

DEAF LEARNERS IN NZ MAINSTREAM CLASSROOMS

PROJECT OVERVIEW

The project

In 2000-2001 the Deaf Studies Research Unit (DSRU)¹ undertook a project to investigate communication access and learning outcomes for deaf children in New Zealand mainstream classrooms who are categorised by Specialist Education Services (SES)² as 'high needs' (HN) and 'very high needs' (VHN). The majority of deaf students in these resourcing categories are severely or profoundly deaf³. The research took a qualitative approach to studying aspects of their learning contexts, with a particular focus on deaf students' ability to participate in the linguistic and social community of the classroom, and the role of Teacher Aides in mediating this.

Rachel McKee was the principal researcher for the project, assisted by Wenda Walton (NZSL transcription), Alan Wendt (audio transcription), Eileen Smith (survey administration and analysis), and David McKee (technical and statistical support).

Context for the research

High and Very High Needs deaf students

Two surveys for SES recently reported on the resourcing and needs of deaf and hearing impaired students across all educational settings (AC Nielsen 2000; Fitzgerald & Associates 2000). One survey characterised 'high needs' students as mostly using spoken communication but unable to access the curriculum without significant support such as "modification of teaching styles and methods, specialist individual teaching and communication access". The survey found that the needs of 60% of this group were considered to be "reasonably well met" (AC Nielsen 2000: 22). The 'very high needs' category were described as students who have:

“a relatively limited ability to communicate to people outside their families, and [a] minimal capacity to access the NZ curriculum without support. They are high users of signed communication (...) Their greatest language and communication needs are for tutoring to

¹ This project was funded by a grant from Victoria University of Wellington's Faculty of Humanities and Social Sciences

² SES has since been restructured with the new name Group Special Education (GSE), under the Ministry of Education.

develop spoken language and to develop reading/writing skills. Two in three require tutoring in signed language. Language and communication needs extend to providing information and training for teachers and paraprofessionals (...) The majority ... need communication access, technology resources in the school environment, modification of teaching methods, and specialist individual teaching... support to help the child develop appropriate communication skills (in particular tutoring in signed language for parents). (...) The needs of two in three of this very high needs group are considered to be reasonably well met, currently”, (AC Nielsen 2000: 22).

Both the surveys commissioned by SES identified gaps and inconsistencies in the availability and effectiveness of support services, considerable lag in academic achievement across the survey population (with Fitzgerald reporting only 26% of students to be operating at, or above, age-appropriate levels), and mixed perceptions of social integration outcomes reported by parents and teachers. This research project aimed to further explore what “reasonably well met” (needs) might mean for HN and VHN deaf students in mainstream schools.

Current placement patterns for deaf students in NZ

A total of 2,194 deaf/hearing impaired students were registered with SES in New Zealand in 2000. A survey of a representative sample of 155 of these children showed that 82% were enrolled in mainstream classrooms (usually singly), 8% in a Deaf Education Centre, 5% in a specialist resource class within a regular school, and 6% in regular early childhood facilities (AC Nielsen 2000). Deaf children who use sign language and live in a large metropolitan area are more likely to be among the 13% enrolled in a Deaf Education Centre or a Deaf Resource Class. Overall, these statistics show that inclusion in a local school is currently the preferred norm in school placement.

The shift to widespread mainstreaming of deaf students has paradoxically coincided with the acknowledgement of New Zealand Sign Language (NZSL) and Deaf culture as having a place within deaf education, which was materialised in 1995 in the first bilingual class (Nuthall 1997). However, a bilingual approach, although stated in policy as an option, is far from an established norm in practice, even in settings where deaf children are grouped, due to a lack of teachers with NZSL proficiency and bilingual teaching skills. Moreover, the majority of parents and teachers of deaf children highly value spoken language competence as an educational goal, which influences teaching practice and school

³ Because the majority of children in the research population had severe or profound hearing loss, and were typically described by others as deaf, we refer to them generically in these reports as deaf, rather than 'deaf or hearing impaired'.

placement decisions, even where signing is also used. It would be fair to say that the following rationale still summarises prevailing placement considerations in NZ: “It is believed that through educational integration, the deaf child will be helped to acquire oral language, come to understand the nuances of everyday social life, and develop a self-concept that he is ‘normal’”. (Lynas 1984:129)

Earlier experiences of mainstreaming

In a study of 100 Deaf adults in the Wellington region, Dugdale (2002:68) reports that "since about 1950, many Deaf people have received a fragmentary education, shifting between [school] placements for various reasons". Dugdale found that 21.6% of her sample had attended a Deaf school exclusively - with most of these being over the age of 40 - while 67% had attended a mainstream school or deaf unit for at least part of their education. Of that 67%, the biggest sub-group had first enrolled in a mainstream school/deaf unit, and later transferred to a school for the deaf; this pattern was particularly strong for those under the age of 30, and suggests that the learning and social conditions for these students in their mainstream placements had proven to be less than satisfactory. Dugdale's participants' recollections of how well they understood their teachers in mainstream schools, deaf units and deaf schools was in that descending order - least in mainstream schools and most in deaf schools - although the deaf school situation was far from ideal, with low academic standards and much incomprehension reported (Dugdale 2002:78). Dugdale notes that three smaller local studies during in the 1980s had called for more specialised communication and literacy support for deaf students in integrated settings.

Deaf adults' retrospective accounts of mainstream school experiences in New Zealand feature difficulties with social isolation, and impediments to academic progress such as limited communication access, lack of adaptation of learning tasks, and the absence of Deaf academic role models (McKee 2001; Sameshima 1999; Townshend 1993), which are ubiquitous factors in the literature on mainstreaming (eg., Antia & Stinson 1999; Van Cleve 1993). However, the range and amount of supportive interventions available to mainstreamed students have increased considerably within the past fifteen years, potentially improving aspects of current deaf students' experience.

Research questions

The overall project had a broad scope which intended to identify, from various perspectives, aspects of the mainstream situation for HN and VHN students which need further critical attention, particularly in relation to the following questions:

- (i) Through what modes and how adequately do HN and VHN deaf students access communication at home and at school?
- (ii) How well are HN and VHN deaf students achieving in mainstream settings? (as reported by primary school teachers, and national examination results for senior highschool students on Itinerant Teachers of the Deaf (ITOD) caseloads)
- (iii) What are parents' main reasons for choosing mainstream placement?
- (iv) What are parents' perceptions of, and levels of satisfaction with, support services and learning outcomes for their deaf child in a mainstream school?
- (v) What are the roles and duties performed by Teacher Aides (TAs) of HN and VHN deaf students?
- (vi) How adequate are TAs' training, employment conditions, and effectiveness in relation to their roles and responsibility for mediating deaf students' learning?
- (vii) What are the benefits of mainstream placement situations as perceived by parents, professionals (class teachers, ITODs, principals), and paraprofessionals (TAs, Deaf Mentors/Resource Persons)?
- (viii) What are the disadvantages of mainstream placement situations as perceived by parents, professionals (class teachers, ITODs, principals), and paraprofessionals (TAs, Deaf Mentors/Resource Persons)?

Project design

Case Studies and Surveys

The project sought data from various sources, using different methods to address the research questions. Case studies of six primary-school aged children provided classroom interaction data, and interview data from each child's class teacher, ITOD, Teacher Aide, parent, principal and Advisor on Deaf children. Data from videotaped class sessions were transcribed and analysed with a focus on the child's communication access and interactions in class. Aspects of these findings are reported in the Teacher Aide report (below), but analysis of this rich data set is ongoing. Interview data from case studies was transcribed and coded thematically; these remain to be more fully reported, although they have been related to survey results where appropriate (in the reports listed below).

Issues arising in case study interviews guided the design of surveys, which aimed to explore similar issues with a wider group of respondents. Surveys (by mail) of national samples of mainstream teachers, ITODs, parents, Teacher Aides, Advisors and Deaf paraprofessionals (by interview) were subsequently conducted. Details of survey administration and content are described in each report document (See: [Reports available from this site](#)). Survey responses were analysed, coded, and tabulated quantitatively using an SPSS programme. Certain questions were cross-tabulated in order to identify possible relationships between factors (e.g. geographical location and satisfaction with support services). Quantitative results were not subjected to tests of statistical significance, so contrasts and relationships reported in the results should be interpreted as indicative patterns.

Multiple perspectives

By surveying various groups of participants in the education of deaf students, it was hoped to find consistencies and differences in their perspectives on the current situation, and also to provide a wider dataset which might confirm findings identified in the case studies.

The perspectives of mainstream teachers, teacher aides, and Deaf paraprofessionals barely register at policy level in deaf education, despite the crucial roles they play. This project particularly aimed to document the experiences and views of these groups. (See survey reports for each of these groups). No New Zealand studies have specifically focussed on the work of teacher aides with deaf students, or the communication access of students who sign in mainstream schools. This aspect of the project breaks new ground for New Zealand, while providing data that may be comparable with previous overseas studies with a similar focus (e.g., Harrington 2001; Jones *et al.* 1997; Schein *et al.* 1991; Winston 1994).

Deaf students' views were not studied in this project. This is an acknowledged gap in the picture, as children's own perceptions are an important source of information for evaluating their educational experience. However, researching these requires specially designed techniques that allow children to articulate their experiences in ways that can be validly interpreted, such as those demonstrated by Sheridan (2001). This delicate process was not within the scope of this project.

PROJECT SUMMARY

Aim

To investigate communication access and learning outcomes for deaf children in New Zealand mainstream classrooms categorised as 'high needs' (HN) and 'very high needs' (VHN) - with a focus on the mediating role of teacher aides.

Types of Information Sought

- *Perceptions* - of student communication access, attainment, social relationships, resources & support services, relationships between educational personnel
- *Beliefs* - about benefits and disadvantages of mainstreaming, areas for improvement
- *Observation* - of student interaction & support practices in class
- *Statistics* - highschool exam passes, teacher assessments of achievement levels

CASE STUDIES

SURVEYS

Subjects	Data	Participants	Number
<ul style="list-style-type: none"> • 4 boys, 2 girls • aged 7-12 yrs • 4 signers, 2 oral • 2 w. one deaf parent • 3 city, 3 provincial • 4 Maori/part-Maori • 1 Pacific Island • 1 Arabic speaking 	<i>Classroom interaction</i> observe & videotape 15-20 hrs per child	Mainstream Teachers Teacher Aides Parents ITODs Deaf paraprofessionals	178 128 126 31 8
	<i>Interviews</i> with teacher, parent, TA, ITOD, principal, Adviser of each child	<i>Survey questions reflected issues arising from interviews</i>	

Theoretical perspective

In qualitative research, the researcher is acknowledged as having potential influence in the collection, analysis, and interpretation of data. The process of turning data into findings and conclusions is filtered through the lens of the researcher's particular philosophical or theoretical orientation to the problem being studied. This is especially pertinent to the analysis of observational, interview and descriptive data (Merriam 1998). It is therefore appropriate to identify theoretical perspectives and assumptions which underlie the research project as a whole, although they are relevant to varying degrees to different aspects of the project.

The research is broadly framed by a sociocultural view of the educational process, which holds that a learning context is generated by the interactions between people in an educational setting; these

interactions are shaped by the particular cultural-linguistic knowledge, ways, and expectations that the participants bring to the situation (Heritage 1997; Vygotsky 1978). A sociocultural view would predict that the 'deaf' status of a child in a school community will powerfully and consistently shape the interactions they have and the types of experiences they commonly need in order to learn effectively and to develop a coherent identity. This approach differs fundamentally from a special education model which frames learners as having 'special' needs that are best identified and catered for at the level of the unique individual.

A sociocultural view of deaf learners in mainstream schools acknowledges that as deaf adults, they will potentially inhabit two distinct cultural-linguistic worlds: the hearing world and the Deaf world. A recent policy statement in deaf education signals recognition of the complex sociocultural nature of learning contexts - *“A learner’s language and culture comprise a vital context for learning and development and must be taken into consideration in planning programmes”* (WEBResearch 2000:Part 3, Principle 6) - but is less explicit about how this would translate into accommodating a potentially bilingual-bicultural deaf student in a mainstream school situation. This researcher views bilingualism and biculturalism as a likely, positive outcome within deaf people lives, whether intended or not. A background in interpreting gives the researcher a particular interest in understanding the nature of cross-language, cross-cultural communication and identity between participants in complex situations such as the classroom.

With respect to placement decisions, the aim of this project to describe practices, beliefs, and outcomes in mainstream settings for deaf students supports the following policy statement (underlining added): *“... it is important that a range of educational settings is available and that families are given adequate information about those settings, so as to enable them to make informed decisions about satisfying the needs of their child.”* (WEBResearch 2000: Principle 1.3(b)). Decisions about school placement are made in a socioeducational context of cultural values, political and economic contingencies, and demographic circumstances of families, professionals and the education system - some of which are susceptible to change. Moreover, the kind of information that is available and considered adequate about 'settings' is influenced by these same factors; in reality it is often not sufficiently fine-grained to ensure that decisions are well informed by knowledge of possible processes and outcomes that will follow.

Reports available from this site

The project generated a large volume of data of various types, requiring different methods of analysis. The documents currently available on this site (listed below) report only on survey responses, along with a sample case study. The data from each survey was extensive, and in some respects particular to each group; it was therefore decided worthwhile reporting on each survey separately. Common issues which arose across the surveys have also been identified in a brief document.

Further publication of results is planned, particularly relating to Case Studies, and further synthesising findings across the project in order to answer the overall research questions.

The reports below can be downloaded, and should be cited to this website address.

Below each report title is a guide to some key topics covered:

Teacher Aides Survey Report

Roles and responsibilities; supervision; backgrounds and training needs; interpreting problems; alternatives to reliance on TAs

Mainstream Teachers Survey Report

Communication with deaf student; perceptions of student's communication access; student achievement levels; support & advice received; working with TAs; benefits & disadvantages of mainstream situation

Parents Survey Report

Communication modes at home/school; perceptions of academic & social progress; satisfaction with advice & support services; contact with Deaf adults; reasons for mainstream placement; perceived benefits & disadvantages of mainstream situation

Itinerant Teachers of the Deaf Survey Report

Examination results (highschool); perceived benefits & disadvantages of mainstream situation; perceptions of overall educational outcomes

Deaf Paraprofessionals Survey Report

Roles & functions; training & supervision; contact with parents; selection of caseload issues; relationships with hearing professionals; perceptions of teacher aides; perceived benefits & disadvantages of mainstream situation; improving learning contexts for deaf students.

Key Issues Across Surveys

Communication modes & communication access; positive & negative perceptions re. mainstream situations; academic outcomes; desired changes

Case Study: Sam

Family; school; educational support; language use; participation in class; access to teacher talk; access to group communication; social communication with peers; future identity & schooling

Related Publications (not available from this site)

McKee, R. L & Y. Biederman (2003) The construction of learning contexts for Deaf bilingual learners. In R. Barnard and T. Glynn (eds) *Bilingual Children's Language and Literacy Development*. Clevedon: Multilingual Matters, 194-224

McKee, R.L. (In press, 2004) Views from the frontline: Deaf paraprofessionals in mainstream schools. *Deaf Worlds*

McKee, R.L (In press) Deaf students as de facto bilinguals in mainstream schools: context and outcomes. *Proceedings of International Conference on Language, Education and Diversity*, University of Waikato, November 26-29, 2003

References

- Antia, S. & M. Stinson (1999) Some Conclusions on the Education of Deaf and Hard of Hearing Students in Inclusive Settings, *Journal of Deaf Studies and Deaf Education*, 4 (3), 246 –248
- Fitzgerald & Associates (2000) *A Survey of the Educational Needs of Deaf Children*. Unpublished Report for Specialist Education Services (Wellington, New Zealand.)
- Harrington, F. J. (2001) The rise, fall and re-invention of the communicator: re-defining roles and responsibilities in educational interpreting. In Harrington, F. J. and Turner, G. H., *Interpreting interpreting: Studies and reflections on sign language interpreting*. Coleford, Glocs: Douglas McLean. 89-102
- Heritage, J. (1997) Conversational Analysis and institutional talk: Analysing data. In D. Silverman (ed.) *Qualitative Research: Theory, Method and Practice* (pp. 161-182). London, Thousand Oaks: Sage Publications.
- Jones, B. E., Clark, G. M., & Soltz, D. F. (1997). *Characteristics and practices of sign language interpreters in inclusive education programs*. *Exceptional Children*, 63 (2), 257-268.
- Merriam, S.B. (1998) *Case Study Research in Education: A Qualitative Approach*. San Francisco: Jossey-Bass
- Nuthall, B. (1997). *Kelston Deaf Education Centre Pilot Bilingual Programme, January 1995-December 1996* (Unpublished report). Auckland: Kelston Deaf Education Centre.
- Schein, J., Mallory, B. & Greaves, S. (1991) *Communication for Deaf Students in Mainstream Classrooms*. Research Monograph No. 2, Western Canadian centre of Studies in Deafness, University of Alberta, Edmonton.

- Sheridan, M. (2001) *The Inner Lives of Deaf Children: Interviews and Analysis*. Washington D.C.: Gallaudet University Press
- Van Cleve, J. V. (1993) The academic integration of deaf children: A historical perspective. In R. Fischer & H. Lane (eds) *Looking Back: A Reader on the History of Deaf Communities and their Sign Languages*, International Studies on Sign Language and Communication of the Deaf, Vol. 20. Hamburg: Signum Press. (333-347)
- Vygotsky, L. (1978) *Mind in Society: The development of higher psychological processes*. (Ed. M. Cole, V. John-Steiner, S. Scribner, & E. Souberman). Cambridge, MA: Harvard University Press.
- WEBResearch. (2000). *A national plan for the education of deaf and hearing impaired learners in Aotearoa/New Zealand*. Ministry of Education, Wellington, NZ.
- Winston, E.A. (1994). An interpreted education: Inclusion or exclusion. In R.C. Johnson, O.P.Cohen (eds.), *Implications and complications for deaf students of the full inclusion movement*. Gallaudet Research Institute Occasional Paper 94-2. Washington, DC: Gallaudet University.