

Deaf Studies Research Unit Department of Linguistics and Applied Language Studies

The Vitality of New Zealand Sign Language project

Report on a Survey of the Deaf/NZSL community

Rachel McKee and Micky Vale

September 2014

Executive Summary

A survey of the NZSL community was carried out in 2013 as part of a larger project evaluating the ethnolinguistic vitality of New Zealand Sign Language (NZSL). The aims of this survey were, (1) to gain an overview of the language profile of members of the NZSL community, and the domains in which they use NZSL; (2) to identify NZSL user perceptions about the vitality of NZSL. An online survey link was disseminated via websites, newsletters and social media sites of Deaf-related organisations. Hard copies of the survey were also made available, and responses collected in person (via NZSL translation) from participants with literacy barriers. In total, 255 responses were collected. Three quarters of the survey participants identified as deaf, 9 % as hearing impaired, 2 % as deafblind and 14 % as hearing. Diverse age-groups and ethnicities were represented.

66% of participants identified themselves as most comfortable using NZSL, and a further 22% use NZSL mixed with speaking. One-third of the sample also claimed some conversational ability in a signed of spoken language other than NZSL or English.

The range of life stages at which participants acquired NZSL reflects the routes to sign language use that are typical in most signing communities. 63% reported first using NZSL with deaf peers at either pre-school or primary school age (of whom 8% were hearing members of deaf families), 11 % at high school age, and 26% after leaving school (some of whom are hearing). Close to half reported that neither adult family members nor school teachers had used sign language with them during childhood, while the other half reported some adults in these environments using sign language with them. Most survey respondents had attended a deaf school and/or a deaf unit class at some time during childhood, suggesting that attendance at congregated deaf education settings remains vital to affiliation with a signing community.

The key domains in which participants report using NZSL in their everyday lives are social activities connected with the Deaf community, and at home. About half of the sample also use NZSL in the workplace, and decreasing proportions report using NZSL in public domains such as tertiary education, leisure, public services, and civic life.

Online video communication technology offers a new medium of interpersonal communication for sign language users, extending opportunities to use NZSL over distance and time, rather than only in-person. While these modalities have been adopted across the age spectrum in the NZSL community, their use is higher among younger generations.

Participants report accessibility barriers and inequalities linked to limited awareness and negative perception of sign language users. It was noted that the absence of NZSL on television and its minimal presence in the school system perpetuates the invisibility of NZSL

and constrains Deaf people's opportunity to use NZSL as a means of participation in society. These findings echo those of the 2013 Human Rights Commission Inquiry into NZSL.

Survey findings indicate that the NZSL community has mixed perceptions about the current status and future vitality of NZSL. On the positive side, about half of the participants believe that societal acceptance of NZSL users and accessibility have improved somewhat since recognition in the NZSL Act 2006. NZSL is being used in a range of domains beyond the Deaf community, and the digital mode of online video communication has expanded opportunities for everyday use of NZSL. These factors contribute to a sense that the vitality of NZSL is increasing.

On the other hand, many participants express frustration that the NZSL Act and other policy measures have not resolved barriers to equality of information and participation. Survey participants were asked to identify problems and threats for the future of the NZSL community, and four recurring themes emerged in responses: (1) *Policy and resources* (lack of practical measures and resources from the state to promote and maintain NZSL); (2) *Barriers to accessing society* (interpreting/translation provision is not consistently available in all domains of life, compromising the rights and opportunities of NZSL users); (3) *Cochlear implants* (the normalisation of CI surgery for deaf children is seen to be significantly reducing and delaying acquisition of NZSL by deaf children, and ultimately shrinking the signing population); (4) *Status of NZSL in the education system* (insufficient availability and quality of NZSL in schools, and the fact that most deaf children lack a cohort of signers in mainstream schools, are weakening transmission of NZSL and the development of Deaf community networks). These factors highlight realistic concern about the maintenance of an NZSL community and the integrity of NZSL as a naturally transmitted primary language.

Threats to the vitality of NZSL observed by the Deaf community in 2013 echo those identified by Johnston (2004) in relation to the endangerment of Australian Sign Language (Auslan). The factors and processes being felt by the community now have clearly been in motion for quite some time, and have apparently intensified during the period in which societal recognition of NZSL has advanced the most.

Findings of this survey contribute to the larger project on ethnolinguistic vitality of NZSL, potentially informing policy makers, service providers, and NZSL community stakeholders.

Contents

Exe	ecutive Summary	1
1.	Aims of the Survey	6
2.	Administration of the Survey	6
2	2.1 Response rate	7
3.	Results	7
3	3.1 Profile of respondents	7
	3.1.1 Hearing status/identity	8
	3.1.2 Gender	8
	3.1.3 Ethnicity	8
	3.1.4 Age	9
	3.1.5 Current and childhood place of residence	9
	3.1.6 School background	9
	3.1.7 Hearing status of family members	10
3	3.3 Language Use	12
	3.3.1 Self-reported language strength	13
	3.3.5 Hearing NZSL signers	14
	3.3.2 Use of other languages	14
	3.3.3 Acquisition and childhood use of NZSL	16
	3.3.4 Use of NZSL by participants' children	17
3	3.4 Domains and modalities of NZSL use	18
	3.4.1 NZSL in social domains	19
	3.4.2 Using NZSL via digital technology	20
	3.4.3 Interpreted communication: NZSL in hearing domains	21
3	3.5 Perceptions of NZSL vitality	27
	3.5.1 Deaf children's access to NZSL	27
	3.5.2 NZSL and cochlear implants	28
	3.5.3 Perceived impact of the NZSL Act 2006	28
	3.5.4 Future strength of NZSL community	29
	3.5.4 Perceived threats to NZSL	29
4.	Conclusions	37
	4.1 Acquisition and use of NZSL	. 37

4.2 Domains and modalities of use	38
4.3 Perceptions about the future of NZSL	39
5.0 Implications	41
6.0 Limitations in survey design and validity of data	42
6.1 Sampling issues	42
6.2 Questions may have been misunderstood or misinterpreted	43
References	45
Appendix 1: Survey Questions	46
List of Tables	
Table 1. Hearing status/identity of participants	8
Table 2. Age of participants	9
Table 3. Schools attended	10
Table 4 Number of D/HI/DB relatives	11
Table 5 Category of D/HI/DB relatives	11
Table 6 Partner hearing status	12
Table 7 Hearing status of participants and their children	12
Table 8 Which language is most easy/comfortable for you to express yourself?	13
Table 9 Which language is most easy/comfortable for you to understand?	13
Table 10 Hearing participants' NZSL ability	14
Table 11 Can you hold a conversation in any other language - not NZSL or English?	15
Table 12 Can you have a conversation in a language other than NZSL or English? (by ethnicity)	15
Table 13 Age of first using sign language with other deaf people	16
Table 14 Did the adults you lived with before age 16 sign a lot to you?	16
Table 15 Did your teachers at school sign a lot to you?	16
Table 16 Teachers' use of sign language by age group	17
Table 17 Children's use of NZSL	17

Table 18 Places of everyday use of NZSL	19
Table 19 How many friends and family members sign well enough for a deep con	
Table 20 Do you watch NZSL videos on the internet? (Where?)	20
Table 21 Who do you communicate with using online video chat?	20
Table 22 Use of online video-chat by age	21
Table 23 How often do you use Interpreters?	22
Table 24 Interpreter is provided on request	22
Table 25 Situations where interpreting was not available	23
Table 26 Methods of communicating when an interpreter is not available	27
Table 27 Usual method of requesting/booking interpreters	27
Table 28 Perception of Deaf children's access to NZSL in school	28
Table 29 Has the NZSL Act made any difference to you personally?	29
Table 30 How strong will the NZSL community be in 30 years time?	29
Table 31 Problems and threats for the NZSL community now and in future	30

1. Aims of the Survey

A survey of the community of NZSL users was carried out by the Deaf Studies Research Unit as part of a larger research project, *The Linguistic Vitality of New Zealand Sign Language (NZSL)*, which aimed to assess current status and vitality of NZSL. The project gathered data through mixed methods including interviews, statistical information, a survey of parents of deaf children, and this survey of the NZSL/Deaf community. A broad-ranging survey of the New Zealand Deaf community has not been undertaken since Dugdale's in-depth survey undertaken in 1997¹, which provided a comprehensive account of the educational, social, language and attitudinal characteristics of 100 members of the Deaf NZSL-using community, and identified the key social inequities and barriers they experienced in society.

The aims of this survey were:

- To gain an overview of the language use profile of members of the NZSL community including how they acquired NZSL, and the domains and modes in which NZSL is used
 in their everyday life;
- 2. To identify NZSL users' attitudes and perceptions about the current status of NZSL and its future vitality.

Survey results will contribute to the larger project findings, which may inform policy makers, education and other specialist service providers, parents and NZSL community stakeholders.

2. Administration of the Survey

An online survey was designed, and piloted with a group of twelve Deaf adults of varying language and educational backgrounds at Victoria University of Wellington, in May 2013. Following minor revisions resulting from pilot feedback, the survey was made available online between July 1 and September 1, 2013.

The target population for the survey was the NZSL-using community. Although the aim was mainly to survey Deaf people as the primary language community, it was expected that some non-deaf (hearing) people affiliated who use NZSL in everyday life (such as family members, interpreters or teachers) might also complete the survey. Demographic questions were included to identify hearing status, and certain questions in the survey were identified as relevant to Deaf participants only, and others to hearing participants only.

¹ Dugdale, P. O. 2000. *Being Deaf in New Zealand: A Case Study of the Wellington Deaf Community*. Unpublished doctoral thesis, Victoria University of Wellington.

The survey link was disseminated via the websites, newsletters and social media sites of Deaf organisations. Participants self-selected by completing the anonymous online survey.

The opening page of the survey displayed an explanatory introduction video in NZSL, however all questions and response options were presented in written English. Care was taken to word questions as plainly as possible, considering that the average level of literacy in the Deaf community is lower than in the general population. The researchers were aware that a written online survey would not necessarily reach, or be easily accessible to, all of the target population due to potential limits on their access to the internet, and varying levels of digital literacy. For this reason, the survey was also administered in-person during social events at Deaf Clubs in the three main centres of Auckland, Wellington and Christchurch. In these cases, the visit of a Deaf research assistant at the event was pre-advertised, and a live announcement made at the venue, explaining the project and inviting people to participate in the survey. A Deaf researcher was available to sit with individual participants with either a laptop showing the online version, or a printed copy of the survey, and to translate survey questions and response options into NZSL as needed. Additionally, staff of Deaf Association (Deaf Aotearoa New Zealand) service offices were asked to promote the survey to Deaf individuals visiting their offices during the survey period, and to assist them with translation of survey questions as needed. This individualised administration of the survey in NZSL introduced potential variation in the presentation of questions, but the value of reaching a wider sample of Deaf people through these methods was considered to outweigh risks to validity of the data. These additional modes of data collection aimed to capture participants who might not have had the opportunity, inclination or ability to respond independently to an online survey.

Appendix 1 contains the survey questions.

2.1 Response rate

In total, 275 people opened the survey and 255 completed it, giving a mean completion rate of 93%. Response rates for individual questions (that were relevant to deaf and hearing respondents) varied from 46% to 94.6%. In total, 116 surveys were completed in hard copy and the data from these was transferred into the online survey results. 139 responses were completed online.

3. Results

3.1 Profile of respondents

The first section of the survey asked for information about respondents' gender, hearing status, and the hearing status of partner and family members, age, school background, and place of childhood and adult residence.

3.1.1 Hearing status/identity

The terms used for hearing status options were not defined in the survey as descriptions of either social identity or degree of hearing loss. It is possible for a person who might audiologically be seen as 'hearing impaired' to call themselves 'deaf', reflecting their sense of social affiliation with a Deaf community. Or conversely, a person who is significantly deaf in audiological terms may identify as 'hearing impaired' - usually if they experienced hearing loss post-childhood, or did not have soical connection with deaf people during their formative years. The terms were left undefined in the survey with the assumption that respondents in the target population would interpret these primarily as descriptors of their social-linguistic identity.

The majority of survey respondents identified themselves as deaf (75%), 9 % as hearing-impaired, and 2 % identified as deafblind. 14 % of participants were hearing.

Deaf 196

Table 1. Hearing status/identity of participants

Hearing impaired	24	9%
Hearing impaired	24	3/0
Deafblind	5	2%
Hearing	36	14%
Total	261	100%

Hearing participants' connection to NZSL community

Hearing participants were asked if they held a professional or vocational role connected to the Deaf community. 42 % (15 people) did not; (answers to a later question about children indicated that 3 were parents of a deaf child). 25 % (9) were education professionals or paraprofessionals, 17 % (6) were interpreters, 14 % (5) were employers or workmates of a Deaf person; and employees of a Deaf organisation or Community/Social worker each made up 6 % (2 of each).

3.1.2 Gender

60 % of participants were female and 40 % were male.

3.1.3 Ethnicity

_

The survey sample represented a range of ethnic backgrounds. The majority (78%) were Pākehā New Zealanders, and Māori were the second largest group, comprising 15 % of respondents. These proportions match those in the general New Zealand population. Pacific Islanders (3%) and Asians (3%), were among the participants, but in smaller proportions than in the general population (7.4% and 11.8% respectively). South Africans constituted 2

² Statistics New Zealand 2013. *QuickStats about culture and Identity.2013 Census*. Accessed electronically August 4, 2014 at: http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-culture-identity.aspx

% of the sample; this identity was specified in identity options because it is known that in recent years, a growing number of Deaf migrants from South Africa have joined the NZSL community, particularly in Auckland. 6 % reported 'other' ethnicities.

3.1.4 Age

The largest number of respondents were aged 31-50 years old (42%). 23 % were 18-30 years old, and 21 % were 51-70 years old. Over 70 year-olds constituted 10 % of participants, and 3 % were 12-17 years old.

Table 2. Age of participants

12 - 17 years	8	3%
18 - 30 years	61	23%
31 - 50 years	110	42%
51 - 70 years	54	21%
over 70 years	27	10%
Total	260	100%

3.1.5 Current and childhood place of residence

71% (179) of the participants currently live in the three main cities of New Zealand, namely, Auckland, Christchurch and Wellington and surrounding areas. A further 22 % (56) of the respondents live in other cities and towns in New Zealand, and 4 % (9) in rural areas. 3 % of respondents (8) live outside New Zealand.

The survey asked where respondents had mainly lived before the age of 16. 50 % reported they had grown up in Auckland or Christchurch, where the two Deaf Education Centres (formerly known as deaf schools) are located. 33 % of respondents had mainly lived in other cities and towns in New Zealand, while 6 % had lived in rural areas. 11 % of participants had mainly lived outside New Zealand before the age of 16.

3.1.6 School background

The type of school attended is closely associated with deaf people's opportunities to acquire and use NZSL during childhood, since deaf education settings bring deaf children from hearing families into contact with other deaf children, and potentially into contact with the small percentage of deaf children who are native signers by having deaf parents. The survey asked deaf or hearing impaired participants to indicate which school(s) they had attended from seven choices, listed in Table 3. Respondents could indicate all the types of schools they had attended, since most have attended more than one type, except for generations above the age of 50 who may have attended only a residential deaf school (common until the 1970s).

Table 3. Schools attended

#	Answer	Response	%
1	Van Asch / Sumner deaf school	82	37%
2	Kelston / Titirangi deaf school	60	27%
3	St. Dominic's deaf school	17	8%
4	Deaf Unit class in hearing school	73	33%
5	Mainstream hearing school (no Deaf unit)	80	36%
6	Overseas deaf school or deaf unit class	29	13%
7	Overseas mainstream school	10	5%

Options 1, 2 and 3 in Table 3 are (historically) residential special schools for the deaf, with St Dominic's being a small, private Catholic school that closed in 1989. Overall, 72 % of respondents had attended one of the deaf schools at some time, and 13 % had attended a deaf school or a deaf unit in an overseas country. A third of respondents had attended a deaf unit class in a regular school, and 36% had attended a mainstream school.

The higher figures for attendance at Van Asch compared to Kelston in these results may be due to the fact that the survey was administered in-person at two Deaf social events in Wellington and Christchurch which are both within the southern (van Asch school) region, whereas data was collected in-person only at the Auckland Deaf Club in the northern region.

Cross-tabulation by age shows that 55 % of 18-30 year olds had attended one of the deaf schools at some time, and a further 30 % had attended a deaf unit class. Since the late 1980s, individual mainstream placement has become increasingly common practice, and enrolment at the deaf schools declined substantially during the 1990s. The fact that such a large proportion of respondents had nevertheless attended a deaf school or unit at some time indicates that affiliation with the NZSL community remains closely linked with attending a school setting in which there is a collective of deaf students.

3.1.7 Hearing status of family members

The survey asked whether deaf respondents had any other deaf/hearing impaired/deafblind (hereafter D/HI/DB) relatives in their immediate or extended family. The majority (62%) reported no D/HI/DB people in their own family. For those with deaf family members, it was more common to have more than one: 23 % had two or more D/HI/DB people in their own family, and 14 % had one other D/HI/DB family member.

Table 4. Number of D/HI/DB relatives

None	138	62%
One	32	14%
Two or more	52	23%
Total	222	99%

The following question asked deaf participants about the categories of their D/HI/DB relatives. The 84 participants who have a D/HI/DB family member(s) gave a total of 152 responses across seven categories of relatives, since 52 respondents have two or more D/HI/DB relatives (according to the previous question). Results are shown in Table 5 show that collateral relatives (blood, but not in direct line of descent) are more commonly reported than lineal relatives (those related directly by line of descent).

Table 5. Category of D/HI/DB relatives

Mother	23	30%
Father	15	21%
Brother(s) or sister(s)	41	53%
Grandmother(s) or grandfather(s)	8	10%
Aunt(s) or uncle(s)	27	35%
Other relatives (e.g. cousins)	38	49%

Partners

34 % of participants reported that their partner is deaf, while 26 % have a hearing partner. Only 2 hearing respondents indicated having a deaf partner. 4 % have a hearing-impaired partner. 36 % reported they did not have a partner at the time of the survey. Results cross-tabulated by hearing status are shown in Table 6.

Table 6. Partner's hearing status

			Is your partner:				
		deaf	hearing impaired	deaf- blind	hearing	no partner	Total
	deaf	85	6	1	35	66	193
Are vew	hearing impaired	2	2	0	6	12	22
Are you:	deafblind	0	0	0	0	5	5
	hearing	1	1	0	25	9	36
	Total	88	9	1	66	92	

Children (offspring)

The question about hearing status of participants' children allowed multiple responses, because parents may have children of differing hearing status. 113 (45 %) of all participants reported they did not have a child. 86 % (128) of the 149 respondents who are parents have hearing children. 8.7 % have a deaf child(ren), and 4.6 % have a hearing-impaired child(ren).

Cross-tabulation of participants' and their children's hearing status (Table 7) shows that 90% of the children of deaf people are hearing (103 out of 114), and almost 10 % (11 out of 114) of their children are deaf or hearing impaired. For hearing impaired participants, 31 % of their children (5 out of 16) were deaf or hearing impaired, and 2 children reported by a deafblind participant were D/HI (one of each). 3 of the hearing participants have a D/HI/DB child (one of each category).

Table 7. Hearing status of participants and their children

		lfy	If you have children, are they: (tick more than one, if mixed)				
deaf hearing impaired deafblind hearing I do not have children				Total			
	deaf	9	2	0	103	80	191
Are you:	hearing impaired	2	3	0	11	9	22
	deafblind	1	1	0	0	4	5
	hearing	1	1	1	14	20	35
	Total	13	7	1	128	113	253

3.3 Language Use

The survey investigated participants' preferred or stronger languages, use of additional languages, where and when they had acquired NZSL, and the use of NZSL by their children.

3.3.1 Self-reported language strength

Deaf participants

Deaf participants were asked to select their expressive and receptive language preference in terms of 'most easy/comfortable', rather than in terms of fluency. This wording was intended to elicit language preference, rather than asking for a self evaluation against an undefined 'standard' of language proficiency. Results are shown in Table 8 and Table 9.

The majority of participants chose 'full sign language (NZSL)' as the most comfortable to express (66%) and to understand (71%). The wording of this option reflects colloquial usage in the Deaf community for describing fluent NZSL.

Table 8. Which language is most easy/comfortable for you to express yourself?

1	Full sign language (NZSL)	144	66%
2	Signing mixed with speaking	49	22%
3	TC - Signed English	5	2%
4	English - speaking orally	21	10%
	Total	219	100%

Table 9. Which language is most easy/comfortable for you to understand?

1	Full sign language (NZSL)	155	71%
2	Signing mixed with speaking	42	19%
3	TC - Signed English	4	2%
4	English (through listening and lipreading)	16	7%
	Total	217	100%

Cross-tabulation of language preference by age shows that those who prefer TC- Signed English are all between 18-50 years old, while those who prefer English lip-reading and speaking were spread across age groups. Overall results about language preferences of course reflect the fact that 75 % of participants identify as deaf, since the survey was aimed at the NZSL-using community. Cross-tabulation of language preference by hearing status shows a significant correlation: HI participants favour English, or signing mixed with speaking, and deaf participants predominantly favour NZSL. However there was some contrast between receptive and expressive preferences: both deaf and HI were more likely to select NZSL as easiest to understand, than as easiest to express. For instance, 76 % of deaf participants said NZSL was the easiest mode to understand and 71 % said it was easiest to express. Among HI participants, 23 % said NZSL was the easiest mode to understand, and 14 % said it was easiest to express - indicating that visual language supports comprehension even for NZSL users who can also use spoken English well.

3.3.5 Hearing NZSL signers

The survey was completed by 36 hearing (non-deaf) individuals. They were asked "How did you originally start using NZSL - what was your first point of contact?". The majority (24, or 67%) stated that they learned NZSL by taking a class, 3 from Deaf family members, 3 from Deaf friends, and 6 indicated 'other' (which could include, for example, church, a work role, or self-taught).

Hearing participants were asked to identify how well they can understand and sign in NZSL. Results in Table 10 show that overall, self-reported comprehension ability is slightly stronger than expressive ability.

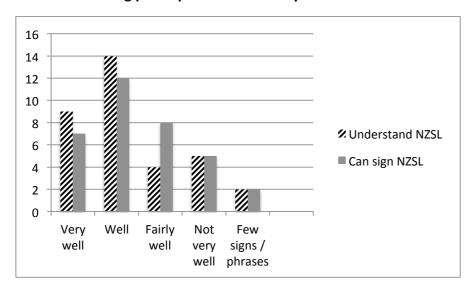


Table 10. Hearing participants' NZSL ability

3.3.2 Use of other languages

Participants were asked if they can have a conversation in any languages other than NZSL or English. Table 11 shows responses cross-tabulated with hearing status. Overall, 65.8 % responded, 'No'. 22 % (56, including 3 who are hearing) of the participants reported that they are conversant in an overseas sign language(s), presumably of another home country or through having lived overseas. 6 % of respondents reported they could hold a conversation in Māori. The remaining 11 % reported the ability to hold a conversation in another spoken home language.

In general, data on self-reported language ability is very approximate. And it is likely that deaf respondents' definition of 'hold a conversation' in a spoken language is different to that of hearing speakers of those languages. For instance, knowledge of Māori by Deaf NZSL users typically entails some high frequency vocabulary and formulaic phrases such as greetings that are often seen in writing, or formal welcomes. For Deaf members of migrant families who speak another language, oral communication (lipreading and speaking) may be restricted to familiar interlocutors and everyday topics in the home domain.

Table 11. Can you hold a conversation in any language other than NZSL or English?

		Are you:			
	deaf	hearing impaired	deafblind	hearing	Total
No	118	19	2	27	166
	61.46%	82.61%	50.00%	81.82%	65.87%
Overseas sign language (home country, or lived in other country)	51	2	0	3	56
	26.56%	8.70%	0.00%	9.09%	22.22%
Māori - spoken	12	1	1	1	15
	6.25%	4.35%	25.00%	3.03%	5.95%
Other language my family or community speaks at home	21	3	2	2	28
	10.94%	13.04%	50.00%	6.06%	11.11%
Total	192	23	4	33	252
	100.00%	100.00%	100.00%	100.00%	100.00%

Cross-tabulation by ethnicity (see Table 12 below) shows that 28 % of Māori Deaf claim ability to hold a conversation in Māori, compared to 3 % or less for NZ Pākehā. Given that only 21 % of the national Māori population report conversational ability in Te Reo Māori, (and only 3 % for the whole population) ³, this figure for NZSL users is probably aspirational, rather than realistic. Conversely, it is interesting that no South African participants report knowledge of another home language, since other languages may be used in their families.

Table 12. Can you have a conversation in a language other than NZSL or English ? (by ethnicity)

		Are you:					
	Pākehā / NZ European	Māori	Pacific Islander	Asian	South African (immigrant)	Other ethnic group	Total
No	135	23	5	3	1	8	165
	69.59%	58.97%	71.43%	42.86%	20.00%	50.00%	65.74%
Overseas sign language (home country, or lived in other country)	41	6	0	2	4	6	56
	21.13%	15.38%	0.00%	28.57%	80.00%	37.50%	22.31%
Māori - spoken	6	11	2	0	0	0	15
	3.09%	28.21%	28.57%	0.00%	0.00%	0.00%	5.98%
Other language my family or community speaks at home	21	2	2	2	0	4	28
	10.82%	5.13%	28.57%	28.57%	0.00%	25.00%	11.16%
Total	194	39	7	7	5	16	251
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

The diversity of responses to this question suggests that individuals in a national sign language community, even a small one such as New Zealand, may be more plurilingual across signed and spoken modalities than is superficially apparent: for example, a Deaf person who immigrated to NZ as a teenager with their hearing family may be conversant in a signed language of the home country, a written and (to some extent) spoken language of the home country, NZSL, written and (to some extent) spoken English. Deaf New Zealanders

-

³ http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-maori-english/maori-language.aspx

who have studied or lived abroad for an extended period usually acquire the sign language of that host country, and may continue to use it on occasion inside or outside New Zealand.

3.3.3 Acquisition and childhood use of NZSL

Participants were asked when they first started to use sign language with other deaf people, which indicates (approximately, rather than precisely) the entry point to socialisation into the NZSL community. Results are shown in Table 13. For 34 % of the respondents, first socialisation with other deaf signers was at pre-school age. 29 % reported first use of sign language with other deaf people during primary school. Note that 8.8 % (3 individuals) of the pre-school/primary age acquirers are hearing respondents who presumably learned NZSL from Deaf family members.

11 % report first exposure to NZSL at high school age, and over a quarter, (26%), after leaving school. However, in the post-school group, just over a third (37%) were hearing participants, presumably adult learners of NZSL, leaving 24 D/HI people (9%) in this category.

Table 13. Age of first using sign language with other deaf people

Pre-school age	86	34%
Primary school age	72	29%
High school age	28	11%
After leaving school	65*	26%*
Total	251	100%

^{*} One third of these responses were from hearing people.

To gain further detail about sources of exposure to sign language during childhood, the survey asked participants if any of the adults they had lived with before the age of 16 years old had communicated with them in sign language ('more than just a few basic signs or gestures'). The same question was posed about teachers, i.e., how much respondents' teachers at school had signed to them. Positive and negative responses were fairly evenly split in both cases, as shown by the results in Tables 14 and 15.

Table 14. Did the adults you lived with before age 16 sign a lot to you?

Yes	105	49%
No	97	45%
Can't remember	14	6%
Total	216	100%

Table 15. Did your teachers at school sign a lot to you?

Yes - most of them	44	20%
Yes - a few of them	68	31%
No	103	47%
Can't remember	3	1%
Total	218	100%

As expected, responses to this question were differentiated by age (see Table 16), with younger respondents reporting more signing by teachers than older participants: approximately 40 % under the age of 30 years said that most of their teachers signed and a further 41 % said that a few of their teachers signed. In the age group 51-70 years, only 28 % said a few or most of their teachers signed, whereas 71 % said their teachers did not sign. These responses reflect a change in policy from 1979 allowing the use of Signed English in deaf education, and NZSL since 1993. But the effect of school communication policy is not uniform: even during the period when signing was not approved in schools (pre 1979), some older participants recall that some teachers signed, while younger participants who were educated after the acceptance of signing in schools had varying experiences of teachers signing to them.

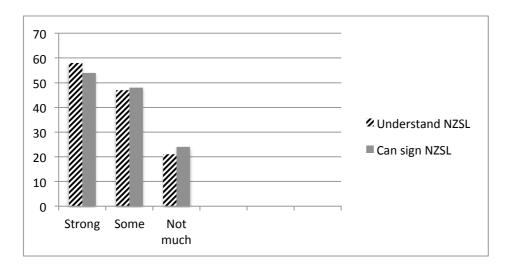
Table 16. Teachers' use of sign language by participant age group

		Think about your teachers a	at school. Did any of your teacher	s sign a lot to yo	ou? (more than just a f	
		Yes - most of them	Yes - a few of them	No	Can't remember	Total
	12 - 17 years	3 42.86%	3 42.86%	0 0.00%	1 14.29%	7 100.00%
	18 - 30 years	19 39.58%	20 41.67%	9 18.75%	0 0.00%	48 100.00%
How old are you?	31 - 50 years	11 12.50%	29 32.95%	45 51.14%	3 3.41%	88 100.00%
	51 - 70 years	5 10.20%	9 18.37%	35 71.43%	0 0.00%	49 100.00%
	over 70 years	6 22.22%	7 25.93%	14 51.85%	0 0.00%	27 100.00%
	Total	44 20.09%	68 31.05%	103 47.03%	4 1.83%	219 100.00%

3.3.4 Use of NZSL by participants' children

Deaf participants with children were asked to rate on a three-point scale how well their children can understand and express themselves in NZSL. As shown previously in Table 7, most of these children are hearing. Results in Table 17 show that the largest proportion of respondents (42-45%) consider their children to have 'strong' receptive and productive skills in NZSL, a slightly lower proportion (37-38%) consider their children to have 'some' NZSL skills, while 17-19% consider them to have 'not much' NZSL proficiency.

Table 17. Children's use of NZSL



This data about the use of NZSL by Deaf people's children is very approximate for two main reasons: (i) The question asks parents about their children collectively, whereas in reality there is usually variation in sign language proficiency between siblings in a single family, relating to birth order and other factors;⁴ (ii) Responses to this question may be partly determined by the age of the children (which was not asked) – i.e., younger children usually being less competent than older children. These details were not captured in the survey question. Nevertheless, the results give a picture of parents' overall feeling about their children's ability to communicate in NZSL, and perhaps an indication of how well they see sign language functioning as a language of family communication.

3.4 Domains and modalities of NZSL use

One section of the survey investigated the domains in which NZSL is regularly used, and asked about the use of NZSL mediated by online video technology, and by interpreters – both of which expand opportunities to use NZSL as a medium of everyday communication.

The survey asked participants to indicate where they normally use NZSL in their life (with or without an interpreter) from the choices listed in Table 18. Results show that the most common domain for NZSL is Deaf social venues and events, and home. Use in the workplace is reported by about half the participants, and less than this in other public domains such as services, shops, and traditional (hearing) cultural domains such as a church or marae. Only 37% reported using Video Relay Service to make interpreted phone calls in NZSL.

⁴ See: Singleton, J. L. & M. D. Tittle. 2000. Deaf parents and their hearing children. *Journal of Deaf Studies and Deaf Education* 5:3, 221 -236.

Table 18. Places of everyday use of NZSL

Answer	Response	%
Deaf club and Deaf	216	0.07
community events	216	86%
Visiting people	162	64%
Home	152	60%
Work	134	53%
Service place (e.g. hospital,	101	440/
doctor, WINZ interview, legal)	104	41%
VRS - phone relay calls	92	37%
School / university / study	85	34%
Sports - playing, or watching	70	28%
Communicate with staff in	C1	2.40/
shops, bars, restaurants etc.	61	24%
Church / religious activities	52	21%
Marae	25	10%

3.4.1 NZSL in social domains

Participants were asked how many of their hearing friends and family members can sign well enough to have a deep conversation in NZSL. Results are shown in Table 19.

Table 19. How many friends and family members sign well enough for a deep conversation?

Answer	Response	%
None	55	25%
1 - 5	85	39%
6 - 10	35	16%
10 - 20	21	10%
More than 20	21	10%
Total	217	100%

A following question probed how many of the hearing people included in the responses shown in Table 19 are interpreters. Descriptive answers varied from "none", to "at least half", to "80%" to "almost all" (with more responses in the "majority" category). Numerical responses to this question ranged from "0" to "30+"; the average of the numerical responses was that 5 of these NZSL competent persons are interpreters (in some cases also

being a family member). These results suggest that: (i) although interpreters hold a professional role in relation to deaf people, they are socially integrated into the NZSL community, as they figure prominently in the category of "hearing friends who sign well"; and (ii) Deaf people's networks of hearing people who are proficient users of NZSL are small, considering that 80 % of respondents know fewer than 10 hearing people capable of a decent conversation in NZSL, and that several of these are likely to be interpreters.

3.4.2 Using NZSL via digital technology

A set of questions inquired to what extent participants use NZSL as a medium of information or real-time conversation via video technology on the internet.

Asked whether they had seen NZSL (video) information on websites of government or other public services, 59 % of respondents said yes, 29 % had not, and 12 % were not sure.

Responses to the question "Do you watch NZSL (videos) on the internet (and where)?" indicate that You Tube, websites of organisations such as Deaf Aotearoa NZ, and Facebook are the main sites where participants access information in NZSL in an online medium. Other locations, shown in Table 20, are the NZSL Online Dictionary and video blogs ('vlog' and 'vimeo').

Table 20. Do you watch NZSL videos on the internet? (Where?)

Answer	Response	%
YouTube	159	67%
Video on a website (e.g. Deaf Aotearoa)	146	61%
Facebook / Twitter	132	55%
NZSL Online Dictionary	129	54%
Other	47	20%
I haven't seen any NZSL on the internet	32	13%
Vlog	30	13%
Vimeo	23	10%

Out of 242 respondents, 69 % report that they use online video technology for real-time conversations in NZSL, on platforms such as videophone, Skype, Oovoo, and Google Hangout. 31 % reported they do not use such technology to communicate.

31 % of respondents said they had posted a video of themselves using NZSL on the internet.

Table 21 shows that participants use NZSL in real-time video chat (eg. Skype) with a range of people and purposes, but most commonly for social talk with deaf friends (90 %).

Table 21. Who do you communicate with using online video chat?

Answer	Response	%
Deaf friends	151	90%
Hearing family	66	40%
Work-related	63	38%
Deaf family	54	32%
Hearing friends	46	28%
Forums or other	36	22%
Deaf groups	30	2270
Other	27	16%

Video-chat technology is used by all age groups, and most commonly by younger people: 85 % of the 12-17 year old participants use it, 75 % of 18 -50 year olds, 67 % of 51- 70 year olds, compared to 20 % of over 70-year olds. (See Table 22.) Similarly, more 18-30 year olds had posted a video of themselves on the internet (41%) than the next age group of 31-50 years (34%), followed by the 51-70 year olds at 29%, and 8% of the 70+ group. While it is not surprising that new technologies are used more by younger generations, it is interesting to find that this new modality has been adopted, to some extent, right across the age range.

Table 22. Use of online video-chat by age

		Do you talk with NZSL using real-t (Eg, videophone, Google H Yes	Total	
				Total
	12 - 17 years	6	1	7
		85.71%	14.29%	100.00%
	18 - 30 years	40	13	53
		75.47%	24.53%	100.00%
How old	31 - 50 years	79	26	105
are you?		75.24%	24.76%	100.00%
are you:	51 - 70 years	35	17	52
		67.31%	32.69%	100.00%
	over 70 years	5	19	24
		20.83%	79.17%	100.00%
	Total	165	76	241
	i otai	68.46%	31.54%	100.00%

3.4.3 Interpreted communication: NZSL in hearing domains

Beyond the social domains of the Deaf community and their homes, deaf people need to use NZSL in their everyday lives in the public domains of workplaces, services, education, commerce, recreation, and many other activities of civic life. The use of NZSL to

communicate with hearing people in these domains is usually facilitated by sign language interpreters, and thus the availability of interpreting is a critical factor in realising NZSL users' right to participation in these domains. The survey sought to measure the extent to which NZSL is used by deaf individuals for interpreted communication in everyday life, and what barriers they encounter in accessing interpreting provision.

The survey asked about use of NZSL interpreters in situations including appointments, meetings, and VRS (phone calls). Results are shown in Table 23. Of the 55 people who said they 'never' use interpreters, 25 of these were hearing and 10 were HI. Both groups are presumably bilingual in NZSL and spoken English, leaving 20 deaf individuals (8% of the 249 responses) who said they never use interpreters.

Table 23. How often do you use Interpreters?

Answer	Response	%
Often - most weeks, or several times a month	99	40%
Sometimes - several times a year	95	38%
Never	55	22%
Total	249	100%

In response to the question about how often a sign language interpreter is provided when requested, 22 % said that their request is always met. 44 % stated that they get an interpreter most times they request one. One third (33%) stated they get an interpreter about half (less) the times they request one. (See Table 24.)

Table 24. Interpreter is provided on request

Answer	Response	%
Every time	48	22%
Most times	95	44%
About half the time, or less than half the time	71	33%
Total	214	100%

While results in Table 23 show only 194 respondents saying that they use interpreters, results in Table 24 show 214 responses about how often interpreting requests are met. It is possible that some respondents who said they 'never' use interpreters have unsuccessfully requested them in the past and checked option 3 in Table 24.

Over half (55%) of participants reported that they encounter some situations when they want an interpreter but no provision is available, while 45 % said there were no such situations. The range of situations where participants had experienced problems getting an interpreter is summarised in Table 25. Some of the gaps resulted from unavailability due to

interpreter supply or scheduling issues. Some situations described are either not covered by current funding streams (e.g. driving lessons, political meetings, sports clubs), or the relevant funding entitlement is insufficient to meet actual cost (e.g. a professional conference lasting several days). Yet other examples mentioned are in fact eligible for free interpreting (such as school-related events, job interviews), but apparently procedures for booking and paying for interpreting services were not known to all parties in these cases. In some cases, interpreting provision is known to be available, but is difficult to organise at short notice, (such as a doctor's or WINZ appointment), or in locations where interpreters are scarce.

Table 25. Situations where interpreting was not available

Education	Private tertiary training organisations
	Public tertiary institutions (e.g. AUT, UOA, VUW etc).
	WAT times the base relied to the way were Markhaides founding for
	"At times I've been asked to use my Workbridge funding for
	interpreters."
	"On-campus events related to study (e.g. guest speakers),
	or extra-curricular events on campus. Sometimes funded by
	the uni, sometimes not depending on how much money
	they have left or whether course-related."
	they have left of whether course-related.
	"At university, sometimes there is high demand within the
	community so it is difficult to get the same interpreter for
	one subject sometimes"
	Night classes (Adult Community Education): eg, business
	development , dancing, parenting workshop, hobby
	"I want to do some night classes but not sure if I can get an
	interpreter."
	Driving lessons
	Access for Deaf parents of hearing children to school & pre-school:
	interviews, parent meetings and school-community activities.
	"After school session at playcentre; school social events;
	parents social events at school"
Community	Citizen's Advice Bureau
Services, Political	
	Self-help support groups: eg, grief, weight loss

& Civic events	Civic mootings
& Civic events	Civic meetings
	"Local politicians giving a talk to residents; transport
	agencies giving presentations about changes to roads/etc
	in the area. Occasionally they will fund this upon request
	(especially if several Deaf people ask) however it's a gesture
	of goodwill rather than usual practice"
	oj godaviii ratner than asaar praetice
	Community/not-for-profit organisations hosting events or
	meetings – eg, IHC, Blind Foundation.
	Hui/ wānanga on marae
	Maori land court
	Maorriana court
	Political meetings
	"I can't participate with politics groups because they don't
	have funding for this kind of thing (interpreters)."
	mave junumg jor tims kina of timing (interpreters).
Deaf community	Hearing guests at Deaf events
events	III. Day Carlotaday in a lita DANZ ADC days have in
	"In Deaf-related services like DANZ, ADS where hearing
	people are not signing fluently and we often are stuck who
	should pay for an interpreter. Hearing guests/visitor/
	contractor and does not have access to Workbridge funding
	or similar funding. This needs to be solved."
	Deaf youth event - access for deaf youth who do not know NZSL
	Dear youth event access for dear youth who do not know NESE
Commercial sector	Real estate, investment seminars
	Service from business/shops: eg, Vodaphone, gym, bank, making
	large purchases

Appointments at short notice

Doctor, media interview, WINZ, Housing NZ

"When I need to go and see a doctor, I find it hard to have to wait several hours or days to see them because need to book and so on. It is much easier to go without but I do not like it because I rather to be fully informed."

"Government departments eg, WINZ and HNZ say it's my responsibility to organise an interpreter so I text iSign but it's too late as all interpreters are booked and it's short notice."

"Interpreters are not available at the time of scheduled appointments"

Work-related

Short notice events: eg, staff meeting, union meeting, job interview

Conference, work-related

"Prohibitively expensive to use up Workbridge funding for interpreters for 2-3 full days.

Running own business: eg, meeting with business mentor, meeting at Inland Revenue

Insufficient Workbridge funding

"Workbridge funds run out - needed for exams / workplace"

Recreation, Leisure

Sports clubs: practices, prizegivings (Deaf adult or their children)

"When my child is playing sports. Especially when you need to get a lot of information to support them."

Theatre, festivals, expos

Churches and Religious events

Tours & Cultural events

"museums, bus tours, zoo, Maori guided tours and shows, short boat cruises, any guided tours/places of interest"

Survey Report: NZSL/Deaf Community

Page 25

Family, Home life	Extended family events: eg, wedding, 21st party, family/whānau reunion
	Meeting tradesman - home maintenance
	Funeral of non-deaf person outside family
	"A workmate's father funeral (I had to provide my own workbridge fund so the Deaf community can attend the funeral in respect)"
Medical	Hospital appointments and emergencies - outside main centres
	"At Taranaki Base Hospital I have refused a communicator every single time, wasting my time in a crisis time, but it takes a month to book an interpreter for an appointment every 3 months. What if I need one for an emergency? They won't PAY"
	Family Planning clinic
	Dentist
Other gaps	No Video Relay Service during weekends for phone calls
	"NZ video relay doesn't operate during the weekends so I have to wait till Monday-Friday to make calls as I prefer video relay - it's much more comfortable for me to use instead of typing."
	Deafblind interpreting
	"Although there are interpreters that know how to sign to a Deafblind person, they are in Auckland, Christchurch and Wellington, not Hamilton. I have to teach them and it's not often possible to do so on a time limit, i.e. a few minutes before an appointment."
	Rural & provincial locations - hard to get an interpreter in general

When there is no interpreter available, deaf people use a range of communication strategies, as shown in Table 26; multiple responses were allowed for this question, hence percentages are not displayed. Writing is the most common method of communication, followed by speaking and lipreading. 60 people reported that they ask a family member or a

friend who knows NZSL to interpret, and 59 said they postpone their appointment if no interpreter is available. Although writing seems to be the main fall-back strategy, it is can be problematic as a form of access to information for NZSL users; as described in Dugdale's (2000) survey, many deaf individuals struggle with English literacy.

Table 26. Methods of communicating when an interpreter is not available

Answer	Response
Write	134
Speak and lipread	117
A family member or friend who knows NZSL interprets for me	60
Postpone appointment	59

The survey asked how participants usually request or book an interpreter; results are shown Table 27. Note that DANZ does not directly provide interpreting services but can assist individuals to request an interpreter.

Table 27. Usual method of requesting/booking interpreters

Answer	Response	%
iSign	128	65%
Other person books interpreter (e.g. hospital, employer)	83	42%
Freelance interpreter - direct contact	61	31%
DANZ (Deaf Aotearoa NZ)	61	31%
Workbridge	34	17%
Other private interpreting agency	21	11%

3.5 Perceptions of NZSL vitality

3.5.1 Deaf children's access to NZSL

Children's acquisition of a minority language is critical to its future vitality. Since most deaf children are born to non-deaf parents, school settings where deaf children come together, and where staff potentially use sign language, have traditionally been key sites of sign language acquisition. Given that inclusive education policy now sets mainstream schools as the default location for most D/HI children, the survey asked respondents about their perception of deaf children's access to NZSL, as follows: "These days, most deaf children go to mainstream schools. What do you think about deaf children's access to NZSL in

mainstream schools for learning and social communication?" Table 28 shows that most respondents think NZSL access in schools is inadequate – 72 % responding 'poor' or 'fair'.

Table 28. Perception of Deaf children's access to NZSL in school

Answer	Response	%
Excellent – all deaf children have good support for using NZSL at school	27	12%
Good – most deaf children have good support for using NZSL at school	35	16%
Fair – some deaf children have support for using NZSL at school, but not enough	76	34%
Poor —most deaf children do not have enough support for using NZSL at school	85	38%
Total	223	100%

3.5.2 NZSL and cochlear implants

The majority of infants diagnosed with a significant hearing loss now receive cochlear implants (CI), which is associated with fewer parents and professionals using sign language as a mode of communication with these children. Results from a survey of parents of deaf children in this project show that parents are more likely to receive professional advice not to use sign language following CI surgery than before it. Overall, a quarter of the 112 parents surveyed indicated that their child uses some form of signing.

This survey of the Deaf community asked respondents their opinion on whether children who have a CI should have the opportunity to be bilingual/bimodal in NZSL and speech. Of 243 responses to this questions, 77 % (187) said 'yes', 14 % (34) were not sure, and 9 % (22) said 'no'. The responses to these two questions (about school access, and about the opportunity to be bilingual/bimodal) indicate a strong value placed on deaf children's access to NZSL, and a high level of concern about how NZSL bilingualism is currently fostered.

3.5.3 Perceived impact of the NZSL Act 2006

Participants were asked whether the NZSL Act has made any personal difference to them (see Table 29). Around half believe the NZSL Act has made a positive difference, either by improving attitudes only, or by improving access as well as attitudes. The other half do not see much change resulting from the Act.

Table 29. Has the NZSL Act made any difference to you personally?

Answer	Response	%
Yes - hearing people have more positive attitude to me using NZSL	56	24%
Yes - improved attitudes AND I have better access to services through NZSL	67	28%
No - no change to my life from the NZSL Act	63	26%
Not enough change yet	52	22%
Total	238	100%

3.5.4 Future strength of NZSL community

To gain a sense of NZSL users' feeling about the future vitality of their language community, the survey asked them to predict the strength of the NZSL community in 30 years' time, as 'stronger', 'weaker', or 'about the same as now'. Results in Table 30 show that just over half feel it will be stronger, about a third feel it will remain the same, and 12% feel it will be weaker. These results suggest that the majority of the survey sample feel optimistic about the maintenance of NZSL in the immediate future, despite concerns in response to previous questions about children's access to NZSL.

Table 30. How strong will the NZSL community be in 30 years' time?

Answer	Response	%
Stronger	101	56%
Weaker	22	12%
About the	58	32%
same as now		
Total	181	100%

3.5.4 Perceived threats to NZSL

To explore perceptions of factors affecting current and future vitality of NZSL, the survey asked an open-ended question: "What is the biggest problem or threat facing the NZSL community now and in the future?" The 179 responses made to this question were diverse and often heartfelt. Some focused more on the 'problem' aspect of the question, describing current gaps or accessibility problems experienced by NZSL users, and some also suggested what was needed to address these. Many of the issues raised echo those identified by the 2013 Human Rights Commission Inquiry into NZSL, which investigated evidence of systemic inequities and breaches of rights for NZSL users. ⁵ Other responses to the question identified factors that pose long-term threats to the future of an NZSL community. The level of optimism in responses ranged from this comment, "There is no threat. It will always

_

⁵ Human Rights Commission. 2013. *A New Era in the Right to Sign: Report of the New Zealand Sign Language Inquiry*, September 2013. Weelington: Human Rights Commission.

survive", to the more pessimistic, "The future, like in 30 years, the NZSL might disappeared" (sic).

Responses to this question are summarised thematically with illustrative (verbatim) quotes in Table 31. Themes are not quantified in terms of their frequency of mention, but overall, the issues that dominated responses were:

- (i) The demise of deaf schools and units in favour of inclusive education placement;
- (ii) Weak practical support for NZSL in the education system (for either deaf or non-deaf students);
- (iii) The increase in cochlear implants in deaf children, which raises the following threats:
 - (a) the absence of deaf/NZSL-user perspective about the value of NZSL in professional advice and resources offered to parents;
 - (b) speech as the exclusive language mode selected for most deaf children;
 - (c) declining affiliation of young CI users with the deaf/NZSL community;
 - (d) potentially divisive identity politics within the adult deaf community (between those with/without CI)
- (iv) A low level of awareness and visibility of NZSL in society, which is associated with negative attitudes towards deaf people and accessibility barriers.

While responses to an earlier question about the future strength of the community were overall fairly optimistic, responses to this question indicate an acute awareness of factors that directly threaten the vitality of NZSL (eg, declining child users of sign language), as well as factors that indirectly threaten it by constraining the community's agency in promoting the role of NZSL in everyday life (eg, barriers to accessible information, and a sense of powerlessness in the realm of educational and medical policy).

Table 31 Problems and threats for the NZSL community now and in future⁶

Attitudes & Awareness:	Lack of NZSL exposure/awareness and positive attitudes in society
low visibility of NZSL	"Not enough awareness and media promotion of positive outlooks for sign language on websites"
	"People will not be using (NZSL) enough - it should be in all schools & work places"
	"Hearing culture's attitude will need to be fully changed or NZSL will still be suppressed as it is today. It helps that Mark is on Attitude TV as this brings more awareness to the wider community. It would help if NZSL was used more in drama shows and maybe used on the news that does not offer captions."

⁶ Participants' comments on this question are quoted verbatim - ie, they have not been grammatically edited, revealing the spectrum of English language use by NZSL community members, and the actual flavour of the views expressed.

-

	"The wider threat facing the NZSL community is ignorance by our peers. As the human race continues to perceive us with a disability rather than what our abilities are, we're often seen as abnormal." "Needs to raise more awareness and promoting NZSL regularly in the whole county including oversea because we are still behind the rest of the world. There are many hearing people who
	still don't realise that there are Deaf people living in their community, workplaces, cafes etc, especially our official NZSL."
Disempowerment in determining policy and	Medical and disability models predominate in decisions about policy and resources
practices affecting NZSL	"Those in power focusing on the opinions of those trying to cure deafness rather than listening to the Deaf community about what we need and making balanced decisions that provide a range of suitable options for all."
	"Professionals not informing parents of Deaf children about options other than cochlear implants/oral language."
	"Hearing people does not listen to deaf people opinions on cochlear implants which is, might not work on deaf children"
	"Lack of government representation - i.e. NZSL Commission/Language Commission"
	"Number of funds being raised by the Govt. for Cls, and not being able to encourage alternative options - language options - for parents with deaf babies/children"
	"Lack of accurate information for hearing parents to make informed decisions for their Deaf children, including meeting inspirational signing Deaf people early in their journey with their child, to let them see NZSL offers a successful alternative for their Deaf child."
	"Early newborn screening - no early involvements about the deaf (issues, people, language) - only focuses on medical view and oralism (listening and speaking)"
	"Deaf communities deserve to be consult within the state and agencies to ensure the basic needs are fully met and service agreement should be developed to avoid erosion of the deaf people"
Promotion and Resources	Lack of funding & infrastructure from government to support NZSL promotion, teaching, everyday accessibility.
	"NZSL does not have prominence status like Maori, with their own channel and commission. I believe NZSL need a NZSL commission and they could allocate fundings appropriately,

	making it easier to process a complaint and ensure the government is encouraging NZSL to thrive."
	Not enough hearing people have opportunity to learn NZSL – more courses and teachers needed.
	"There are not enough appropriately skilled NZSL tutors to teach all the willing people who want to learn NZSL - so that they can then support the students they work with."
	NZSL Act lacks practical measures.
	"The Act not cover all thing yet. Need to be more open to all thing we do or use as the Act is not open to all thing we need"
Accessibility	Not enough provision of interpreters.
(communication) barriers	"There are not enough interpreters. Having an interpreter can make full Deaf people more extrovert in hearing company."
	"TVNZ and the government need to understand that NZSL interpreter should be seen on TV under the Human Rights. Also in the case of emergencies we need NZSL interpreters to be there. And the last one is we want more NZSL Interpreter on advertisements on TV, because otherwise it's misleading."
	Not enough information accessible in NZSL
	"Not getting recognition that we must have visual NZSL in the television (often cut out signing interpreters in the news) It took many years of lobbying to get services we need like interpreters, TV & film captions, to get NZSL recognised. WHY???? It takes far too many years of writing, talking, signing using interpreters, thru lack of our own education and rights to get services when its our right to be entertained, listened to and be respected as people. How many more years do we have to lobby for a regular TV programme using NZSL???? Problem is not being heard!"
	"Access to information, would be nice to see a interpreter/Deaf Interpreter on the news relaying current affairs information to the Deaf community"
Decline of deaf schools	Decline of deaf schools which are/were an important site of
& units	socialisation into a signing community.
	"The deaf children do not know the sign language. No Deaf school means there is no opportunity for the deaf children from a hearing family to learn the culture and identity from other Deaf."
	"Not much in deaf school and most mix with hearing school, no value deaf culture and with deaf children. Important sign

language communicate is number one for development. "

"In my time, in Van Asch College, there were over 100 deaf students, plenty of chats all around, in all levels. Now? A very small group of deaf chats to limit range of age groups. True, the NZSL classes is growing slowly, but my concern is the deaf children from mainstream classes don't have the sufficient opportunity JUST to have a chat with their own peer groups. One Kit Day per term is NOT enough. I remember chat with my friends easily, and now the KIT Day children don't seems to be sure now. Future for the deaf children... I don't know about that for sure. Our NZSL as a language is dying slowly before our eyes."

Inclusive education lack of deaf cohort and limited contexts to learn/use NZSL

Mainstream schools do not offer the social conditions for learning and using NZSL: they lack signing peers and deaf role models, and do not have a cultural understanding of deaf identity.

"School is the key. Mainstreaming won't help much. Deaf school is the most important and should encourage increase numbers."

"While mainstream is useful up to a point, but would dear love to see more deaf units to ensure the language is using every day"

"All d/Deaf children going mainstream, they might academically (just?) cope. Teachers and other professional people rarely assess children socially which is in my opinion equivalent as cognitive learning. Those children (most of them will have CI) have no or very limited access to NZSL!! That is a threat! Wouldn't be great if they grow up in an environment where they learn and use NZSL as much as English? Learning 2 languages simultaneously is not impossible! This will boost their confidence and will increase their socially and cognitive learning!"

"Deaf Children in education are more isolated from each other than before, so the opportunities to get together and use sign language are less. Cochlear implants are becoming more popular and there is a trend towards mainstreaming and speech as opposed to using NZSL."

Low educational attainment of deaf students - linked to inequality of access through NZSL

"Inability to write correct standard English. Insufficient educational attainment."

"Funding for equal education by providing NZSL interpreters full time for deaf pupils who are NZSL users. More awareness and involvement with activities with other deaf peers and role models, eg: KIT days, deaf youth camps (of all ages from 5 upwards ... Re-strengthen and develop more deaf units in

mainstreamed schools with encouragement/reinforcement from MoE."

Low quality of bilingual education - no standard of NZSL proficiency for teachers or evaluation of educational outcomes

"Bilingual education quality is not enough"

"Not enough teachers of the deaf fluent in NZSL, so language role models for deaf kids are not present enough."

Hearing control of policy and practice in deaf education

"Hearing people not letting younger deaf people sign freely"

"Many schools and especially preschool uses Teacher Aide with no sign, in which Advisor of the Deaf say they will teach them, but there is not enough hours and time given to teach TA, and very much pushing for oral."

Weak support for NZSL in the general curriculum

"NZSL isn't in the New Zealand Education Curriculum and I think it should be, but it can only be that if we have more NZSL Teachers and that the Government funds them."

"No NZSL curriculum in schools as one of the official languages - will be difficult to get teacher aides etc that is skilled in NZSL and (know) how to work with deaf children so they grow up bilingual and independent."

Cochlear implants reduces NZSL use and and weakens community solidarity

Most deaf children now have CI and most subsequently most parents use oral communication only.

Myth that CI eliminates deafness and the need for sign language or deaf peers.

"Numbers of deaf children learning NZSL. Threats from medical advancements"

"Lots of people think CI is a cure for deaf, not need NZSL. I find more hearing people wanting to learn NZSL than parents of Deaf children, they not like their children "looking Deaf".

"Cochlear implant - I have no problem with this, but I would like to see more Advisors to encourage the parents and the cochlear implanted child to use both speaking and learn the NZSL, to give the child a greater choice and flexibility in language, there is needs for fundings to support their times and resources for this to be happened so parents can have a go, and insist the child is child, not a disability when first learn of its deafness for the first

time."

"Deaf community find it hard to accept CI/hearing people. I understand that because of the history, deaf people united together against hearing people to preserve the language and so on, but by excluding CI/hearing, they have less support for deaf school, deaf events etc."

More CI use will reduce the training of interpreters for future NZSL users

"A lot of children who are born deaf are receiving cochlear implants which stops them from learning and using NZSL so I feel that this is a big threat to NZSL and also it means less interpreters as there will be hardly anymore deaf people as the cochlear implants is changing deaf babies into hearing babies so our community and interpreters will eventually drop in numbers."

More diverse identities (language & education backgrounds) in the Deaf community weakens community solidarity and use of NZSL.

"Cochlear Implants is the one problem. Deaf people should wear Hearing Aids instead of cochlear implants! Both can learn NZ sign language - no difference."

"Members of the deaf community backstabbing people who have a cochlear implant by CHOICE. Some deaf people, myself included were taught to speak from a young age. I didn't have a choice back then whether I should talk or sign. I can do both but feel a lot of people in the deaf community thinks I'm not "deaf" enough to be involved in the deaf community. I want to be more involved but how can I when people look down on me?"

Social networks smaller and more dispersed

Deaf community organisation membership is decreasing, and ageing – fewer young Deaf people are joining and participating

"Falling numbers of deaf being in the community. Deaf sports has dropped."

"In Sports we need younger generations who need NZSL to keep the spirit of the deafness no matter how deaf they are"

"There are a large number of older Deaf community members who will pass away in the next 30 years and I believe there will not be enough younger Deaf community members coming into the Deaf community to replace those older Deaf people. So the number of Deaf people may decrease."

"Encourage more Deaf Youth involve in community - generation to the future, that is problem not enough support toward Youth."

	"Deaf community find it hard to accept CI/hearing people. I understand that because of the history, deaf people united together against hearing people to preserve the language and so on, but by excluding CI/hearing, they have less support for deaf school, deaf events etc."
Leadership	Perception that younger leaders are scarce in the NZSL
·	community.
	"Deaf Youth are our future, but there isn't much in the Wellington area to take over the reins by the Deaf community"
	"The Deaf community needs more leaders so that young deaf/hearing impaired can learn to be proud to be Deaf and don't feel embarrassed."
	"The Deaf leaders like Deaf Aotearoa aren't doing their job properly. Our children are going to grow up like hearing people."
Communication	More use of communication technology and less in-person social
technology	contact might have a negative impact on use of NZSL and
	participation in social organisations (yet also enables other forms
	of social connection and information sharing).
	"Technology - cochlear implants and information technology may take over the need to communicate in NZSL."
	"Deaf community doesn't get together as much (not like the past where Deaf people visit each other or go out all the time) Technology and social networks such as Facebook, makes get togethers less meaningful and make people stay at home more. Deaf people are visual so need face to face social interaction."
Paradigm tension:	Tension exists between utilising technological advances and the
disability vs language	rights/ resources conferred by disability provisions, and
rights	maintenance and promotion of a language-based identity.
	"New technology (e.g. cochlear implants, hearing aids) makes people believe that they are not deaf/Deaf but when they take the hearing aids off or they break they are still deaf/hearing impaired. A lot of Deaf people have an issue to balance being Deaf and disabled. On one hand they need to ask for special treatment/help/financial support and highlight their issues. On the other hand they are proud to be Deaf, to have their own language and culture. It is difficult to balance the needs for some people."
	"Promoting UNCRPD gives wrong message to govt that NZSL is a 'tool' for access – not enough focus on maintaining language community"

4. Conclusions

As part of larger project on the vitality of NZSL, this survey aimed to collect data from the NZSL community in order to:

- 1. form a picture of their language use profiles, including how and when they acquired NZSL, and the domains and modes in which NZSL is used in their everyday life;
- 2. identify NZSL users' perception of the current status of NZSL and its future vitality.

4.1 Acquisition and use of NZSL

The survey investigated participants' language profile, including their preferred or stronger language, knowledge of any additional languages, and where, and when, they had first acquired and been exposed to NZSL.

The majority of participants (66%) identified themselves as most comfortable using NZSL, and a further 22 % use NZSL mixed with speaking (likely to be situationally determined). As expected for the intended target population for this survey (i.e., NZSL users), only a few report feeling most comfortable using spoken English or Signed English.

A question on knowledge of languages other than NZSL or English revealed that one-third of this sample claim some conversational ability in a language other than NZSL or English. Nearly a quarter of the sample reported knowledge of an overseas sign language, and 6 % claimed the ability to have a conversation in Māori. While the accuracy of self-reported language competence is unattested, these responses suggest that the profile of a national Deaf community may be more plurilingual than might be superficially assumed. However it is also likely that this finding reflects diverse interpretations of 'conversational ability'.

The range of 'life stages' at which participants were first exposed to NZSL reflects the variety of routes to sign language acquisition typical of most signing communities. The survey did not ask whether, or how, NZSL was acquired within particular school settings, but used level of schooling as a rough approximation of age (or life stage) of socialisation into a cohort of signers. The largest number (63%) reported first using NZSL with deaf peers either at preschool or primary school age (of whom 8% were hearing), and a further 11 % at high school age. Ethnographic knowledge of the community, and survey results showing multiple school attendance for most participants, suggests that many of the 'high school' group attended a mainstream primary school with little or no exposure to NZSL, and encountered deaf, signing peers during adolescence by attending a Deaf Education Centre or a Deaf Unit/Resource Class for part or all of their secondary education. Just over a guarter of participants were exposed to NZSL after leaving school (including most hearing participants). It can be assumed that the 37 % who acquired NZSL during or after high school age are second language users of NZSL who have chosen affiliation with the Deaf community for social reasons and for ease of visual communication, rather than because they are linguistically dominant in NZSL.

Deaf family members were reported by 37% of respondents, with considerably more collateral relatives mentioned - aunts, uncles, cousins and siblings, than lineal relatives - parents or grandparents. Although the language use of these deaf relatives was not investigated in the survey, the number with deaf relatives suggests that kinship networks do play an important part in intergenerational transmission and maintenance of NZSL, but that horizontal transmission between peers is a more common scenario than vertical transmission from intergenerational adult language models.⁷

Questions about use of sign language by adults at home and school during childhood confirm that NZSL (in current generations of adults) is in large part transmitted and developed outside the domains of home and the instructional activities of schooling. Close to half of the participants reported that neither adult family members nor school teachers used sign language with them during childhood, while the other half did report some adults in these environments using sign language with them.

Most of the survey respondents who use NZSL as a preferred language had attended a deaf school and/or a deaf unit class at some time during childhood. Even though NZSL is not necessarily used by all teachers in these settings, socialisation in congregated deaf education settings is clearly vital to the acquisition of NZSL and the development of affiliation with a signing community. The reduction of these education settings on the one hand, and the restricted availability of NZSL in mainstream schools on the other, is identified by survey participants as a serious threat to the maintenance of NZSL in future generations.

4.2 Domains and modalities of use

The key domains in which participants use NZSL in their everyday lives are, unsurprisingly, social activities connected with the Deaf community: attending Deaf club and community events, socialising with Deaf friends, and communicating at home. About half of the sample report that they also use NZSL in the workplace, and decreasing proportions report regularly using NZSL in public (non-deaf) domains such as tertiary education, leisure, public services, and civic life. (Survey results do not tell us if respondents use English as an alternate, less preferred, language in these domains, or if they simply don't participate in them regularly.)

The advent of online video-based communication technology has enabled a new medium of interpersonal communication for sign language users, allowing use of their primary language to communicate over distance and time. This has been observed as a potential contributor to the maintenance of sign language, by expanding its domains of use.⁸

⁷ A separate survey of 120 parents of deaf children had a question on D/HI relatives, and whether those relatives used sign language. 20 parent respondents (16%) had D/HI relatives, but 60% of these relatives did not use sign language. Of the 8 respondents who indicated that at least one of their relatives used sign language, 6 were themselves D/HI.

⁸For example, see: http://www.scientificamerican.com/article/deaf-mobile-video-and-apps/. Accessed August 26, 2014.

Commonly used modes include videotelephony and videoconferencing via the internet, video relay service (for phone calls to non-deaf people), web cams, and video blogging ('vlogging'). The majority of respondents in this survey report that they use NZSL via online video communication (both real-time and asynchronous). Not surprisingly, more of the younger participants report using real-time video-chat and 'vlogging' than older participants, but it is interesting that three-quarters of 51-70 year olds, and a quarter of those over 70 have also adopted digital modes of communication. ⁹

While the majority of respondents use NZSL interpreters to access necessary services and to participate in a range of everyday life domains, they also identified numerous barriers to interpreting access. Some of the reported gaps stem from limited interpreter workforce capacity and geographical distribution, some from actual limits on the funded provision of interpreting, and some from an apparent lack of knowledge about how to access existing entitlements and booking procedures. Constraints on access to interpreting services were encountered in education, government, commercial, employment and arts sectors. Respondents also identified an unmet need for interpreting support in their domestic roles as householders (eg, organising home maintenance or insurance), neighbours (eg, local community events), consumers (eg, making major purchases, organising finance, understanding advertising), parents (eg, attending school events for their hearing children) and as members of extended families (eg, weddings, family reunions, hui).

Participants noted that NZSL accessibility barriers are created by limited awareness, and at times outright negative perception, of sign language users. It was noted that the absence of NZSL on television and in the school system perpetuates the invisibility of NZSL and maintains attitudinal barriers which constrain Deaf people's ability to assert the right to use NZSL as a means of participation in society. These findings are consistent with those reported in the 2013 Human Rights Commission Inquiry into NZSL.

4.3 Perceptions about the future of NZSL

Survey respondents' feelings about the current and future vitality of the NZSL community are mixed, reflecting some optimism about recent recognition of NZSL and some apprehension about perceived threats in the current technological and policy environment. Opinion was almost divided with regard to tangible impacts of the 2006 NZSL Act, with half the participants observing improvement in attitudes and/or access, and the other half not noticing any change.

Similarly, about half of the respondents believe that the NZSL community will be stronger in 30 years' time, whereas the other half think that it will remain similar to now or become weaker. On the one hand, legal recognition of NZSL, an increase in Deaf-led language promotion activity (notably, NZSL Week), expanded interpreting provision, and advances in

⁹ Not explored in this survey is the potential impact on NZSL of exposure to content in other signed languages, especially American Sign Language, which predominates in the digital 'vlogosphere'.

video communication technology have raised the profile of NZSL and increased opportunities to use it in everyday life. On the other hand, there is acute awareness of persisting barriers to NZSL access and of threats to continuity of the language community that are presented by technological/medical advances and by the constraints Deaf people perceive in influencing social policy leading to practical gains.

Most respondents to the survey believe that current generations of deaf children have inadequate access to learning and using NZSL within the school system; this is a longstanding historical reality, but with the contemporary difference that most deaf children are now dispersed across mainstream schools, and many have better access than previously to spoken language via modern cochlear implants. Combined, these factors are seen to seriously threaten the promotion and uptake of NZSL by deaf children and family members and professionals who work with them.

The survey asked participants to describe major problems and threats for the future of the NZSL community. The recurring themes can be summarised under four main headings:

Promotion and resources

• The NZSL Act lacks practical measures, including addressing the need for more active promotion and use of NZSL in wider society, and support for its maintenance in the Deaf community (including supporting intergenerational connection between Deaf children and adults¹⁰).

Barriers to access to society

 More comprehensive policy and resourcing are needed to equalise access to communication and information in domains of everyday life in which provision of NZSL interpreting or translation is not currently provided.

Cochlear implants.

- The high ra
- The high rate of cochlear implantation in deaf children is of high concern to the NZSL community because this trend is associated with the medicalisation of expertise on deafness, and a perception that sign language user perspectives are marginalised in advice and resources for parents and educators.
- CI use is seen to lead to professional and parental concentration on monolingual spoken language acquisition and assimilative goals for the social identity of deaf children and young people.

¹⁰ Since survey data was collected, in May 2014 the government committed budget to establish an NZSL Expert Advisory Board, to provide expert advice and monitoring on NZSL issues. The Board will administer an annual contestable fund of one million dollars for projects that promote NZSL. Formation of the board is scheduled for late 2014 to early 2015.

- State funding is seen to be disproportionately directed towards medical and rehabilitation activities associated with CI compared to resources that support NZSL access and maintenance.
- An increase in CI use and less exposure to NZSL in child generations raises concern that there will be a reduction in the training of NZSL interpreters, which may disadvantage the NZSL community in future.

Status of NZSL in the education system.

- The individual placement of most deaf children in regular schools works against creating authentic contexts for acquisition and use of NZSL as a living language.
 NZSL bilingualism is difficult to develop or maintain without language peers.
- The number of proficient NZSL users among deaf education and regular education staff is small, and their skills unmonitored; this limits deaf children's access to fluent adult models of NZSL.
- NZSL is not well supported in the national school curriculum more attention to this could promote tolerance and wider communication opportunities for NZSL users in schools and in society.

5.0 Implications

Survey findings show that the NZSL community has mixed perceptions of the current status and future vitality of NZSL. On the positive side, many feel that societal tolerance of NZSL has increased since official recognition. Respondents use NZSL to communicate in a variety of domains beyond the social activities of the Deaf community and home, although these remain the major contexts for use of NZSL. Online video communication technology has expanded opportunities and modes for real-time communication with other signers, for transactions with non-signers via online video interpreting, and enables recorded posts ('vlogs') for sharing information and opinions in NZSL. These factors all contribute to a sense that the status of NZSL has strengthened and that domains of use are expanding.

On the other hand, survey findings show frustration that the NZSL Act and other policy measures have not sufficiently resolved barriers to information and equal participation that NZSL users experience. Respondents identify current threats to the vitality of NZSL as a weakening of social connection between deaf children, and between the youth generation and the adult NZSL community - with the effect of shrinking Deaf community networks. Intergenerational transmission of sign language has always been vulnerable to the effects of educational policies and practices that control deaf children's contact with other sign language users. Survey respondents observe a link between the rise in infant cochlear implantation, mainstream school placement, and a dominant discourse of normalisation which privileges auditory-oral language development. Survey respondents perceive that while educational policy has become more supportive of NZSL in recent times, state

investment in CI surgery and rehabilitation services seem disproportionate to the resources available to promote NZSL as a human right for existing NZSL users, and as a resource for future generations of deaf children, including those with cochlear implants.

As in other countries with state funded provision of cochlear implants (eg Sweden: Nilsson & Schönström 2014), it appears that a shift towards delayed, second language acquisition of sign language is in progress among the deaf population. Survey results indicate that a significant proportion of adults who identify with the Deaf community acquired NZSL at highschool age or later, and can thus be considered second language users. A trend in this direction is supported by data from interviews with deaf youth in the larger project. Late acquisition of a natural signed language has long been commonplace in Deaf communities, and it contributes to variation in sign language usage; this effect on the language may be amplified by a growing proportion of late learners. Moreover, it is axiomatic that the opportunity for late socialisation into a signing community depends on the existence of a viable community of fluent signers. A shift to first language acquisition of spoken English (or Māori) among current cohorts of deaf children with CI is diminishing the 'core' NZSL community as a destination for young deaf people who may seek out acculturation into a Deaf identity in adolescence, which has been a common pattern in Deaf life cycles (Leigh 2009). Survey respondents describe a struggle to locate and involve young people in Deaf community organisations and activities, which they attribute to the dispersal of deaf children in mainstream schools and their limited exposure to NZSL and Deaf role models. This disconnect threatens the maintenance of physical spaces and social networks for NZSL use - although respondents note that social spaces for NZSL use now include digitally mediated communication.

Threats to the vitality of NZSL observed by the Deaf community in 2013 echo those identified by Johnston (2004) in relation to the endangerment of Australian Sign Language (Auslan). The factors and processes being felt by the community now have clearly been in motion for quite some time, and have apparently intensified during the period in which societal recognition of NZSL has advanced the most.

6.0 Limitations in survey design and validity of data

6.1 Sampling issues

As noted in section 2.1, a written online survey is not easily accessible to all NZSL users, in particular those who are less literate in English print and digital modalities and thus face greater social disadvantage and exclusion. In an effort to widen the sample, the survey was also administered in person by Deaf research assistants at Deaf community venues, which increased the participation of senior citizens, individuals without independent access to computers and print, and some who might otherwise have been unaware of the survey.

This report is based on 255 survey responses, collected in the modes described above. Three quarters of the survey participants (75%) identified as deaf, 9 % as hearing impaired, 2 % as deafblind and 14 % as hearing. 65% of participants were between 18-50 years old, with another 31% over the age of 50. 3 % were under 18 years, and 10 % over 70 years old. Ethnicities varied, and the two main ethnic groups, Māori and Pākehā, were represented in proportion to their numbers in the general population. Information provided by respondents thus reflects the range of identities who participate in the NZSL community. Without reliable demographic data on the make-up (or boundaries) of the NZSL/Deaf community, it is difficult to be certain that this sample is an accurate representation of its membership; however, it aligns with researcher observation of typical participation in the NZSL community.

6.2 Questions may have been misunderstood or misinterpreted

In response to some requests from the target community, a number of printed survey forms were provided and completed in hard copy. It was known that this might introduce a source of inconsistency in responses, but it was considered a worthwhile risk, in order to expand survey coverage. Whereas an online format forces a single response to a multi-choice question, highlights missing responses and controls the question sequence, a print version allows more latitude for unconventional or incomplete responses. Analysis of responses on the printed forms was valuable in indicating issues with comprehension of questions or with response options that were not apparent from the data collected online. Specific examples that may compromise the exact accuracy of results are listed below:

6.2.1 Questions may have been mis-read or mis-interpreted

 For example, in Q19, "Where do you normally use NZSL in your daily life now?, several over 70-year-olds ticked 'at school/university/study". It is unlikely these individuals are studying, and probable that they were indicating where they used NZSL in the past.

6.2.2 Inconsistency between responses

- Especially Q35 / 36: some people answered 'no' to the question whether they talk with other people in NZSL using Skype or other technologies, but then in Q 36 listed people they talk with in this modality.
- Q8 asks "Do you have any other deaf/hearing impaired people in your own family (not partner)?" This was sometimes ticked as 'no' but deaf family were listed in Q9.
 Perhaps Q8 was misunderstood as referring only to one's own nuclear family (partner and children), and the term 'not partner' may have been understood as 'not your partner's family'.
- Q 20/21: Some responses selected "1-5 hearing friends and family members" (who can sign well), but in the following question stated that 'about 6' of this group are interpreters.

Q46, "Who do you use NZSL with – without an interpreter?", may have been understood to mean only non-Deaf people. For example, it was answered with 'hearing friends' or 'hearing family members' only by respondents who earlier indicated having Deaf family members, or Deaf partner, and/or attends Deaf club. Similarly, a number of people indicated that their hearing child(ren) have 'strong' skills in NZSL, but then neither 'hearing family members' nor 'hearing children' were ticked for Q46.

6.2.3 Questions expecting a single response were often answered with multiple ticks on paper

- Q 13/14, "Which language is the most easy/comfortable for you to understand / express yourself?", was answered several times with both 'full sign language' and 'signing mixed with speaking' ticked.
- Q16, "When did you first start using sign language with deaf people?" some respondents ticked more than one age group.
- Q1, "Are you deaf, hearing impaired, deafblind?" a few respondents ticked both 'deaf' and 'hearing impaired' (presumably indicating both audiological status and social identity status).

6.2.4 Question response options did not always identify all potential relevant answers

- Q13 /14: Deafblind communication was not included as a response option for "most easy/comfortable communication" mode, as noted by one participant.
- Q6, "Where did you live (most of the time) as a child (before age 16)?" presented uncertainty about whether 'live' referred to residence at a deaf boarding school or to the family home, and some participants ticked multiple locations.
- Q5, "Which school(s) did you go to?" omitted a small, short-term deaf school, Myers
 Park (the respondent selected Kelston/Titirangi as the closest Auckland Deaf
 school). Similarly, 2 participants indicated that they attended another private Deaf
 School (run by Miss Close) that had about 8-10 students.
- Q13, "Which language is the most easy/comfortable for you to understand?" one person wanted 'written English' as an additional option.

References

Fitzgerald and Associates. 2010. *Scoping Support for New Zealand Sign Language Users Accessing the Curriculum, Part II.* Unpublished report. Wellington, NZ: Ministry of Education.

Human Rights Commission. 2013. A New Era in the Right to Sign. He Houhanga Rongo te Tika ki te ReoTuri. Report of the New Zealand Sign Language Enquiry. Wellington, NZ: Human Rights Commission. Accessible at: http://www.hrc.co.nz/wp-content/uploads/2013/09/A-New-Era-in-the-Right-to-Sign-for-web.pdf

Johnston, Trevor. 2004. "W(h)ither the Deaf Community? Population, Genetics, and the Future of Australian Sign Language" *American Annals of the Deaf* 148. 358.

Leigh, Irene. 2009. A Lens on Deaf Identities. Oxford University Press.

McKee, R. and E. Smith. 2003. Report on a Survey of Mainstream Class Teachers of High and Very High Needs Deaf Students in Mainstream Schools. Unpublished Research Report, Deaf Studies Research Unit, Victoria University of Wellington. Accessible at: http://www.victoria.ac.nz/lals/research/projects/publications/Report_1_Parents_Survey.pdf

McKee, Rachel, Victoria Manning and Rachel Noble. 2012. *Towards an NZSL Strategy: Report of a survey of priorities for action on NZSL. Report of a working group convened by the Human Rights Commission*, (2010). Accessed 14 July 2013. http://www.victoria.ac.nz/lals/about/staff/publications/NZSL- Priorities-Survey-report.pdf.

Nilsson, Anna-Lena and Krister Schönstrom. 2014. Swedish Sign Language as a second language: Historical and contemporary perspectives. In D.McKee, R. Rosen, & R. McKee (eds) *Teaching and Learning of Signed Languages: International Perspectives and Practices*, 11-34. Palgrave Macmillan.

Appendix 1: Survey Questions

Survey of the Vitality of New Zealand Sign Language

The Deaf Studies Research Unit at Victoria University of Wellington is researching the status of NZSL and its future. Rachel McKee and David McKee are leading the project.

We want to find out:

- How many Deaf people use NZSL?
- Where and when do Deaf people learn NZSL?
- How do Deaf people use NZSL in their daily life?
- How do Deaf people feel about the future of NZSL?

This survey is for **Deaf, hearing impaired and Deafblind people**. The survey will help us collect information from the NZSL community.

The survey will take 15 - 20 minutes.

Your answers are anonymous: we will not know your name or keep personal information. When we write about the survey, the report will focus on numbers and groups, not individuals.

This research has been approved by a Human Ethics Committee at Victoria University. If you have questions about the survey, please contact rachel.mckee@vuw.ac.nz.

O I have read this information and I give permission for my responses to be used in the research.

Note: Circles next to response options indicate that in the online version, a single answer had to be selected, while squares show that multiple answers were possible. In the online version, survey logic controlled the display or non-display of questions that were contingent upon previous responses.

PART 1: Background information Q1 Are you: O deaf O hearing impaired O deafblind Q2 Are you: O Male O Female Q3 How old are you? **O** 12 - 17 years **O** 18 - 30 years **O** 31 - 50 years **O** 51 - 70 years O over 70 years Q4 Are you: ☐ Pākehā / NZ European ■ Māori ☐ Pacific Islander ■ Asian ☐ South African (immigrant) ☐ Other ethnic group Q5 (deaf) Which school(s) did you go to?

You can tick more than one		
	Van Asch / Sumner deaf school	
	Kelston / Titirangi deaf school	
	St. Dominic's deaf school	
	Deaf Unit class in hearing school	
	Mainstream hearing school (no Deaf unit)	
	Overseas deaf school or deaf unit class	

Overseas mainstream school

 Q5 (hearing) How did you originally start using NZSL - what was your first point of contact? O deaf family O deaf friends O a class O other
Q6 (deaf) Where did you live (most of the time) as a child (before age 16)?
 Auckland or Christchurch city or area Other city or town Rural, farm area Not in New Zealand
Q6 (hearing) Select any professional or vocational role(s) you have in relation to deaf people
 □ Interpreter □ Education professional or para-professional □ Health professional □ Community or social worker □ Employer or workmate □ Employee in a Deaf organisation □ None
Q7 Where do you live now?
 Auckland, Christchurch, Wellington city or area Other city or town Rural, farm area Not in New Zealand
Q8 Do you have any other deaf / hearing impaired people in your own family (not partner)
O None Go to question 10O OneO 2 or more

	Who in your family is deaf / hearing impaired / deafblind? I can tick more than one		
	Mother Father Brother(s) or sister(s) Grandmother(s) or grandfather(s) Aunt(s) or uncle(s) Other relatives (e.g. cousins)		
Q1	Q10 Is your partner:		
O O O	deaf hearing impaired deafblind hearing I do not have a partner		
Q1	1 If you have children, are they: (tick more than one, if mixed)		
_ 	deaf hearing impaired deafblind hearing I do not have children Go to question 13		

Q12 Do your children:

	strong	some	not much
understand NZSL?	O	O	0
sign (use NZSL)?	O	O	0

PART 2: Learning and Using NZSL Q13 (deaf) Which language is the most easy / comfortable for you to understand? Full sign language (NZSL) Signing mixed with speaking TC - Signed English English (through listening and lipreading) Q13 (hearing) How well can you understand NZSL? Very well (I can understand almost anything in NZSL) Well (I can understand many things in NZSL) Fairly well (I can understand some things and some people in NZSL) Not very well (I can understand simple / basic things in NZSL, with some people)

O I only understand a few signs or phrases

Q14 (deaf) Which language is the most easy / comfortable for you to express yourself?

- Full sign language (NZSL)
- O Signing mixed with speaking
- O TC Signed English
- O English speaking orally

Q14 (hearing) How well can you sign in NZSL?

- Very well (I can talk about almost anything in NZSL)
- Well (I can talk about many things in NZSL)
- Fairly well (I can talk about some things in NZSL)
- O Not very well (I can understand simple / basic things in NZSL, with some people)
- O I only understand a few signs or phrases

Q15 Can you have a conversation in any other language(s) - not NZSL or English?

	No
	Overseas sign language (home country, or lived in other country)
	Māori - spoken
	Other language my family or community speaks at home
Q1	6 When did you first start using sign language with deaf people?
O	Pre-school age
O	Primary school age
O	High school age
O	After leaving school
-	7 (deaf) Think about the adults you lived with before you were 16 years old. Did any of ose adults sign a lot to you? (more than just a few basic signs, or gestures)

YesNoCan't remember
Q18 (deaf) Think about your teachers at school. Did any of your teachers sign a lot to you? (more than just a few basic signs, or gestures)
 Yes - most of them Yes - a few of them No Can't remember
Q19 Where do you normally use NZSL in your daily life now? (with or without an interpreter) <i>You can tick more than one</i>
 □ At Deaf club and Deaf community events □ At School / university / study □ At work □ At home □ Visiting people □ At a service place (e.g. hospital, doctor, WINZ interview, legal) □ In church / religious activities □ At the marae □ Sports - playing, or watching □ To communicate with staff in shops, bars, restaurants etc. □ VRS - phone relay calls
Q46 (as per online survey numbering) Who do you use NZSL with - without an interpreter? You can tick more than one
 □ Deaf familiy members □ Hearing family members □ Deaf adults □ Deaf children □ Hearing friends □ Hearing workmates □ Hearing children □ Other
Q20 (deaf) How many of your hearing friends and family members can sign well enough to have a deep conversation in NZSL?
O None Go to question 22 O 1-5

	6 - 10		
	10 - 20		
0	More than 20		
Q2	11 (deaf) How many of these hearing friends and family members who can sign are		
int	erpreters?		
PA	RT 3. NZSL Access and Future		
Q2	2 Do you use sign language interpreters? (including appointments, VRS, meetings)		
0	Often - most weeks, or several times a month		
0	Sometimes - several times a year		
0	Never		
Q2	3 When you request a sign language interpreter, do you usually get one?		
0	Every time		
0	Most times		
0	About half the time, or less than half the time		
	4 Are there some situations when you want an interpreter, but no-one will pay for the erpreting?		
0	Yes		
0	No Go to question 25		
Q2	4a Where do you have problems getting an interpreter (what kind of situations)?		
Q2	25 (deaf) If you have no interpreter at an appointment or a meeting, how do you usually		
	mmunicate with the hearing person? You can tick more than one		
	☐ A family member or friend who knows NZSL interprets for me		
	☐ Speak and lipread		
	Write		
	Postpone appointment		
	Don't know		

	6 (deaf) If you want to book an interpreter, who do you normally contact? I can tick more than one
	DANZ (Deaf Aotearoa NZ) iSign Workbridge Freelance interpreter - direct contact Other private interpreting agency (e.g. in Auckland, Wellington, Christchurch) Other person books interpreter for me (e.g. hospital, employer)
Q2	7 Has the NZSL Act 2006 made any difference to you personally?
О О	Yes - hearing people have more positive attitude to me using NZSL Yes - improved attitudes AND I have better access to services through NZSL No - no change to my life from the NZSL Act Not enough change yet
Wh	8 These days, most deaf children go to mainstream schools. nat you think about deaf children's access to NZSL in mainstream schools for learning and ial communication?
О О	Excellent – all deaf children have good support for using NZSL at school Good – most deaf children have good support for using NZSL at school Fair – some deaf children have support for using NZSL at school, but not enough Poor –most deaf children do not have enough support for using NZSL at school
	9 Do you feel deaf children with cochlear implants should learn NZSL, as well as eaking?
0	Yes No Not sure
	0 Thinking about the future of NZSL - in 30 years' time, do you feel that the NZSL nmunity will be:
O	Stronger Weaker About the same as now Don't know

Part 3A: Technology		

Q31 What is the biggest problem or threat facing the NZSL community now and in the future?
Q32 Have you seen NZSL (video) information on websites of government or other public services?
YesNoNot sure
Q33 Do you watch NZSL (videos) on the internet? You can tick more than one Vlog YouTube Vimeo Facebook / Twitter NZSL Online Dictionary Video on a website (e.g. Deaf Aotearoa website) other I haven't seen any NZSL on the internet
Q34 Have you ever posted a video of yourself signing in NZSL on the internet?
O Yes O No
Q35 Do you talk with other people in NZSL using real-time technology (videophone, Skype, Oovoo, Google Hangout)
Yes Go to question 36No
Q36 Who do you communicate with in NZSL at a distance (through video or real-time technology like Skype)? You can tick more than one
 □ Deaf family □ Hearing family □ Deaf friends □ Hearing friends □ Forums or other Deaf groups □ Work-related □ Other