chalmers Library	post
		Waikouaiti Library	post
Clutha District Libraries	http://www.cluthadc.govt.nz /libraries.htm		
		Clutha District Libraries	email
		Owaka Library / Catlins Information Centre	post
		Lawrence Library/ Service Centre	post
		Milton Library/Service Centre	post
		Tapanui Library / Service Centre	post
Public Libraries	**Website**	**Libraries**	**Method of Contact**
Southland District Libraries	http://www.southlanddc.gov t.nz/library-services/		
		Winton Library	email
		Lumsden Public Library	post
		Otautau Library	post
		Nightcaps Community Library	post
		Riverton Public Library	post
		Stewart Island Community Library	post
		Te Anau Library	post
		Waiau Memorial Library	email
		Wyndham Public Library	post
Gore District Libraries	www.goredc.govt.nz/index.cf m/fuseaction/gdc.library		
		Gore Public Library	email
		Mataura Public Library	email
Invercargill City Libraries	www.ilibrary.co.nz		
		Invercargill (Eve Poole) Public Library	email
		Bluff Library	post

Geographical areas	**9**		
Library systems	**50**		
Libraries	**341**		
Number of libraries contacted	**330**		

Appendix 2 - Questionnaire on Bilingual Signage

Questionnaire on Māori/English Bilingual signage:

Please fill out the questionnaire by ticking the appropriate boxes, and adding comments in the sections indicated. When the questionnaire is completed, please send the completed questionnaire to me, either in the stamped addressed envelope provided, or as an email attachment to evanseliz@myvuw.ac.nz .

Please tick the appropriate boxes.

SECTION A: IDENTIFYING SIGNAGE

PART 1.   Main Library Name

1.1.   What is your library's name?

aa

1.2.   How is your library name displayed on the outside of the building? *(please tick one box only)*

English only		*Please go to PART 2*	*ab*
Maori only		*Please go to PART 2*	*ac*
Māori and English		*Please answer all questions in PART 1*	*ad*
Other *(please specify)*		*Please go to PART 2*	*ae*

1.3.   How is the bilingual library name sign displayed? *(please tick one only)*

Māori and English side by side		*af*
Māori above, English below		*ag*
English above, Māori below		*ah*
Other *(please specify)*		*ai*

1.4.   How is the font displayed on the bilingual library name sign? *(please tick one only)*

Same size font for Māori & English		*aj*
Māori font bigger, English font smaller		*ak*
English font bigger, Māori font smaller		*al*
Other *(please specify)*		*am*

1.5.   What are the characteristics of the font/s displayed on the bilingual library name sign? *(please tick any relevant boxes)*

Same font style for Māori & English		*an*
Different font style for Māori and English *(please give details)*		*ao*
Other *(please specify)*		*ap*

1.6.   What colours are the font/s displayed on the bilingual library name sign? *(please tick one only)*

Same colour font for Māori & English	☐	*aq*
Different colour font for Māori and English *(please give details)*	☐	*ar*
Other *(please specify)*	☐	*as*

1.7.   Are there any variations in the Māori and English library names not covered by the previous questions?

Please add your comments about the Māori and English library names   *at*

PART 2. General Library Information and Opening Hours

2.1.   How is this information displayed in your library?

English only	☐	*Please go to PART 3*	*ba*
Māori only	☐	*Please go to PART 3*	*bb*
Māori and English	☐	*Please answer all questions in PART 2*	*bc*
Other *(please specify)*	☐	*Please go to PART 3*	*bd*

2.2.   Does the library information displayed have the same meaning in Māori and English?

All information signs have exactly the same meaning in Māori and English	☐	*be*
All have the same general meaning but worded differently (please give details)	☐	*bf*
All signs have slightly different meanings in Māori and English (please give details)	☐	*bg*
Some signs are the same, and some are different (please give details)	☐	*bh*
Don't know	☐	*bi*
Please add comments on the meanings of library information signs	☐	*bj*

2.3.   How is the bilingual library information and opening hours displayed?

Māori and English side by side	☐	*bk*
Māori above, English below	☐	*bl*
English above, Māori below	☐	*bm*
Other *(please specify)*	☐	*bn*

2.4.   How is the font displayed on the library information sign?

Same size font for Māori & English	☐	*bo*
Māori font bigger, English font smaller	☐	*bp*
English font bigger, Māori font smaller	☐	*bq*
Other *(please specify)*	☐	*br*

2.5. What are the characteristics of the font/s displayed on the library information sign? *(please tick any relevant boxes)*

Same font style for Māori & English	☐	*bs*
Different font style for Māori and English *(please give details)*	☐	*bt*
Other *(please specify)*	☐	*bu*

2.6. What colours are the font/s displayed on the Library Information? *(please tick one only)*

Same colour font for Māori & English	☐	*bv*
Different colour font for Māori and English (please give details)	☐	*bw*
Other *(please specify)*	☐	*bx*

2.7. Are some Library Information signs displayed differently from others?

Please comment on variations in Library information signs	*by*

PART 3. Main Service Points (e.g. Enquiries, Reference, Lending)

3.1. How are the main service points signposted?

English only	☐	*Please go to PART 4*	*ca*
Māori only	☐	*Please go to PART 4*	*cb*
Māori and English	☐	*Please answer all questions in PART 3*	*cc*
Other *(please specify)*	☐	*Please go to PART 4*	*cd*

3.2. Does the signage for the main service points have the same meaning in Māori and English?

All main service point signs have exactly the same meaning in Māori and English	☐	*ce*
All have the same general meaning but worded differently (please give details)	☐	*cf*
All signs have slightly different meanings in Māori and English (please give details)	☐	*cg*
Some signs are the same, and some are different (please give details)	☐	*ch*
Don't know	☐	*ci*
Please add comments on the meanings of signs for main service points	☐	*cj*

3.3. How are the bilingual signs for the main service points displayed?

Māori and English side by side	☐	*ck*
Māori above, English below	☐	*cl*
English above, Māori below	☐	*cm*
Other *(please specify)*	☐	*cn*

3.4.   How are the fonts displayed on the signs for the main service points?

Same size font for Māori & English ☐ *co*

Māori font bigger, English font smaller ☐ *cp*

English font bigger, Māori font smaller ☐ *cq*

Other *(please specify)* ☐ *cr*

3.5.   What are the characteristics of the font/s displayed on the signs for the main service points?
(please tick any relevant boxes)

Same font style for Māori & English ☐ *cs*

Different font style for Māori and English *(please give details)* ☐ *ct*

Other *(please specify)* ☐ *cu*

3.6.   What colours are the font/s displayed on the signs for the main service points? *(please tick one only)*

Same colour font for Māori & English ☐ *cv*

Different colour font for Māori and English *(please give details)* ☐ *cw*

Other *(please specify)* ☐ *cx*

3.7. Please add comments on any bilingual aspect of the signage for the main service points.

☐ *cy*

PART 4. Main Areas of the Collection (e.g. Fiction, Large Print, Children's, Young Adult)

4.1.   How are the main areas of the collection signposted?

English only ☐ *Please go to PART 5* *da*

Māori only ☐ *Please go to PART 5* *db*

Māori and English ☐ *Please answer all questions in PART 4* *dc*

Other *(please specify, e.g. if some areas are treated differently)* ☐ *dd*

4.2.   Do the signs for the main areas have the same meaning in Māori and English?

All signs for main areas have exactly the same meaning in Māori and English ☐ *de*

All have the same general meaning but worded differently (please give details) ☐ *df*

All signs have slightly different meanings in Māori and English (please give details) ☐ *dg*

Some signs are the same, and some are different (please give details) ☐ *dh*

Don't know ☐ *di*

Please add comments on the meanings of signs for main areas ☐ *dj*

4.3.   How are the bilingual signs for the main areas of the collection displayed?

Māori and English side by side	☐	*dk*
Māori above, English below	☐	*dl*
English above, Māori below	☐	*dm*
Other *(please specify)*	☐	*dn*

4.4.   How are the fonts displayed on the signs for the main areas of the collection?

Same size font for Māori & English	☐	*do*
Māori font bigger, English font smaller	☐	*dp*
English font bigger, Māori font smaller	☐	*dq*
Other *(please specify)*	☐	*dr*

4.5.   What are the characteristics of the font/s displayed on the signs for the main areas of the collection? *(please tick any relevant boxes)*

Same font style for Māori & English	☐	*ds*
Different font style for Māori and English *(please give details)*	☐	*dt*
Other *(please specify)*	☐	*du*

4.6.   What colours are the font/s displayed on the signs for the main areas of the collection? *(please tick one only)*

Same colour font for Māori & English	☐	*dv*
Different colour font for Māori and English *(please give details)*	☐	*dw*
Other *(please specify)*	☐	*dx*

4.7.   Please add comments on any bilingual aspect of signage for the main areas of your library.

dy

PART 5. Māori Language Collection

5.1.   Does your library have a separate Māori language collection? *(Please tick all relevant answers)*

No	☐	*Please go to PART 6*	*ea*
Yes, both adult and children's books in the same Māori language collection	☐		*eb*
Yes, but only a collection for Māori children's books	☐		*ec*
Yes, a main Māori language collection plus a separate collection for Māori children's books in the children's section	☐		*ed*
Yes, a separate Māori collection in the adult books section	☐		*ef*
Other *(please specify)*	☐		*eg*

5.2. How is the Māori language collection signposted? *(Please tick all relevant answers, and give details if answering more than one question)*

English text		*eh*
Māori text		*ei*
Māori and English text – no pictorial signage		*ej*
English text only, but with Māori artwork /symbol		*ek*
Māori text with Māori artwork or symbol		*el*
English and Māori text with Māori artwork or symbol		*em*
Other (*please specify, e.g. if some areas are treated differently*)		*en*

5.3. Does bilingual signage for the Māori collection have the same meaning in Māori and English?

All signs have exactly the same meaning in Māori and English		*em*
All have the same general meaning but worded differently (please give details)		*en*
All signs have slightly different meanings in Māori and English (please give details)		*eo*
Some signs are the same, and some are different (please give details)		*ep*
Don't know		*eq*
Please add comments on the meanings of signs for the Māori collection		*er*

5.4. Please add any further comments on the content of the signage for your library's Māori language collection

es

5.5. If your library has bilingual signage for the Māori language collection, how is this displayed?

No bilingual signage in Māori language collection		*Please go to Question 5.8*	*et*
Māori and English side by side			*eu*
Māori above, English below			*ev*
English above, Māori below			*ew*
Other (*please specify*)			*ex*

5.6. How are the fonts displayed on the signs for the Māori language collection?

Same size font for Māori & English		*ey*
Māori font bigger, English font smaller		*ez*
English font bigger, Māori font smaller		*eza*
Other (*please specify*)		*ezb*

5.7. What are the characteristics of the font/s displayed on the signs for the Māori language collection? *(please tick any relevant boxes)*

Same font style for Māori & English ☐ *ezc*

Different font style for Māori and English *(please give details)* ☐ *ezd*

Other *(please specify)* ☐ *eze*

5.8. Please add comments on any aspect of the signage for the Māori language collection which occurs to you.

ezf

SECTION B: DIRECTIONAL SIGNAGE

PART 6. Signs indicating where to go to find information and materials, e.g. signs on the ends of rows of bookshelves to indicate what is in these sections (*e.g. Religion; Biography; Travel; Cookery; Crafts; Military History, etc.*)

6.1. How are the labels at the end of rows of bookshelves displayed?

English only ☐ *Please go to Question 6.3* *fa*

Māori only ☐ *fb*

Māori and English ☐ *fc*

Other *(please specify)* ☐ *fd*

6.2. Do the directional signs have the same meaning in Māori and English?

All directional signs have exactly the same meaning in Māori and English ☐ *fe*

All have the same general meaning but worded differently (please give details) ☐ *ff*

All signs have slightly different meanings in Māori and English (please give details) ☐ *fg*

Some signs are the same, and some are different (please give details) ☐ *fh*

Don't know ☐ *fi*

Please add comments on the meanings of directional signs ☐ *fj*

6.3. Please comment on any bilingual aspect of the directional signage in your library, e.g. the font size, style and colour of the Māori text in comparison to the English text.

fk

SECTION C: ORIENTATONAL SIGNAGE

PART 7. Orientational Signs, Maps and Floorplans

7.1. If you have maps or floorplans to help people navigate around the library, how are they displayed? *Please tick one box.*

No maps or floorplans in my library	☐	*ga*
English only	☐	*gb*
Māori only	☐	*gc*
English and Māori	☐	*gd*
English and Māori with different meanings in each language (please give details)	☐	*ge*
Other *(please specify)*	☐	*gf*

7.2. If you have a chart to indicate subject areas under the Dewey Decimal system or other cataloguing system, how is it displayed? *Please tick one box.*

No subject chart in my library	☐	*gf*
English only	☐	*gg*
Māori only	☐	*gh*
English and Māori	☐	*gi*
English and Māori with different meanings in each language(please give details)	☐	*gj*
Other *(please specify)*	☐	*gk*

7.3. Please comment on any bilingual aspect of the orientational signage in your library, e.g. the font size, style and colour of the Māori text in comparison to the English text.

gl

SECTION D: INSTRUCTIONAL SIGNAGE

PART 8. Signs giving instruction, e.g. on using equipment in the library.

8.1. Please indicate how signs giving instruction on using equipment in the library are displayed *(e.g. using computers, internet access, photocopiers and self-checkout machines)*

No instructional signs in my library	☐	*Please go to PART 9*	*ha*
English only	☐		*hb*
Māori only	☐		*hc*
English and Māori	☐		*hd*
English and Māori with different meanings in each language (please give details)	☐		*he*
Other *(please specify)*	☐		*hf*

8.2.   Please comment on any bilingual aspect of the instructional signage in your library, e.g. the font size, style and colour of the Māori text in comparison to the English text.

hg

SECTION E: ADMONITORY SIGNAGE

PART 9.   Signs giving instructions on behaviour.

9.1.   If your library has signs indicating preferred behaviour (*e.g. No Eating or Drinking; No talking)*, how are they displayed?

No admonitory signs in my library		*Please go to Part 10*	*ia*
English only			*ib*
Māori only			*ic*
English and Maori			*id*
English and Māori with different meanings in each language (please give details)			*ie*
Other			*if*

9.2.   Please comment on any bilingual aspect of the admonitory signage in your library, e.g. the font size, style and colour of the Māori text in comparison to the English text.

ig

SECTION F: TEMPORARY OR VERNACULAR SIGNAGE

PART 10. Temporary Signs, created by library staff for an immediate or short-term need

10.1.   Please indicate how temporary signs are displayed. *(e.g. signs to say the library is closing early or a special activity is being run in the library next week)*

English only		*ja*
Māori only		*jb*
English and Māori		*jc*
English and Māori with different meanings in each language (please give details)		*jd*
Other *(please explain)*		*je*

10.2.   Please comment on any bilingual aspect of the temporary signs in your library, e.g. the font size, style and colour of the Māori text in comparison to the English text.

jf

SECTION G: DESIGN AND POLICY

PART 11. Signage design

11.1. How were the decisions made on the designs of signs in your library?

Librarian decided alone		*ka*
Council branding /specifications applied		*kb*
Librarian or library staff in consultation with local iwi		*kc*
Signage Committee (please indicate in the box below the roles of people on the committee)		*kd*
Other (please specify in the box below)		*ke*
Don't know		*kf*

11.2. Please add any further comments on the design and decision-making process of the library's signage:

kg

11.3. How were the decisions made on the placement of signs in your library?

Librarian decided alone		*kh*
Architect / contracted designer		*ki*
Librarian or library staff in consultation with local iwi		*kj*
Signage Committee (please indicate in the box below the roles of people on the committee)		*kk*
Other (please specify in the box below)		*kl*
Don't know		*km*

11.4. Please add any further comments on sign placement:

kn

PART 12. Population

12.1. What do you estimate to be the percentage of Māori population in your library zone?

Less than 5 percent		*la*
5 to 9 percent		*lb*
10 to 19 percent		*lc*
20 to 29 percent		*ld*
30 to 39 percent		*le*
40 to 49 percent		*lf*
50 to 59 percent		*lg*
60 percent or more		*lh*
Don't know		*li*
Other comments:		*lj*

12.2. Please add any further comments about your library's signage relative to the local Māori population

lk

PART 13. General comments

13.1. Please add any further comments regarding the content of this survey.

ma

PART 14. Photos: if you would like to send photos of your library's signage, please email them to evanseliz@myvuw.ac.nz , with your library's name in the subject line.

Thank you for your participation in this survey.

Appendix 3 - Invitation to Participate in Survey / Email

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI

VICTORIA
UNIVERSITY OF WELLINGTON

Invitation to participate in a Study on Māori/English Bilingual Signage in Public Libraries

Researcher: Elizabeth Evans: School of Information Management, Victoria University of Wellington

To: *[Library Name]* Librarian

Dear Librarian,

I am a Masters student in Information Studies at Victoria University of Wellington. As part of this degree I am undertaking a research project examining the range and extent of bilingual signage in New Zealand public libraries. The University requires that ethics approval be obtained for research involving human participants.

In order to obtain the fullest possible data, I am inviting representatives of all public libraries throughout New Zealand to participate in this study. Participants are asked to complete a questionnaire on the signage in their public library, and to add their own comments at the end of each section.

I would be grateful if your library would participate in my survey. It is important for my research to receive responses from as many individual libraries as possible.

Responses collected will form the basis of my research project and will be put into a written report. Grouped responses will be presented in this report. All material collected will be kept confidential. No other person besides me and my supervisor, Dr Sydney Shep, will see the completed questionnaires. The completed research project will be submitted for marking to the School of Information Management and deposited in the University Library. The research report will be deposited in the VUW institutional repository. Research outputs may include conference papers, and articles submitted for publication in scholarly journals.

Participants who wish to receive a summary of the results should tick the box in the consent form.

Questionnaires will be destroyed two years after the end of the project.

It is expected that the questionnaire will take about twenty minutes to complete. Please go to https://www.surveymonkey.com/s/Signage11 to complete the survey.

Please complete the survey by 21st April 2011.

If you would prefer to have the questionnaire sent to you as an email attachment, or by post (with a stamped self-addressed envelope provided), please reply to this email and let me know your preference.

If you have any questions or would like to receive further information about the project, please contact me at evanseliz@myvuw.ac.nz or my supervisor, Dr Sydney Shep at the School of Information Management at Victoria University, P O Box 600, Wellington, email: sydney.shep@vuw.ac.nz, phone +64-4-463-5784.

Thank you for your consideration of this request, and your help with my research.

Elizabeth Evans.

Appendix 4 - Participant Information Sheet

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI

VICTORIA
UNIVERSITY OF WELLINGTON

Participant Information Sheet for a Study on Māori/English Bilingual Signage in Public Libraries

Researcher: Elizabeth Evans: School of Information Management, Victoria University of Wellington

I am a Masters student in Information Studies at Victoria University of Wellington. As part of this degree I am undertaking a research project examining the range and extent of bilingual signage in New Zealand public libraries.

The University requires that ethics approval be obtained for research involving human participants.

I am inviting representatives of all public libraries throughout New Zealand to participate in this study. Participants will be asked to complete a questionnaire on the signage in their public library. Participants are invited to add their own comments at the end of each section.

It is envisaged that the questionnaire will take about twenty minutes to complete. Participants are asked to complete the questionnaire online at https://www.surveymonkey.com/s/Signage11.

Should any participants feel it necessary, they may withdraw any information they have provided from this project before April 30th without having to give reasons and without penalty of any sort.

Responses collected will form the basis of my research project and will be put into a written report. Grouped responses will be presented in this report. All material collected will be kept confidential. No other person besides me and my supervisor, Dr Sydney Shep, will see the completed questionnaires. The completed research project will be submitted for marking to the School of Information Management and deposited in the University Library. The research report will be deposited in the VUW institutional repository. Research outputs may include conference papers, and articles submitted for publication in scholarly journals. Participants who wish to receive a summary of the results should tick the box in the consent questions.

The data collected will be destroyed two years after the end of the project.

If you have any questions or would like to receive further information about the project, please contact me at evanseliz@myvuw.ac.nz or my supervisor, Dr Sydney Shep at the School of Information Management at Victoria University, P O Box 600, Wellington, email: sydney.shep@vuw.ac.nz, phone +64-4-463-5784.

Signed:

Appendix 5 - Consent Form

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI

VICTORIA
UNIVERSITY OF WELLINGTON

CONSENT TO PARTICIPATION IN RESEARCH

Title of project: **An investigation into the extent and application of Māori/English bilingual signage in New Zealand public libraries**

I have been given and have understood an explanation of this research project. I have had an opportunity to ask questions and have them answered to my satisfaction. I understand that I may withdraw any information I have provided from this project before April 30th without having to give reasons or without penalty of any sort.

☐   I understand that the data I provide will not be used for any other purpose or released to others without my written consent.

☐   I would like to receive a summary of the results of this research when it is completed.

☐   I agree to take part in this research

Signed:

Name of participant: _____

(please print clearly)

Library: _____

Date:

Please fill out and sign this consent form, and return it with your completed questionnaire, in the stamped addressed envelope provided.

Appendix 6 – Coding Schedule

Themes	Coding categories
Māori collection - Signage	
	Bilingual signage planned but not yet in place New Library in progress and signage will be in both languages New signage needed. (Recently moved to nes library and this signage was over-looked.
	Bilingual signage plus extra features to make the collection attractive to Māori Māori and English signage plus a kete installation.
	Different treatment for the adults section and the children's section Adult's - English and Maori text with Maori artwork or symbol Children's - Maori text
	Limited or inadequate signage -There is (no) main sign for the Maori collection just stickers on the shelfs saying Maori collection
	Limited or inadequate signage No specific signage. The spines on all our Maori collection has Maori down the spine. Children and Adult. In the children's section we just have a small sign that runs along the shelf saying Maori books in English or English books in Maori.
	Uncared for - The Maori text sign has fallen off! Maori artwork on shelf fronts Awaiting new signage Children's collection signposted in Maori
	Signage for Māori section is treated differently from signage in the rest of the library We have a large area sign which is Kia Whakapūmau Whakaaro for this area which is just in Maori. Then we are in the process of installing Bayend signage which will be Maori then English. Majority of the items in adult collection are Maori subjects written in English. About a quarter of the children's Maori collection are either Maori or bilingual.
	Spine labels are different. Have a visual design on spine
	Māori signage only Only Maori signage with no translation
	Just Māori Jst the maori sign up & dewey Just says "Maori" Maori only - 2 small signs
Translations	
	Bilingual signage - Maori Collection/Te Kohikohinga Maori but tone sign in the Children's Section is probably a looser translation;Nga Pakiwaitara/Maori and Maori/English bilingual picture books

	- Maori Collection / Nga Taonga Māori - Maori Collection Te Kohinga - -
	Some signage is bilingual - Children's and adults' collections treated differently Adult's - in English it says Maori Collection, while in Maori it simply says Te Kohinga
	Conceptual terminology - Conceptual terminology eg: Nga Pounamu Maori o Aoteaoa = Green stone Treasures of New Zealand Maori Services Centre
	Signs are not bilingual - Māori only - Maori only - We have one sign for our Māori collection (it is not jus a language collection but subject collection) in a separate area. It has a name "Te Matahīapo" which translates to "a prized collection". The children's Māori collection is called "Mātahi" which translate to "new beginnings". - Nga matauranga Māori - **The name of the collection reflects the whenua of this rohe** Unsure wt u mean bt the maori collection has been given a name n referenc 2 a carving that depicts the whenua of this rohe
	No signs yet Hope it will
Is the meaning the same in Māori and English	
	Unsure To the best of my knowledge I assume the meaning is exactly the same, but not 100% sure. I think so from my limited knowldege...Nga Matauranga maori means Maori collcetion
Relative Position on sign	
	Bilingual Anticipate it will be Maori above, English below Adult's - "The Collection" in the foreground with Te Kohinga above and below in background. Main sign is bi-lingual following format of other signs in library ie. English first, Maori below. individual areas of the collection have bilingual dividers - Maori and english side by side - same font size. That we have two different signs, one is around the corner and only in Maori, the other is both languages and English is above the Maori, but is an exact translation. there is no signage for Maori language collections - just for the whole of the Maori collection Maori is above the english
Font sizes	
	Bilingual Anticipate Maori bigger, English smaller

	main sign in English first - Maori second - English larger than Maori
	We are currently ordering the signage for this area and it will be Maori first before English but I haven't seen font mockups yet.
	English font bigger because it takes less room
	Maori only small font and small signs due to space
	Bilingual + enhancements
	The name is carved & displayed above. We hav yt to do signage 4 children's collection
	English only
	Only sign posted in English as includes Maori subject books as well as language books.
	Māori smaller
	Maori is in a slightly smaller font size
	Maori text is generally smaller and underneath English Words
	Temporary sign
	This is a new collection so I have temporarily made laminated signs until I can get budget approval for permanent ones for adult and children.
Font characteristics	
	English prominent
	English bolded, Māori not.
	Maori in Italics
	Compensations for smaller font - equalising
	Although the English font is larger and in bold, the Te Kohinga is featured twice, one in the bottom left, the other in the top right corner.
	Māori prominent
	Font for Maori text is more assertive than that for English
	English font italicised
	English is in italics
	Gill sans is the font used on all our signs to mainatin a consistent look across all of our libraries. We a;lso use this font in our publications Māori font is bold English font is not bold
	there is no signage for Maori language collections - just for the whole of the Maori collection Maori is above the english
	The subject signs for the Maori section are on shelf blocks with the Maori text above and horizontal and the English text below and vertical
	style the same for both English and Māori
	one font style
Consultation with Māori	
	Library worked with local iwi to achieve a translation of signs into the local dialec
	The Māori translation are of local dialect which is the result of working with tangata whenua to provide the translations
	Signage is a bit strange. The colelction is called 'Taiehu' - a name given by local

	iwi, but signage says Taiehu collection (English) and Ngā Kohikohinga o Taiehu (Māori). A bit of a nonsense, really. Original Maori Translation were sourced from Nga Puhi and tainui elders after considerable consultation and subsequent agreement on the best terminplogy to be used
	Language style macrons are used
	## Cultural significance Signs in the Nga Pounmau maori Area wher the subject matter is Māori use Māori languge first to refelct the cultural significance of the area and its resources
Problems	## Dissatisfaction with the state of the signage in their library poor really, but like much of the rest of our signage Due to size of library there is only a small area available for separate Maori language childrens collection . Signage is a bit strange. The colelction is called 'Taiehu' - a name given by local iwi, but signage says Taiehu collection (English) and Ngā Kohikohinga o Taiehu (Māori). A bit of a nonsense, really.(2) do not think that the signage for the Moari collections in our library (both adults and childrens) is adequate to alert people to the presence of the collections. Sadly, not all of our libraries have bilingual signage...YET Our signage as whole is very poor - we are looking at re-doing signage across our libraries and will be looking at bi-lingual signage as part of this review. only really why have we the two Maori signs, the one round the corner only in Maori and the other bilingual
General info	## Stickers on books Currently we have different stickers for books in Te Reo Maori, bi-lingual and English with Maori content
	## Colours on signs - The colours used were chosen to reflect traditional Maori art. - all text in red, on red and black background. These are standard signs throuughout Welington City Libraries, but they are totally different to all the other signage in the libraries The background for the sign is an orange/red colour, chosen it suggest maori traditional art
Small signage	
	The signage for this area initially appears small, i.e. there is no suspended signage alerting viewers to the area but on reflection, that is exactly the same situation for other areas of the main Children's Collection.
	## Proposed initiatives for the Māori Material We are currently reassessing our collections with the aim of separating Maori material. One of the rpojects identifed in the 10 yr plan is to incorporate Matauranga Maori into our libraries in the form of artwork and culture reflecting

	tangata whenua Current resistance to adding separate Maori Childrens collection - will be instigated as part of next reshuffle in May
No separate Māori collection	
	No separate Māori Collection Not applicable as the individual items are part of the whole collection - language is identified on the catalogue.
	Combined collection of Maori language books and books on Maori.
	Māori material integrated with the rest of the collection Individual items are Identified on the collection catalogue as Maori language manuscripts and newspapers and are part of the Research Library Collection and are kept with the manuscript or newspaper collections - they are not kept separately.
No dedicated signage	Signs are not bilingual - English only Not applicable, collection only identified in English no bilingual signage Only in English

WORD COUNT: 20123