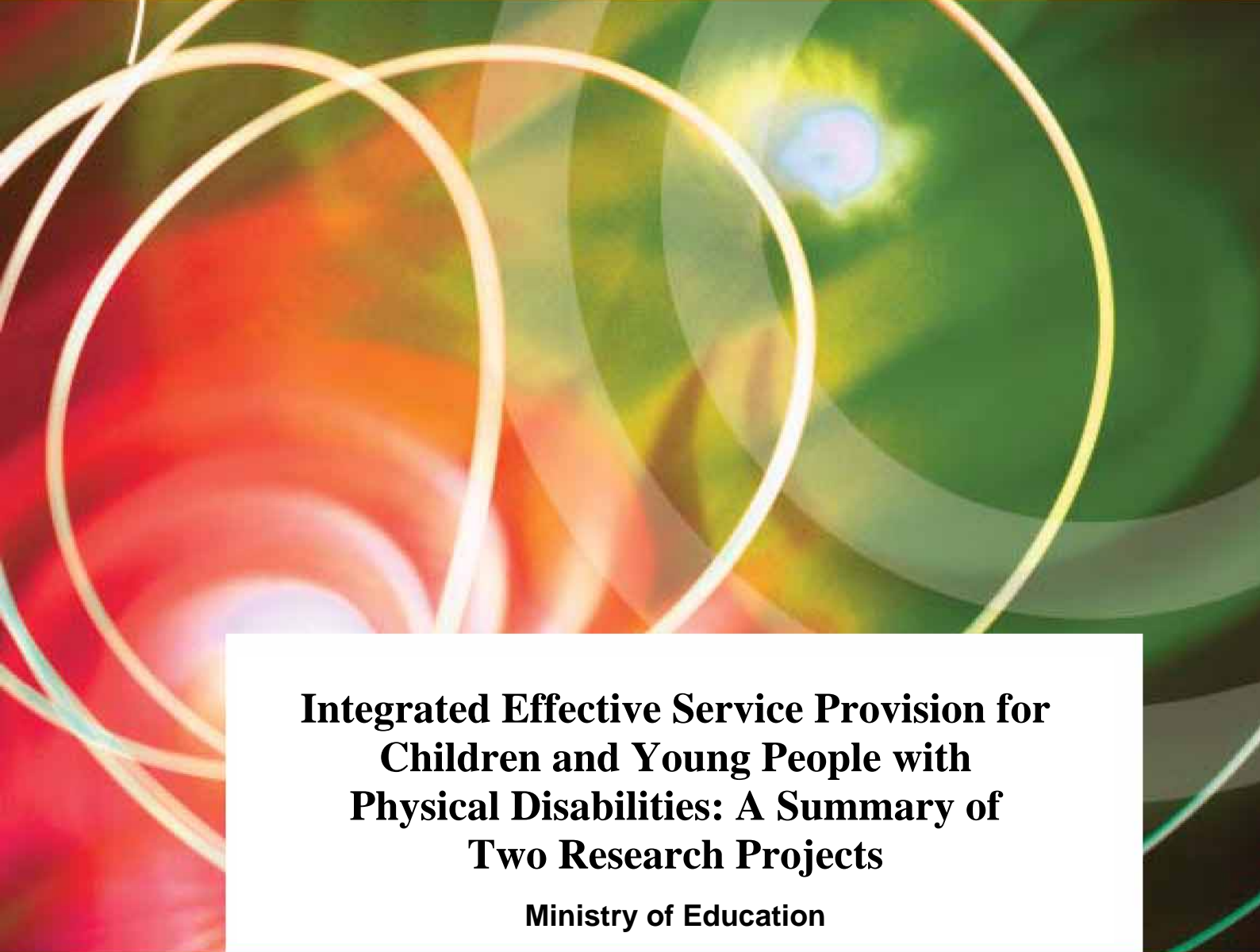



**MINISTRY OF EDUCATION**

*Te Tāhuhu o te Mātauranga*

New Zealand



**Integrated Effective Service Provision for  
Children and Young People with  
Physical Disabilities: A Summary of  
Two Research Projects**

**Ministry of Education**

**RESEARCH DIVISION**



**Wāhanga Mahi Rangahau**

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## **Preface to reports of research into integrated effective service provision for children and young people with physical disabilities**

We, the Ministry of Education Advisory Reference Group for Students with Physical Disabilities, are pleased to introduce you to this summary report of a two year research programme about integrated effective services for children and young people with physical disabilities.

With the implementation of Special Education 2000 (SE2000) we saw significant opportunities for providing more effective services but we were aware that there was much debate about what these effective services could and should look like. Recognising that young people with physical disabilities had a range of support needs and were learning in a number of different settings, we wanted to build a solid base of evidence information that covered a range of effective practices and approaches. With the many perspectives represented in our group, we were well placed to understand the diverse views, hopes and experiences of families, educators and specialist services.

We used a collaborative approach that brought together the experiences of the young people themselves, their families and whānau, their therapists and their teachers. We were determined that the research would take a holistic approach which illustrated the central role of families and the importance of the young person as a person, rather than just a recipient of resourcing and services.

In 2001 – 2002 we commissioned a scoping study into the characteristics of integrated effective practice. The resulting indicators are contained in the scoping study report - [www.educationcounts.govt.nz/publications/special\\_education/integrated\\_effective\\_service](http://www.educationcounts.govt.nz/publications/special_education/integrated_effective_service)

Building on the findings of the scoping study, in 2003 we went on to commission a comprehensive, two part research project. One part focused on getting a better picture of the numbers of students with physical disabilities and the resources these students were drawing on across a number of relevant government agencies. The other consisted of case studies which illustrated approaches to education and therapy for students in a range of different school settings and locations. Together, the two parts of the research provide a rich picture of the experiences of young people with physical disabilities, their families, schools and therapists.

This was the first time statistical and administrative data was used in Aotearoa New Zealand to understand the numbers of young people with physical disabilities, and their situation. Through assembling information from Work and Income, ACC, and the Ministries of Health and Education, the researchers discovered some patterns and gaps in access to resources. This data was supplemented with a survey of schools which were providing therapy services.

The case studies component of the research was conducted by a second team of researchers who accompanied a small number of students throughout one or more typical school days. This

layering of approaches and sources of data has created very rich information about the young people in and across all their usual settings and activities.

We acknowledge that the research was ambitious and the resulting information was extensive and complex. Although it has taken time to do justice to the wealth of detail in the reports, the resulting information is still real and relevant.

We are confident that the research reports from both projects will be valuable for everyone involved in striving towards integrated effective practice for students with physical disabilities. The research captures day-to-day challenges and achievements. It does not gloss over the difficulties but reveals potential for improvements across a number of the systems that support these students, and their families and whānau.

This summary report highlights the aspects of the research which we see as being particularly important for policy, planning and practice, including the:

- importance of collaboration – between families, schools and specialist services, and between different government agencies;
- complexity of needs and ways to address these – requires flexibility and a range of options, rather than a single recipe for services;
- significant contribution made by families, parents, whānau and fono;
- significant contribution made by teachers, teacher aides, therapists and communities;
- the need for professional learning and development;
- value of communicating and sharing information – everyone needs to know what is possible and how to make it happen.

As a group, our vision is for students to engage in learning and participate in their communities to their fullest. For that we all need access – to information, knowledge and quality services. From the research it is clear that there is a marked need for building the knowledge, skills and confidence of all those who support the young people. We can all contribute to this development, as we all have some of the skills, knowledge and information that are needed to provide truly integrated and effective support.

Whether you are involved in developing policy, planning services or providing day-to-day support for young people with physical disabilities, you will find these reports contain information that will help you and improve outcomes for the young people.

The full research report is available at [www.educationcounts.govt.nz/publications/15356](http://www.educationcounts.govt.nz/publications/15356)

## Contents

Introduction.....	1
Indicators of integrated effective practice .....	1
Structure of this summary .....	2
Part 1: The database research project: A summary .....	5
Background .....	7
Resourcing .....	7
Data sources .....	7
Definition of disability.....	7
Household Disability Survey data .....	9
Numbers.....	9
Gender .....	9
Ethnicity.....	9
Geographical distribution .....	9
Comparison of rates internationally.....	10
Experiences.....	10
Unmet need.....	12
Child Disability Allowance.....	15
Numbers.....	15
Gender .....	15
Geographical distribution .....	15
ACC-funded Independence Allowance and lump sum payments.....	17
Numbers.....	17
Geographical distribution .....	17
Ethnicity.....	18
Independence Allowance and Child Disability Allowance.....	18
Services funded by ACC .....	19
Numbers.....	19
Ethnicity.....	19
Ongoing and Reviewable Resourcing Schemes funding.....	21
Numbers.....	21
Ethnicity.....	21
Urban and rural .....	22
School decile .....	22
Geographical distribution .....	22
Verification rates.....	23
Gender .....	23
Data from specialist service providers .....	23
Students with Moderate Physical Disabilities.....	25
Numbers.....	25
Health-funded services .....	27
Survey of schools .....	29

Part 2: Case Studies of Service Provision to Students with Physical Disabilities.....	31
Background.....	33
Research questions.....	33
How the research was done.....	33
The case studies.....	35
On-site provision.....	35
Itinerant therapy services.....	36
Focus students.....	36
Approaches to therapy.....	43
Self-contained school and primary school with attached unit.....	43
Secondary and intermediate schools with attached units.....	43
Itinerant therapy support.....	44
Reflecting the principles of integrated effective practice.....	47
Organisational matters.....	47
Interagency and professional collaboration.....	47
Working as a team.....	48
Interventions.....	52
Funding.....	53
Effects on quality of life.....	55
How well does therapy support children’s development?.....	55
The balance between learning and therapy.....	55
Friendships and relationships.....	56
Parental involvement.....	57
Children’s voices and children’s rights.....	57
Glossary.....	59



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# Introduction

This is a summary of a comprehensive two-part research programme on integrated effective service provision for children and young people with physical disabilities. One study focused on resourcing and the other was a set of case studies. Both studies took place from 2003 to 2004.

The two research projects were developed from a scoping project (the McDonald report)<sup>1</sup> that had been commissioned by the Ministry of Education-convened Advisory Reference Group for Students with Physical Disabilities (the Reference Group).

The Reference Group consisted of parents, health professionals, early childhood and school staff, and representatives of disability organisations and education unions. Part of its brief was to promote and support robust research into effective integrated teaching, learning, and therapy practices so that children and young people with physical disabilities successfully overcome barriers to learning and develop their skills for participating effectively in life. The Reference Group and the Ministry of Education commissioned the scoping project to identify the indicators of effective integrated practice and set the research questions for the two-part study summarised here.

## Indicators of integrated effective practice

The move towards inclusive education for children and young people with physical disabilities has meant that physiotherapists and occupational therapists have become members of special education teams. This raises questions about the role these specialists can play in this new working environment and about the best ways to integrate practices from a number of occupational groups within an educational context.

The term ‘integrated’ is widely used in education to describe the extent to which children and young people with physical disabilities are a part of their school community. Increasingly, the term has become synonymous with inclusion, and refers to the extent to which an individual has the opportunity to participate in every aspect of life (McDonald et al., 2001, p.15).

‘Integrated practice’, in the context of the scoping project and the research summarised here, refers to therapists, teachers, and families working together to provide services and programmes for children and young people with disabilities in schools, and to the integration of the therapies into their daily activities.

‘Effective practice’ is used in the sense of ‘best practice’. What is effective practice in one context will not necessarily be an effective practice for another student in another setting. However, effective practices must be theoretically and methodologically sound, they must consistently produce desired outcomes, and they must be socially valid (McDonald et al., 2001, p.16).

From its review of the literature, the McDonald report identified a number of indicators to identify integrated and effective practices in New Zealand. These include:

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<sup>1</sup> McDonald, T., Caswell, P., Penman, M. (2001). *Integrated effective service provision for children and young people with physical disabilities: Report to the Ministry of Education’s reference group on physical disability*. Wellington, New Zealand: Ministry of Education.

- The student and family are at the centre of practice and individual and family needs are reflected in the development of interventions.
- A range of environmental or ecological assessment<sup>2</sup> and evaluation tools is used to identify areas of need and to measure outcomes.
- There is a focus on quality of life issues and the development of functional skills.
- Therapy and interventions are carried out in natural settings across an individual's day.
- Agencies, organisations, and individuals from a range of disciplines work in collaborative teams in support of students and their families. The collaboration must address issues of overlap to avoid problems of communication, continuity and transition; reduce pressures on families; and be client-centred and culturally sensitive.
- There is a method for measuring change based on mutually agreed outcomes.

The components of integrated effective practice identified by the people interviewed as part of the scoping project were similar to those identified in the literature review. The scoping project also identified ways to measure the success of interventions (outcome measures), based on information from the interviews and on the literature review. Table 1 summarises the indicators and outcome measures identified in the literature review and from the interviews.

As a result of the scoping project, the Reference Group and the Ministry of Education commissioned the two research projects: a database project and a series of case studies.

The database project was a synthesis of existing information from a range of sources that gave a picture of the distribution of resources and funding streams for this group of students, and the quantum of resourcing on a national and regional basis. The research was conducted by a team led by Phillipa Clark, Department of Paediatrics, University of Auckland.

The case studies illustrated approaches to therapy for students with physical disabilities in the compulsory school sector, across different services, settings and locations. This project also looked at the extent to which the approaches to therapy reflected the principles of integrated effective practice, and the effect the therapy and services had on the life and quality of life of students with physical disabilities and their families.

The case studies were researched by a team led by Jude MacArthur, of the Donald Beasley Institute, University of Otago.

## **Structure of this summary**

This summary starts with the database project. It presents the key findings from each of the data sources, including the estimated numbers and characteristics of children and young people with physical disabilities,

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<sup>2</sup> Ecological assessment recognises that a student's surroundings and context have an effect on abilities and needs. Ecological assessments include a study of students' physical environments and students' interactions with the people in close contact with them.

geographical patterns of distribution, and other information specific to a particular data source. The second part of the summary looks at the key findings from the case studies.

For more detailed information, refer to the full report which is available from:

[www.educationcounts.govt.nz/publications/15356](http://www.educationcounts.govt.nz/publications/15356)

**Table 1 Indicators of integrated effective practice\***

<p><i>Integrated effective practice</i></p> <p>Services and provision can be said to be integrated and effective when:</p> <ul style="list-style-type: none"> <li>• sufficient, flexible and transparent funding is available to meet individual, programmatic, organisational and monitoring needs</li> <li>• there is local control, development and management of services</li> <li>• agencies collaborate, co-ordinate and manage transitions successfully</li> <li>• caseloads are managed to enable enduring relationships with clients and families, effectiveness of service and individual role clarity</li> <li>• families are informed about options and alternatives, and they are respected team members</li> <li>• there is a focus on changing attitudes and environments</li> <li>• the IEP [Individual Education Programme] is the focus of contact and planning, changes are recorded and documents are regularly reviewed</li> <li>• physical and educational needs are balanced</li> <li>• flexibility in programme model, location and provision occurs</li> <li>• staff are familiar with the educational context and the curriculum, and have on-going professional development, supervision and mentoring.</li> </ul>	<p><i>Integrated effective practice</i></p> <p>The literature has identified the following components of integrated effective practice.</p> <ul style="list-style-type: none"> <li>• Inter-agency and professional collaboration, which helps to reduce overlap and avoid problems of communication, continuity and transition.</li> <li>• Services aim to reduce pressures on families and work in a client-centred, culturally sensitive manner.</li> <li>• Clients and families are central in the assessment, development and monitoring of interventions, and there is recognition of disability across people's lives.</li> <li>• A range of developmentally appropriate, non-standardised ecological observation, assessment and intervention methodologies are used.</li> <li>• There is a focus on quality-of-life outcomes that promote adaptation and functional skills.</li> <li>• Change is measured by the analysis of school, home, health, community and vocational factors.</li> <li>• Interventions become natural activities in an individual's life.</li> <li>• Intervention plans are designed for implementation in natural settings across an individual's day.</li> </ul>
<p><i>Measuring outcomes</i></p> <p>Effective services are said to have been provided when programmes focus on:</p> <ul style="list-style-type: none"> <li>• inclusion, including access to peers and minimising differences</li> <li>• equalising opportunities for students with/out disabilities</li> <li>• self-esteem, confidence and learning</li> <li>• meaningful and beneficial goals</li> <li>• a long-term view, and practical and easily maintained goals</li> <li>• input from clients and families</li> <li>• using relevant assessment and monitoring approaches.</li> </ul>	<p><i>Measuring outcomes</i></p> <p>The literature has noted that the indicators of effective outcome include:</p> <ul style="list-style-type: none"> <li>• extensive family involvement</li> <li>• client learning and achievement</li> <li>• acceptance, inclusion and friendships</li> <li>• supports for curriculum adaptation</li> <li>• interventions that focus on quality of life and include multiple measures, perspectives and components</li> <li>• built-in accountability measures based on the definition of outcomes and the purpose for which the information is to be used.</li> </ul>

\* Table 1 is from the full report of the two-part research project. Indicators and outcomes identified from interviews are in the left hand column and those identified from the literature review are on the right.



# **Part 1: The database research project: A summary**



## Background

The database research project was a quantitative study that sought information on the amount of resourcing for, and the means of distributing it to, school-aged children and young people with physical disabilities, on a national and regional basis. The data was extracted and collected over the period 2001 – 2003.

## Resourcing

The database project reported on the three main sources of funding – the Ministry of Education, the Ministry of Health, and the Accident Compensation Corporation. It also looked at other sources of funding such as the Child Disability Allowance – a benefit administered by Work and Income (a service department of the Ministry of Social Development) – and privately provided therapy, usually funded by parents and caregivers.

The Ministry of Education has two main resourcing streams for students with physical disabilities – the Ongoing and Reviewable Resourcing Schemes (ORRS) and the contract for children and young people with moderate physical disabilities (the moderate needs contract). Some additional central resourcing for therapy<sup>3</sup> is also provided outside of ORRS and the moderate needs contract.

The Ministry of Health funding is provided through its Disability Support Services in the form of resourcing for Child Development Services (CDS) teams that provide therapy and related services.

The Accident Compensation Corporation provides funding for benefits and services for children and young people who are disabled as a result of an accident.

The Child Disability Allowance is paid to the caregiver of eligible children and young people. It is not means-tested, but children and young people who are disabled as the result of an accident, and thus receive the Accident Compensation Corporation-funded Independence Allowance, are not eligible for the Child Disability Allowance.

## Data sources

Data were obtained from the following sources: Statistics New Zealand's 2001 Household Disability Survey, Ministry of Education, Special Education (GSE),<sup>4</sup> school-based providers of moderate needs contracts, special schools and schools with attached units, the Ministry of Health's Disability Support Services, CDS teams, the Accident Compensation Corporation, and Work and Income.

## Definition of disability

For the purposes of the research project, the researchers defined physical disability that affects learning or access to the curriculum as:

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<sup>3</sup> Initially known as transitional funding, the additional central resourcing was provided to 26 schools and units to help them make the transition to the new Special Education 2000 (SE 2000) framework so they would not be disadvantaged. Some schools and units still receive additional resourcing for physiotherapy and occupational therapy positions.

<sup>4</sup> GSE (originally Group Special Education) is the accepted abbreviation for the Ministry of Education, Special Education section.

Difficulties with physical activities, which involve sitting, standing, positioning, moving, communicating, writing, manipulating school tools/materials, and self-care, that impact on learning or access to the curriculum.



## Household Disability Survey data

The following section summarises the key findings from an analysis of data from Statistics New Zealand's 2001 Household Disability Survey (HDS); specifically, from two components of the HDS – the Child Screening Questionnaire (completed face-to-face by a parent or caregiver of all those aged 14 and under), and the Child Content Questionnaire, which asked further questions relating to services and assistance, education, equipment, transport and accommodation.

Based on the representative sample of people who completed the HDS 2001, Statistics New Zealand estimated there were 90,000 children aged up to 14 years with disabilities. The database project researchers used that data to estimate the number of children with physical disabilities.

### Numbers

Based on the Statistics New Zealand estimates, the database project researchers estimated there were 14,500 children aged 14 years and under who had physical disabilities (as defined for this research project – see page 10). Of the 14,500, an estimated 12,200 were between the ages of 5 and 14, inclusive.

### Gender

There were slightly more boys than girls with physical disabilities: in the under-five age group, there were an estimated 1,400 males and 900 females, and in the 5 to 14 age group there were an estimated 6,900 males and 5,300 females.

### Ethnicity

An estimated 9,600 of children and young people with physical disabilities were New Zealand European, 3,800 Māori and 600 Samoan. Estimated numbers for Cook Island Māori, Tongan and other ethnic groups were too small to be reliable. Of the estimated 3,800 Māori, 700 were under 5 years and 3,100 between 5 and 14 years. The researchers suggested this breakdown of ethnicity data could provide useful background information for planning services for Māori children with physical disabilities.

### Geographical distribution

The Household Disability Survey used four areas (the northern, midland, central and southern regions)<sup>5</sup> for data on geographical rates of distribution. The data were given as the rate per 1,000 children, which allowed for areas with higher or lower population densities and gave an estimated proportion of children with physical disabilities in each area rather than the total number.

An estimated 17 per 1,000 children had physical disabilities. The rates per region were: 13.6 per 1,000 for the northern region, 13.5 per 1,000 for the midland region; 19.5 per 1,000 for the central region and 26.2 per 1,000 for the southern region. The researchers noted that the figures gave no indication as to why the Southern region had a proportionately higher rate of children per 1,000 with physical disabilities than the other areas.

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<sup>5</sup> The northern region included Northland and Auckland; the midland region included Waikato, Rotorua, Taupo, Bay of Plenty and Taranaki; the central region included Gisborne, Hawkes Bay, Wairarapa, Wanganui, Manawatu, Wellington, Nelson and Marlborough; and the southern region covered the South Island, except Nelson and Marlborough.

Of the estimated number of children with physical disabilities (as defined by the database research project), around one-third had a severe disability, which meant they would need personal help on more than one level (e.g., needing both respite care and personal care). Proportions with severe disability were similar in Māori and non-Māori.

## **Comparison of rates internationally**

The estimated number of New Zealand children aged up to 14 with physical disabilities was 14,500 or 1.7%, which was higher than the United Kingdom (an estimated 1% of 10 to 15 year olds with a locomotor disability) or Canada (0.5% aged 5 to 14 years with mobility problems and 0.8% with dexterity problems); however, the research noted that the differences could be because of differences in categorisation – the New Zealand data may have captured some children who were described in the data sets of other countries as having a self-care disability or a dexterity disability.

## **Experiences**

The researchers used responses in the Child Content Questionnaire section of the HDS to describe the experiences of the estimated 14,500 children with physical disabilities and their families. The questionnaire focused on five main areas: services and assistance; education; transport; accommodation; economic characteristics.

The data related to the 12 months before the questionnaire was administered, except for the questions about school enrolment, which related to the week ending 4 March 2001.

### **Services and assistance**

The researchers calculated that an estimated:

- 8,700 children had had a consultation with a physiotherapist
- 6,600 had seen an occupational therapist
- 4,000 had seen a speech-language therapist
- 3,900 had seen a counsellor, social worker or psychologist
- 800 had seen a podiatrist or chiropodist
- 1,700 had seen an alternative therapist, homoeopath, naturopath or iridologist.

In terms of personal care and housework, an estimated:

- 4,400 families needed help with their child's personal care or with household work because of their child's condition
- 1,600 needed help with personal care but were unable to get this help
- 1,200 needed but were unable to get help with household tasks such as housework or shopping
- 1,500 needed but were unable to obtain help with repair or maintenance of property.

The researchers said these data indicated there was a high level of perceived unmet need.

They also estimated that 2,400 children or young people received free respite care; 3,000 received government, hospital or Ministry of Health funding for personal care; and 1,100 had to pay for respite care themselves.

Within the 12 months before the administration of the Child Content Questionnaire, an estimated 800 children or young people with a physical disability (5.5%) had received physiotherapy, speech-language therapy, or other therapy that had been paid for by their parents or caregivers.

An estimated 5,600 children had had a needs assessment at some point in their life, and an estimated 8,700 (60%) had not. Parents and caregivers of the remaining children with physical disabilities were unsure or did not answer.

## Education

This section of the HDS divided children into early childhood age (under five years) and school-age (5 years to 14 years, inclusive). Questions about school enrolment related to the week ending 4 March 2001.

From the responses of the HDS sample, it was estimated that of these 5 to 14 year-olds:

- 8,700 children with physical disabilities were at primary or intermediate school
- 1,900 were at secondary school
- 800 were at a special school.

The numbers at other types of schools were all too small for reliable estimates.

The researchers deduced two other estimates by using different questions in the Child Screening and Content Questionnaires. Based on the Child Screening Questionnaire, an estimated 1,100 children were attending a special school; and, based on the education questions in the Child Content Questionnaire, an estimated 2,000 either attended a special school in the week the snapshot data were obtained or had done so at some stage.

It was estimated a large proportion of children (an estimated 10,800 out of 12,200 aged 5 to 14 years, or about 90%) were able to be enrolled in the school of their choice.

An estimated 3,300 children needed special transport or help getting to and from school. For an estimated 5,900, their main way of getting to school was by private car; for an estimated 1,400 it was by school bus; an estimated 1,500 mostly used subsidised special transport or taxi to get to school, and an estimated 2,500 mainly walked.

An estimated 7,100 children were prevented from taking part in sports and games at school because of their condition or health problem.

An estimated 5,700 were prevented from playing because of their health condition, an estimated 4,200 were prevented from making friends, and an estimated 3,400 were prevented from going on school outings or camps because of their health conditions.

The researchers estimated that, based on the HDS sample, 6,800 children aged 5 to 14 years had received an assessment from a specialist at some time in the past.

## Transport and accommodation

For an estimated 700 children, a private car had been modified so they could travel in it.<sup>6</sup> An estimated 1,200 required special features to enter and leave their home – the only specific type of equipment or modification mentioned by a significant number of parents and caregivers was an easy-to-get-at driveway, ramp or street-level entrance, needed for an estimated 700 children.

## Unmet need

The researchers estimated there were 1,600 families who needed help with the personal care of their child but did not get it; an estimated 1,200 who needed help with household care but did not get it; and an estimated 1,100 who had to pay for respite care for their child – presumably, the researchers say, because no other form of funding was available or because the available funding was insufficient.

Furthermore, an estimated 600 children needed but had not received modifications to the family car, and an estimated 1,300 needed special features to enter or leave their home but had not received them.

An estimated 8,700 children with physical disabilities (based on the definition used by the researchers) had seen a physiotherapist and an estimated 6,600 had seen an occupational therapist (in the year previous to the administration of the HDS questionnaires). An estimated 800 had seen a therapist (occupational therapist, physiotherapist or speech-language therapist) paid for privately. The researchers said this could suggest an unmet need or a difference in view between family and public services as to what the therapy needs of certain children were and where those needs fell relative to those of other children for a service with a finite budget – the researchers noted that questions of when and why families paid for private therapy could not be explored further with these data.

Based on parent/caregiver information in the HDS sample, the researchers estimated that a large proportion of children (at least 60%) had never had a needs assessment (though this is neither a requirement nor entitlement) – however, they noted that parents may have forgotten that they had received an assessment and therefore the figure may have been an over-estimate.

The researchers noted that, notwithstanding this, the figure was a concern as a needs assessment<sup>7</sup> is one of way of accessing a large number of health-funded occupational therapy and physiotherapy services.<sup>8</sup> They suggested two possible reasons for this figure. First, it could be that more than half the children estimated as having physical disabilities as defined by this research did not have a disability as defined by the Ministry of Health. Secondly, it could mean a number of children with physical disabilities were missing out on an important service (needs assessment) and were perhaps lacking access to services and supports for which they would be eligible, including home help, help with personal care and respite care.

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<sup>6</sup> The transport section of the Child Content Questionnaire addressed only those children two years and older.

<sup>7</sup> Needs assessments are conducted by Needs Assessment and Service Co-ordination organisations (NASC), contracted to the Ministry of Health's Disability Services Directorate (from 1 July 2007 known as the Health and Disability National Services Directorate) and that work with disabled people to help identify their needs and to outline what disability support services are available. They allocate Disability Services-funded support services and assist people to get other support that is available.

<sup>8</sup> Services can be also be accessed without a needs assessment

In regard to allowances, it was estimated that fewer than half (5,500) of children with physical disabilities were receiving the Child Disability Allowance (the non-means tested benefit discussed in the next section). Fewer still (1,300) were reported to be receiving the means-tested Disability Allowance.<sup>9</sup>

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<sup>9</sup> See also *Living with Disability* (2004), a descriptive analysis of results from the 2001 Household Disability Survey and the 2001 Disability Survey of Residential Facilities :  
[www.moh.govt.nz/moh.nsf/0/8FD2A69286CD6715CC256F33007AADE4/\\$File/livingwithdisability.pdf](http://www.moh.govt.nz/moh.nsf/0/8FD2A69286CD6715CC256F33007AADE4/$File/livingwithdisability.pdf)



## Child Disability Allowance

This section summarises the main findings of the analysis of the data on children and young people receiving the non-means-tested Child Disability Allowance.<sup>10</sup> The data were provided by Work and Income, which administers the allowance.

To qualify, a child or young person must meet all the requirements of Section 39A(1), plus at least one of the Section 38A(2) criteria. Thus, the child or young person must:

- have a physical or mental disability, and
- because of that disability, need constant care and attention, and
- be likely to need such care and attention permanently, or for more than 12 months.

In addition, the child or young person must require:

- frequent attention, from another person, in connection with his or her bodily functions, or
- attention and supervision substantially in excess of that normally required by a child or young person of the same age and sex, or
- regular supervision from another person in order to avoid substantial danger to himself or herself or to others.

Most of the figures below relate to the total numbers in receipt of the Child Disability Allowance, rather than just those estimated to have a physical disability.

## Numbers

The data showed that on 6 September 2002, a total of 24,423 children and young people were receiving the Child Disability Allowance.<sup>11</sup> Of these, the researchers suggested between 1,000 and 2,600 had a physical disability (based on an analysis of medical terms on application forms that suggested physical disability).

## Gender

Of the total number of children and young people in receipt of the allowance on 6 September 2002, 13,907 were boys and 7,800 were girls, with gender not recorded for the balance (2,753). The researchers noted that the pattern of more boys than girls receiving the allowance fits with the Household Disability Survey data discussed in the previous section.

## Geographical distribution

Geographical rates of distribution were determined by examining the uptake of the allowance per 1,000 children and young people in the geographical area – in this case, territorial local authorities. Using rates per 1,000 allowed the researchers to take into account whether areas were densely or sparsely populated.

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<sup>10</sup> Note that Child Disability Allowance is available for dependent children and young people aged up to 17 years, and the data reported here apply to that age range, whereas Child Disability Allowance data from the Household Disability Survey, reported in the previous section, relates to children and young people aged 14 years and under.

<sup>11</sup> This was worth \$33.75 per week, as at July 2003; the figure as at 1 April 2005 was \$38.46 a week.

There were high rates of uptake per 1,000 for Dunedin City, Invercargill City, Christchurch, and Papakura – the researchers noted, however, that each of these local authorities administered the Child Disability Allowance for surrounding local authorities that had no Work and Income offices. Once this was allowed for, the range of uptake rates was smaller but remained statistically significant.

The researchers suggested several explanations for this. It could be that parents moved with their families to certain magnet areas; that is, families might move to be near hospital facilities or near schools that they felt were particularly good at providing a quality education for children and young people with disabilities. Also, the variation might be because parents were more likely to be made aware of the Child Disability Allowance in some areas than in others – for example, some areas might have had better developed parent support groups and parent networks, or be areas where therapists or teachers raised parental awareness of this allowance.

Varying degrees of awareness among doctors, and differences in ability or willingness to recognise certain conditions, might also have contributed to variation in uptake, as might socioeconomic conditions. However, the researchers said that although there was evidence in the research literature that recurrent and perhaps chronic illness was more common in families with lower income, in this project there was no evidence of a relationship between the median income of a geographical area or areas and the uptake rate of the Child Disability Allowance administered by the Work and Income office in that area.

In summary, while some of the variation in uptake occurred because certain offices administered the allowance for people living in other geographical locations, there appeared to be a genuine geographical variation in uptake rates. This, the researchers said, suggested that some areas were under-using the Child Disability Allowance – that is, that there may be some children and young people who were eligible for the allowance who were not getting it – while in others there was a high level of awareness and a willingness to apply for the allowance.

The researchers estimated that if the relatively high but believable rate of 40.99 per 1,000 population in the combined Timaru, McKenzie, and Waimate districts, in South Canterbury, were extrapolated across the whole of New Zealand, there would be an estimated 43,474 children and young people receiving the Child Disability Allowance, rather than the observed 24,433.<sup>12</sup> It therefore appeared likely that some children and young people who would be eligible were not receiving this allowance.

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<sup>12</sup> The figures included all children receiving the CDA, not just those with physical disabilities.



## ACC-funded Independence Allowance and lump sum payments

This section summarises the key findings relating to children and young people funded by the Accident Compensation Corporation (ACC) who received an Independence Allowance or a lump sum payment.

This support is accessed through accident forms, assessment, and decisions made by case managers. Children and young people may qualify for an Independence Allowance or may have qualified in the past for a lump sum.<sup>13</sup> The Independence Allowance is a quarterly allowance based on the assessed level of impairment.

The data analysis included all children and young people aged under 18 years.

### Numbers

A total of 892 children and young people (aged under 18 years) had received lump sums or were receiving an Independence Allowance at the time the data were extracted (September 2002). The researchers classified 320 of these children and young people as physically disabled, based on the criterion that they had acquired equipment costing more than \$60. The amounts received in lump sums or through the Independence Allowance for the 320 children and young people with physical disabilities ranged from \$801 to \$26,999 per claimant.

### Geographical distribution

Sixteen regions were used as the basis for the geographical analysis: Auckland, Bay of Plenty, Canterbury, Gisborne, Hawkes Bay, Manawatu–Wanganui, Marlborough, Nelson, Northland, Otago, Southland, Taranaki, Tasman, Waikato, Wellington, and the West Coast.

Across the country, the distribution of children and young people receiving the independence allowance or a lump sum (i.e., all recipients, not just those with physical disabilities) was 0.88 per 1,000 population. The regional analysis showed a statistically significant regional variation in rates – the highest uptake was on the West Coast of the South Island (the combined Westland–Grey–Buller districts), followed by the Southland region (combined Invercargill and Gore). Uptake was also high in the Taranaki and the Gisborne regions. The Northland region had low absolute numbers and low numbers proportionally.

The researchers said the figures were open to a range of interpretations: It may have been that accidents that led to disability were occurring at a higher rate in some geographical areas than in others; or that access to ACC funding was easier in some parts of New Zealand than others; or that both those explanations applied.

The researchers noted that some less densely populated areas had relatively high uptake rates.

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<sup>13</sup> The entitlement to lump sums ceased in 1992 and was replaced by the Independence Allowance, but was subsequently reinstated under the Injury Prevention Rehabilitation Corporation Act 2001 for injuries sustained after 1 April 2002.

## **Ethnicity**

The proportion of Māori children and young people aged under 18 years who received the Independence Allowance or a lump sum was 0.9 per 1,000 population, similar to the overall rate of 0.88 per 1,000. The uptake rate for Pasifika children and young people in this sample was low, at 0.46 per 1,000 population.

## **Independence Allowance and Child Disability Allowance**

The researchers said that the information from the Work and Income-administered Child Disability Allowance, discussed in the previous section, and the similar Independence Allowance funded through ACC suggested that there were an estimated 2,920 children and young people aged under 18 years with a presumed physical disability who were receiving an allowance or lump sum (up to 2600 via Work and Income and 320 via ACC).

## **Services funded by ACC**

This section summarises the findings from the analysis of data on those children and young people who received ACC-funded services for a physical disability. The criterion for identifying a child or young person as having a physical disability was that the claimant had received a payment for equipment of at least \$60. The data were abstracted in July 2002.

### **Numbers**

Using the criterion above, the researchers found that 557 children and young people (349 boys and 208 girls) aged under 18 years received services funded by ACC. For 381 children and young people (68%), their accident occurred between 0 and 5 years of age. Not many of those who sustained their injury 10 years or more earlier were still receiving funding in August 2002. The researchers said that suggested many had injuries that improved over time, or that some were now 18 years or over and did not appear in the data, although they may still have been receiving funding.

### **Ethnicity**

More than half were New Zealand European/Pakeha (313) and the next most commonly represented group was Māori (141). The researchers said that because a variety of sources suggested that Māori children and young people were over-represented among those with disability, they decided to examine the data for Māori separately.

The researchers found that Māori were slightly more likely to have their accidents in the first two years of age than non-Māori. In terms of the cause of the accidents, Māori were generally over-represented in each category compared to their proportion of the total population. The researchers said that indicated that proportionally more Māori than non-Māori had preventable injuries but also that services were accessible to Māori – unless the true need was even greater than appreciated because, for example, some Māori families and whānau might prefer not to access what they perceived to be a Pakeha service.

Pasifika children and young people, on the other hand, were proportionately under-represented in these data.



## Ongoing and Reviewable Resourcing Schemes funding

This section covers findings from the data on the Ministry of Education's Ongoing and Reviewable Resourcing Schemes (ORRS). These schemes support students with high and very high special educational needs who require additional help to take part in education. The schemes provide money for specialist services and teacher aide support, and also extra resources in the form of additional teacher time. At the time of the research, about 7,500 students or 1% school-age population, could receive support under ORRS at any one time.

Data in this section came from the Ministry of Education database which records each application and its outcome, and keeps track of those receiving ORRS resourcing. The researchers received several data sets, each relating to a different period. All identifying features had been removed from the information.

ORRS has two funding rates, one for students with high needs and the other for students with very high needs.<sup>14</sup> There are also two types of additional staffing time – 0.2 of a full-time teacher equivalent (FTTE), or one day a week, for students whose needs are verified as very high, and 0.1 of an FTTE, or half a day a week, for students whose needs are verified as high.

Unless stated otherwise, the following figures relate to total ORRS funding, not just ORRS funding for students with physical disabilities. Also, because the figures relate to the school-age population, they cover children and young people from 5 to 21 years of age, in contrast to figures provided for other sources of resourcing, for which the age categories include children and young people aged 14 and under (HDS) and children and young people aged 17 years and under (Work and Income figures for Child Disability Allowance, and ACC figures for Independence Allowance, lump sum payments and ACC-funded services).

### Numbers

In total, 7,592 children and young people received ORRS resourcing at some time in 2002, of whom 2,988 were girls and 4,598 boys. This figure represented a little more than 1% school age population. Because some students joined and some left the schemes over the course of the year, the total varied from day to day.

On 15 December 2002, there were 1,078 students described as having a physical need who were receiving ORRS resourcing. At the same time, 608 students described as having a general learning need also had physical needs verified, and 67 students described as having a vision need were verified as also having a physical need and received ORRS funding. Thus, on 15 December 2002, a total of 1,751 students receiving ORRS funding were known to have physical disabilities. The researchers said this figure was likely to be an underestimate as it would have missed some students with physical disabilities who would have other needs verified at a higher level.

### Ethnicity

Proportionally fewer Māori and Pasifika students were resourced through ORRS in mid-2001 than would be expected from their numbers in the total school-age population. The researchers said the reasons for this were not known. It could suggest an unmet need or it could be that the Māori and Pasifika students were

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<sup>14</sup> In 2006, the funding rates were \$15140.15, including \$500 for consumables, for students with very high needs and \$8781.95, including \$250 for consumables, for students with high needs.

receiving an optimal educational experience without the need of ORRS, perhaps because of the attitudes of their wider family and in their school environment. It could also be that the ORRS application process was a stumbling block.<sup>15</sup>

Proportionally more 'other' ethnic groups were getting ORRS resourcing compared with their numbers in the total school-age population. The researchers said this was related to New Zealand's refugee policy which specifically allowed refugees with disabled children to come to New Zealand. At that time immigrants with disabled children could enter New Zealand.<sup>16</sup> However, they comprised a small part of the total ORRS-funded population.

## Urban and rural

Ministry of Education data for July 2000 showed the percentage of students receiving ORRS resourcing varied between urban and rural schools. Schools in main urban areas had 1% of their students verified as ORRS students, secondary urban 0.94%, minor urban 0.78%, and rural 0.64%.

## School decile

Decile 10 schools, with 15% of the total school population, had the lowest proportion of students receiving ORRS (0.36%). Decile 2 and 3 schools, each with 9% of the total school population, had more than 1% of their students receiving ORRS (1.38% and 1.49% respectively). Decile 4 schools, with only 11% of the school-age population, had the highest percentage of verified students of any decile (1.57%). The majority of special schools were in deciles 2 to 4 which would affect the proportions.

## Geographical distribution

March 2000 data showed the percentage of all students receiving ORRS resourcing in each territorial local authority varied from 0.32% to just over 3%, though most local authorities had close to the 1% predicted by the funding arrangements.

The researchers said there was no conclusive evidence as to why there was variation but they suggested it could be the result of genuine differences in number of eligible children and young people in different areas; for example, low uptake in rural areas might reflect that families with disabilities had moved to urban areas to be nearer services.

Areas with special residential schools tended to have higher ORRS rates. For example, Christchurch, where 1.2% of children received ORRS resourcing, had two residential special schools; the Tasman district, with 1.3% of students receiving ORRS resourcing, had a special residential school; and Waitakere City, where 1.7% of students received ORRS funding, had the Kelston Deaf Education Centre.

Manukau City, however, had 0.7% of children receiving ORRS resourcing, even though it had Homai National School for the Blind and Visually Impaired<sup>17</sup>. The researchers suggested this relatively low rate

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<sup>15</sup> The application form is now available in Māori.

<sup>16</sup> The policy changed in April 2006 to bar the entry of children who would meet ORRS criteria.

<sup>17</sup> Renamed as Blind and Low Vision Education Network NZ (BLENNZ) in 2005.

could reflect the low uptake of ORRS funding among Pasifika students, who comprised a high proportion of the Manukau City population relative to many other local authorities.

## Verification rates

In 2002, 41% of the applications for ORRS for physical disability were not verified. The researchers noted that, as students were assessed against set criteria, this suggested students were being put forward who did not meet the criteria.

## Gender

Uptake rates were generally higher for boys but the extent of gender difference varied widely by territorial local authority.

## Data from specialist service providers

The Ministry of Education has designated some schools as specialist service providers.<sup>18</sup> These schools manage ORRS money through a funding agreement with the Ministry under which they are required to report regularly on how they use the resourcing. At least 20% must be used to employ specialists, and up to 8% can be used for administration.

At the time this research was completed, there were 76 schools designated as specialist services providers. Some of the schools held the resourcing for a cluster of schools: others had enough students receiving ORRS assistance to hold the resources for just their own school.

Data for this section of the report were obtained from the specialist service providers' reports to the Ministry of Education in 2002. They showed a wide variation in how the specialist service providers were allocating the resourcing.

On average, 17% of the ORRS budget was spent on traditional therapies (occupational therapy, physiotherapy and speech-language therapy combined). The range of spending was from less than 2% to more than 40% for a handful of schools.

The average spent on teacher aides was 65% of the ORRS budget across all schools, with almost half spending more than 70% this way. Secondary schools appeared to spend an average of 73% on teacher aides but the researchers noted that in practice the figure would be less than that. This was because the picture was complicated by the fact that only 19 secondary schools were specialist services providers in their own right and 20 belonged to clusters that included primary schools. Some schools, particularly those receiving additional central resourcing for therapists, were spending more than 75% of their ORRS resourcing on teacher aide time. The researchers noted that the lower spending on therapy might have reflected difficulties in recruiting or retaining therapists, and that some schools might have been providing a good therapy service in spite of the low percentage of spending on therapists.

On average, 5.6% was spent on administration and 3% on consumables (e.g., audiotapes, disposable gloves).

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<sup>18</sup> Specialist service providers were formerly known as fundholder schools.

The researchers suggested it would be likely that intensity of therapy provision would be lower in schools spending a smaller proportion of their ORRS resourcing on therapy, unless a school had an alternative or additional source of therapy funding such as the centrally funded (or transitional) therapy provision. They also noted that co-ordination of services, not just the total amount spent, would have an effect on therapy provision, but said that co-ordination of services could not be measured with the data available.



## **Students with Moderate Physical Disabilities**

The 'moderate contract' provides Education-funded physiotherapy and/or occupational therapy for students with moderate physical disabilities. Services can be provided by schools that hold a contract to provide the services, or by Ministry of Education, Special Education (GSE) therapists.

At the time of the research project, there were nine school-based contract holders receiving a total of \$740,000 for providing therapy services. An additional \$1.1 million went to GSE districts to provide services for eligible students not covered by school-based providers.

The moderate contract is for students who have a moderate to high motor disability that is a barrier to learning.

To qualify for the service, students must present with three or more of the following categories, and must have 'significant' difficulties in one of the three:

- mobility difficulties
- fine/gross motor co-ordination difficulties
- problems in relation to personal self-management and physical safety
- need for specialised equipment and/or modifications to their learning environments
- physical deterioration or at risk of loss of function (e.g. those with progressive conditions).

Those who do not meet the criteria for the moderate contract may still meet the criteria for Health-funded occupational therapy or physiotherapy.

### **Numbers**

There were two sources of information for this data – GSE and the school-based providers. GSE estimated that 1,000 students received therapy through moderate contracts at some time in 2002. This figure included students receiving moderate contract services directly through GSE staff and those receiving services from school-based providers.

For 2002, school-based providers had a total target, across all contract holders, to provide therapy for 356 students. However, some providers operated a 'revolving door' approach, listing students as receiving their services only while there was active therapist involvement, then discharging and re-enrolling later if necessary. Others kept all the students referred to them on their books. Thus it was not possible for the researchers to calculate exactly the number of students on the moderate contract who were receiving services from school-based providers at any one time.



## Health-funded services

Health-funded Child Development Services (CDS) teams provide physiotherapy and occupational therapy services to those who satisfy the Ministry of Health definition of disability, and on the basis of individually assessed needs.

The Ministry of Health is responsible for funding those children and young people who do not meet the criteria for Education funding, including occupational therapy and physiotherapy for children before they start school.<sup>19</sup> It is also responsible for funding intensive pre-operative and post-operative rehabilitation, orthotics services and orthoses.<sup>20</sup>

At the time of the research, information on the number of students receiving occupational therapy or physiotherapy, and on the intensity of provision, was not held nationally. Although, there were national specifications for CDS contracts with district health boards, the reporting requirements varied.

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<sup>19</sup> There are a number of potential sources of therapy provision for students; key providers have written protocols for working together and dividing up responsibilities. Two key agreements are between the Ministry of Education and the then Health Funding Authority (which was disbanded on 31 December 2000 and its functions distributed between the Ministry of Health and district health boards), and between the Ministry of Education and ACC.. The full report contains a summary of these protocols and its Appendix A contains copies of them

<sup>20</sup> Since 2003, District Health Boards (DHBs) have been responsible for intensive pre-operative and post-operative rehabilitation, orthotics services and orthoses.



## Survey of schools

This section summarises the database research project's findings from a survey of a subgroup of New Zealand schools – special schools, schools holding a moderate contract, and schools that received the three-year package of additional central funding for therapy provision.

The survey provided data on the amount and intensity of occupational therapy, physiotherapy and speech-language therapy provided by this group of schools.

Fifty-seven schools were eligible to take part in the survey on the grounds that they were a special school, a school that held the moderate contract, a school that received additional central funding for therapy provision,<sup>21</sup> or received some combination of these. Of the 57, 46 schools responded – an 81% response rate.

All questions in the survey related to Term 3, 2002, unless otherwise stated.

Some of the schools had a high percentage of students with physical disabilities, and some had very few. Thus schools varied widely in the kinds of students that they were set up to work with, making it difficult for the researchers to summarise the data with one measure, such as 'on average'.

The researchers found that occupational therapists, physiotherapists and speech-language therapists worked differently in different schools. Overall, it was more common for them to work predominantly within, rather than outside of, regular classroom activities. Therapists spent most of their time with individual students, and there was little time spent on travel. The researchers said that reflected the fact that many therapists worked on-site, and was in contrast to the anecdotal reports of extensive time spent travelling by Health- and Education-funded itinerant therapists.

The researchers found that other perceived benefits of having therapists on site were that it promoted good teamwork and good liaison between therapists and teachers.

There was significant variation in the frequency with which students were seen for each of occupational therapy, physiotherapy, and speech-language therapy, with 'weekly' the most common answer for each type of therapy. Therapy programmes were provided by a number of different professionals and helpers, not just by the therapist. Data on workloads showed a wide range, with three-quarters of schools with ratios of 50 or fewer students per full-time equivalent therapist.

In two-thirds of schools, fewer than half the students spent time in a regular school during the term for which data were collected. In almost half the schools, 10% or fewer of students had spent some time in a regular school during the term, which the researchers said was to be expected given the status of many of the schools as self-contained special schools.

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<sup>21</sup> The additional central funding (also known as transitional funding) was initially provided for three years to 26 schools and units to help them make the transition to the new Special Education 2000 (SE 2000) framework so they would not be disadvantaged. The term 'transitional funding' is no longer used but some schools and units still receive additional centrally funded physiotherapy and occupational therapy positions.



## **Part 2: Case Studies of Service Provision to Students with Physical Disabilities**





## Background

This part of the research project used case studies to explore the provision of integrated effective services in detail.

The cases chosen were either a school setting with therapists located on site, or schools in which students were supported by an itinerant service provided by a Ministry of Education, Special Education (GSE) or a Ministry of Health-funded Child Development Services (CDS) team.

## Research questions

The main research questions were to identify:

1. what the models of therapy and other service provision for students with physical disabilities in the compulsory school sector looked like across a spectrum of services, settings and locations
2. the extent to which these models reflected the components and principles of effective integrated practices as described in the scoping report for the research
3. the effect of the therapy and service provision on the life and quality of life of the student with physical disabilities and their family.

## How the research was done

The research included eight case studies that involved 11 schools and 16 focus students. Together, the studies illustrated different services provided in a range of settings and locations. The characteristics of each student, and their resourcing stream and supports at school, are provided in Appendix H at the end of this document.

Focus students were selected to include gender, age, and ethnic diversity and, to the extent possible, to reflect diversity in disability and funding streams. The range of disabilities included cerebral palsy, spina bifida, hemiplegia, and low tone with sensory and motor-planning challenges.

There were four case studies with on-site therapy and four with itinerant therapy.

Each case study involved a five-day visit across one working week. Fieldwork also included interviews with the focus students, their parents/caregivers/whānau and, where possible, a friend, as well as interviews with all members of each student's support team. These support teams included the school principal; unit directors; special needs co-ordinators; heads of department in secondary schools; class teachers; therapists; teacher aides; and any other person who was considered to be part of the student's support team. Where possible, recent school graduates were also interviewed.

The researchers also observed the daily life experience of the focus students at home and school; this involved spending one to two days moving with the student through their day at school, home and other settings. Data were also obtained from archival searches of documents relating to focus students' education.

The project used qualitative methods of enquiry to collect and analyse the data. The interviews with all participants were semi-structured, and face-to-face.

The project was reviewed and approved by the Ethics Committee of the University of Otago, and followed ethical processes. The research reports used pseudonyms for all focus students.

## The case studies

This section provides descriptions of the eight case studies and provides a brief description of the 16 focus students, as at the time of the research.

The four case studies with therapists on-site comprised a special school (the ‘self-contained school’) and three regular schools with attached units (a primary, an intermediate and a secondary school). All the schools were in urban locations.

The four case studies with itinerant services included two Health-funded CDS teams and two GSE teams, and involved seven schools: two city primary schools, three rural primary schools, a rural college, and an area school.

Appendix A

### On-site provision

The self-contained school provided for children and young people with a wide range of needs. Most students attending this school were described as having severe learning and often multiple disabilities.

All but a very few of these students received resourcing through ORRS at the high and very high levels. The school did not receive transitional funding<sup>22</sup> for therapists because, at the time the SE 2000 policies were introduced, it was not designated as a school primarily for students with physical disabilities.<sup>23</sup>

Staffing included teachers, special education assistants, teacher aides, occupational therapists, physiotherapists, speech-language therapists, and a part-time psychologist. The school acted as its own ORRS specialist service provider, and was the specialist service provider for students in a number of local regular schools. Therapists from the school travelled to these other schools as needed to support students.

At the unit attached to the primary school, all the students were resourced at high or very high needs levels through ORRS. The school also received transitional funding to employ therapists, in addition to its operations and Special Education Grant funding. Unit staffing included three full-time teacher positions, two-and-a-half therapy positions, and 20 part- and full-time teacher aides.

The intermediate school with the attached unit had 31 students on the unit’s roll, although a number of these students were placed in regular classes. There were one-and-a-half occupational therapy positions, a part-time speech-language therapy position, the equivalent of a full-time physiotherapist, and a therapy assistant. There were three teachers in the unit and a number of aides and special education assistants to support students in the unit and regular classes. The intermediate unit was resourced through ORRS and transitional funding for therapists, in addition to funding received through the school’s operations and Special Education Grant funding.

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<sup>22</sup> Transitional funding was additional central resourcing was provided to 26 schools and units to help the schools make the transition to the new Special Education 2000 (SE 2000) framework so they would not be disadvantaged. The term ‘transitional funding’ is no longer used but some units still receive additional centrally funded physiotherapy and occupational therapy positions.

<sup>23</sup> Prior to 1996, this school was resourced as a school for students with learning disabilities.

The secondary school with the attached unit was resourced through ORRS and transitional funding for therapists, in addition to funding received through the school's operations and Special Education Grant funding. The staffing was similar to that of the other schools – teachers, special education assistants, teacher aides, occupational therapists, physiotherapists, and speech-language therapists.

## **Itinerant therapy services**

One CDS team provided services in an urban area. Five staff supported between 350 and 400 children in educational settings and in homes. The team covered a wide geographical area, which involved significant travel for staff.

Since SE 2000, the team's client group had changed and, at the time of the case study research, the team's work focused primarily on children of early childhood education age – once children started school they were transferred to GSE services. However, in some instances CDS support could continue into the school years – for example, for students who were pre- and post-surgery, had minor physical challenges such as handwriting and co-ordination difficulties, or had neurological difficulties and did not meet the criteria for either ORRS or moderate contract funding.

In the case of the two focus children, the team's involvement had been intensive during early childhood and at the time of transition to school, but most formal support then stopped. Informal support had continued for one student and her family because of a lack of GSE physiotherapy support because of a staff shortage. The team also maintained contact with the other focus student's family as the parents went through several ORRS applications before being accepted for moderate contract services.

The rural CDS team comprised five full-time therapists and several part-time physiotherapists working on contract. This team supported more than 100 families across a very large geographical area with a large number of small schools. Most of the team was centrally located in a hospital. Because this team held both the Health funded contract to provide early childhood services and the GSE-funded moderate contract for the region, the same staff supported children when they moved from one contract in early childhood to the other when they started school.

The two GSE teams were based in urban areas and provided itinerant support to rural schools across the range of therapies, and throughout large geographical areas.

## **Focus students**

The case studies included 16 focus students – two from each site. Two of the students identified as Pasifika and one as Māori. The researchers used pseudonyms for the focus students.

### **Simon (18) and Selena (13)**

Simon and Selena attended the self-contained school. Both were resourced through the Ongoing and Reviewable Resourcing Schemes (ORRS) as students with very high needs.

Simon lived at home with his family. He had a range of needs, including cerebral palsy (spastic quadriplegia), epilepsy and learning disability. Simon travelled between home and school by Ministry of Education-funded taxi and received occupational therapy, physiotherapy, and speech-language therapy support.

Selena also lived at home with her family and came to school each day in a taxi. Selena had a range of physical and learning needs, including scoliosis for which she had had surgery. She received occupational therapy, physiotherapy, and speech-language therapy support, and support from her teacher, a special education assistant, and an aide.

Simon and Selena's individual learning needs were catered for by individual programmes. They participated in a number of activities in which therapy and educational goals had been integrated, including social/communicative activities, movement/drama, music, self-care, computer activities, and swimming.

### **Penny (11) and Paul (8)**

Penny and Paul were on the roll of the attached unit at the primary school. Penny was in the regular school and had ORRS high needs resourcing, while Paul was in the unit and had ORRS resourcing for very high needs.

Penny lived at home with her mother, some distance from the school. She had multiple needs, including needs associated with autism, and used a wheelchair independently for mobility. She spent about one hour per day in the unit, at which time she participated in the therapy programme that the school used.

Paul also lived at home with his family some distance from school. His schooling had been disrupted over the past two years as a result of serious illness. He was resourced through ORRS at the very high needs level and had 30 hours a week of aide support. He also received private speech-language therapy at home.

### **Ian (11) and Isobel (12)**

Ian and Isobel both attended the intermediate with an attached unit.

Ian was a student in Year 7 at the time of the study. He had needs associated with cerebral palsy (spastic diplegia) as a result of a premature birth. He lived with his parents and younger sister. Ian had recently had surgery and was receiving post-operative support from health agencies. He received ORRS resourcing at the high needs level and also Ministry of Education funding for transport to and from school.

Although on the roll of the attached unit, Ian was fully integrated into a regular class. In class he was supported by a teacher aide at times and received occupational therapy and physiotherapy in the unit. He was independently mobile in his wheelchair.

Isobel was in her second year at the unit. She had a right-sided hemiplegia as a result of a stroke and in the past year she had begun having seizures, for which she was taking medication. She received resourcing through ORRS at the high needs level. She received occupational therapy, physiotherapy, and speech-language therapy.

Isobel's class was staffed by a teacher, teacher aide, and a special education assistant. She went to a regular school class for reading, and the other unit class for mathematics. She used an Alphasmart<sup>24</sup> for written communication. Isobel had a hydrotherapy session once a week, and twice a week she attended a group for children who have hemiplegia. She went to Riding for the Disabled once a week during school time.

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<sup>24</sup> An electronic notetaker or word processor – essentially a simple computer for writing.

### Harry (16) and Heather (14)

Harry and Heather attended the secondary school with an attached unit. Heather, a student with cerebral palsy, was in Year 10 at secondary school. She lived in the school zone with her mother and brother.

Heather had resourcing under ORRS at the high needs level. She spent much of her time in the attached unit although her timetable included subjects in regular classes. She went swimming twice a week, and had a weekly one-to-one physiotherapy session which took place in the unit. Occupational therapy was sometimes provided in the regular classroom, when the therapist observed and assisted with seating and writing.

Harry was in Year 12 and was full-time in regular classes, with an academic programme. At the time of the study, he was at home recovering from surgery due to spinal problems associated with spina bifida, and he had missed three months of school. He had seven hours of teacher aide support each week, and attended the unit three times a week for occupational therapy and physiotherapy.

### Caitlin (8) and Christopher (7)

Caitlin and Christopher attended regular primary schools in their local areas. They received mainly informal support from the urban CDS team.

Christopher had cerebral palsy (spastic diplegia). He was in a class of 29, with no special equipment. His teacher received some consultative learning support from an RTLB. Christopher's family had made three applications for high-needs ORRS resourcing since Christopher had started school, and all had been turned down. He had just been accepted under the moderate contract.

He was withdrawn from class for therapy, which was provided through a joint session of one hour per fortnight. Some hospital-based pre- and post-surgery physiotherapy was also provided intermittently through Health.

Christopher's parents had arranged for private mathematics tuition after school. The school had also provided additional support using a specially designed mathematics programme drawn up by the RTLB for Christopher's class teacher.

Caitlin had received support from the CDS team before she started school, and now attended a Year 4 class in her local school. She had cerebral palsy (spastic diplegia) and some difficulties in the areas of visual perception and visual memory, and lived at home with her mother, and older brother and sister.

An initial application for high-needs resourcing under ORRS before Caitlin started school was turned down. She later received ORRS resourcing because of her ongoing surgery and Botox treatment.

The ORRS resourcing was used for five hours of teacher aide time and for some occupational therapy support. She received no physiotherapy support under ORRS, however, because of a shortage of physiotherapists in GSE—although received some physiotherapy from the CDS team when she had surgery.

Caitlin's ORRS resourcing was also used to fund a special education needs teacher who provided one-to-one teaching in remedial mathematics.

### **Ricky (11) and Rose (6)**

Ricky received some occupational therapy and physiotherapy and Rose received some occupational therapy through Health from the rural CDS team; neither student received ORRS or moderate contract resourcing to support their education.

Ricky was 11 years old at the time of the study and in his first year (Year 7) in a rural college (Years 7 to 13). He had significant delays in his learning, very low tone, an unstable gait with poor motor skills and poor visual-perceptual development. At age 6, he was diagnosed as having Attention Deficit Hyperactivity Disorder (ADHD). In addition, he had skin grafts on a third of his body following an accident when he was seven.

Ricky lived with his mother, grandmother and two siblings. He had received occupational therapy support from the CDS team since he was five, and had occupational therapy at school once every three weeks. After the accident, at age seven, he received physiotherapy support and teacher aide support funded through ACC but that had since stopped. He had recently had some physiotherapy made available through Health outside of school.

He received remedial reading and mathematics support at school, and his teacher also had some support from the RTLB. He attended Riding for the Disabled during school time.

Rose was in Year 2 class with 26 children at her local rural primary school. She had sensory integration and motor planning challenges. She spoke a little, and her use of language was improving with attendance at school.

She started school at 5½ and as a new entrant attended mornings only for two terms, with 1½ hours of support each day from an RTLB. Her family had been participating in a home-based learning and behaviour programme, which they paid for, and this approach had continued for the remaining half-days when Rose started school.

Rose and her family had received early intervention teacher support and speech-language support at kindergarten, and occupational therapy support through the CDS team at home during her early childhood years.

The school could not fund sufficient teacher aide support from their Special Education Grant and Rose's parents decided to fund the teacher aide themselves at \$3,500 each term. The school had also obtained about \$600 to fund some RTLB support, which was available to Rose's class teacher.

### **Leah (8) and Laura (12)**

Leah and Laura attended small rural schools (Years 1 to 8) in the same geographical region. They received support from a GSE team located in a city approximately 1½ hours drive away.

Leah attended her local three-teacher, decile 2 school. It was a school with an inclusive philosophy and a diverse student population. It had a high proportion of students with special education needs and its own RTLB.

Leah had athetoid cerebral palsy and received support under ORRS for high needs. She used a wheelchair and Hart walker,<sup>25</sup> and was preparing for a power chair with head control. She attended Riding for the Disabled and was about to start Brownies.

Laura was in Year 8 at her three-teacher school, which she had attended since she was five. She had cerebral palsy, which affected all parts of her body, including her sight. She lived at home with her parents and older sister. She needed some support in the areas of reading and writing, and she received ORRS resourcing for high needs.

Laura had two teacher aides (one in the morning and one in the afternoon), and received physiotherapy, occupational therapy, and a small amount of speech-language therapy. She participated in the regular curriculum alongside her peers. She had some teacher aide support at school, which was topped up from the school's operational grant. Laura used a computer for support with reading and writing. Her teacher wrote a special mathematics programme for her that was implemented by the teacher aide.

### Ashley (15) and Alan (10)

Alan and Ashley attended an area school (Years 1 to 13) in their small rural community and received support from the other GSE team included in the case study research. Both students travelled to school on the school bus. At the time of the study Alan attended the primary section while Ashley was in Year 10 in the secondary section. Their school had a strong community focus, with many of the school staff living locally.

Alan was in Year 6 at the time of the study. He lived on a farm with his parents and three younger siblings. He had cerebral palsy, which restricted his mobility in terms of speed and balance, and he had some needs in the area of fine motor control. He used a walking frame when he first started school, but had been walking since having surgery at the age of six. He also had visual challenges, with field loss and short-sightedness.

Alan had high-needs resourcing under ORRS. At school he had support from a teacher aide for 18 hours each week, and from a 0.1 FTTE specialist teacher for one-on-one reading and physical stretches. His GSE therapy team included a physiotherapist, occupational therapist, speech-language therapist and vision support person.

He was withdrawn for remedial reading with the special education needs teacher and for physical stretches, for one-on-one music with the music teacher, and for community-based instruction with the teacher aide in areas relating to vision and mobility. He saw the itinerant therapists each term, with the exception of the vision support person who came once a fortnight. His teacher aide also withdrew him at times, particularly for reading, if the class was too active or noisy.

Ashley was almost 16 and in Year 10 at the time of the study. He lived at home with his parents and five brothers. He had cerebral palsy combined with learning disability, and received very high needs resourcing under ORRS. He received Correspondence School support in mathematics, and CCS<sup>26</sup> resourcing for support with eating and care at lunchtime. He also had a Ministry of Education-funded computer and communication equipment, and his family received home help.

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<sup>25</sup> A walker is a piece of equipment sometimes used by people with physical disabilities in the early stages of learning walking patterns.

<sup>26</sup> In 2007, CCS became CCS Disability Action.



He primarily used a wheelchair for mobility and he was pushed around the school, although he could also walk in his walking frame, with assistance, and his daily movement around the school in this was encouraged. He communicated primarily through affective responses, body movements and voice tone.

Ashley received itinerant support for physiotherapy, occupational therapy, speech-language therapy and mobility. His weekly timetable included regular classes in English, technology, mathematics, social studies and physical education. He was withdrawn from regular classes to do correspondence work, computer, music and walking, and he travelled once a week to Riding for the Disabled.

He was supported full-time by two teacher aides who job-shared over alternate weeks. At lunchtime he sat with a caregiver who helped him to eat his lunch.



## Approaches to therapy

This section summarises the researchers' findings in relation to the approaches to therapy by the various sites and teams.

### Self-contained school and primary school with attached unit

The self-contained school and the primary school with an attached unit worked from particular philosophical foundations which resulted in unique approaches to therapy and service provision in which educational and therapy goals were highly integrated.

Most students in these settings had significant disabilities and were funded at the high or very high needs level under Ongoing and Reviewable Resourcing Schemes (ORRS). The primary school also received transitional funding. These levels of funding allowed for a degree of flexibility and, by comparison with other settings, relatively high ratios of staff to students.

There was a strong focus in the self-contained school on functional skills, particularly in relation to self-care and mobility. Therapy activities were based in the classroom and other settings such as the swimming pool, with therapists, teachers, and others working alongside each other to address students' physical, sensory, and educational needs.

The primary school with the attached unit used an approach to therapy that emphasised the maintenance and development of gross and fine motor skills. Physical skills were taught in the context of everyday activities, although the therapy was conducted separately from classroom activities. As well as focusing on functional skills, the unit also placed strong emphasis on academic and social development.

In both sites, there was a high level of collaboration among on-site staff, and the diversity of staff meant that inter-agency links seemed less important than in other settings. Staff had manageable workloads, which allowed time for meetings and planning, and for collaboration with families through both formal and informal processes. Parents were actively involved at several levels, and there was an emphasis on providing services and supports to students and their families in ways that were highly responsive to families' ethnicity and culture.

Both sites placed a strong focus on ecological assessment and intervention,<sup>27</sup> and both used the Individual Education Programme (IEP) as the basis for teaching and therapy interactions. Professional development was highly valued, ongoing, and responsive to the day-to-day issues of teaching and therapy.

### Secondary and intermediate schools with attached units

The researchers found that the two other schools with attached units – an intermediate and a secondary school – followed the more traditional approach of withdrawing students from class for therapy.

Most of the students in these settings were also funded at high or very high levels through ORRS and had significant and sometimes multiple disabilities. As was the case with the other two schools with on-site

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<sup>27</sup> Interventions and assessments that recognise the effect of surroundings and context on abilities and needs.

therapy, this level of funding, in addition to the transitional therapy funding both units received, meant there were relatively high ratios of staff to students.

All of the staff in these two settings emphasised the need for collaboration between therapy and teaching staff. Although there was time available for this on a regular basis, a number of those interviewed would have liked greater opportunities to observe each other's work and to plan collectively.

Staff working in these two sites placed greater emphasis on inter-agency collaboration than staff in the other two settings with therapy on-site, and to this end therapists, in particular, spent a good deal of time on liaison to ensure ongoing services.

Both units encouraged family involvement, and the intermediate school in particular encouraged families to get involved with goal setting and review. Both used IEPs as the focus of goal setting and assessment.

Both schools valued professional development, and the intermediate, in particular, actively encouraged it. Therapists met with colleagues regularly, at which time they studied individual students and supervised each other's work. Therapists at the intermediate school also provided some professional development for their education colleagues, and teacher aides met with the managers of the unit regularly for professional development.

## **Itinerant therapy support**

The itinerant therapy teams that supported students with physical disabilities in regular school settings used a consultative approach to service provision<sup>28</sup> and an integrated approach to education and therapy in which therapy was incorporated into daily routines in the classroom and wider school environment.

The rural CDS team focused on children's experiences and development within the contexts of their families and support networks. The other CDS team, in its services for children aged 0 to 2 years, was working towards the various specialists providing a seamless service to families, particularly in the early stages following diagnosis. This CDS team maintained good links with GSE and CCS<sup>29</sup>, with regular meetings each term. This was particularly important when children were making the transition from early childhood to school.

Both the CDS and GSE teams had a strong focus on therapy as a means of helping students access the curriculum. Interventions were consistently based on principles of inclusive education and emphasised the active participation of students in their classroom, school, and community.

These teams also used a consultative approach, in which the therapy team and the support team at school worked together to find the best way to provide a service. The therapists' practice was guided by the principles of role sharing and role release – modelling therapeutic approaches, making suggestions,

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<sup>28</sup> In a consultative approach to service provision, the therapist works collaboratively with the classroom and specialist teachers; providers of other services; parents; and, where appropriate, the student, to jointly devise a programme that is incorporated into the student's typical daily activities. The therapist usually models the interventions and coaches the team most directly involved with the student. This team then carries out the programme.

<sup>29</sup> In 2007, CCS became CCS Disability Action.

responding to questions, and giving staff the knowledge, information and skills needed to work with their students.

Both the CDS and GSE therapists mainly worked with teacher aides and 0.1/0.2 FTTE teachers in schools; in most cases, class teachers were not actively involved in the consultation process, mainly because of time constraints on both therapists and teachers.

Families were considered central to the processes of planning and teaching, with family involvement usually focused on the IEP process. Assessments were primarily based on informal approaches and on observation in context.

The researchers found that the extent to which strong teamwork was achieved was variable. Staff in all of these settings saw value in collaboration and integration of services, but time was a constant pressure. Some schools had structures that supported a sense of teamwork across therapy and school staff; for example, there was a position of responsibility for liaison.

Professional development was a priority in every school, and a number of schools had responded by developing in-house programmes for staff, often led by the 0.1/0.2 FTTE teacher. For some teachers their professional development needs related to learning more about their student with physical disabilities and about curriculum and teaching. Some teams wanted opportunities for whole-team professional development to establish a shared framework for the team to use for supporting students. Therapists also valued professional development and supervision.

Students in sites with itinerant therapy support had a range of funding provision. Students with ORRS resourcing were generally well served in relation to their learning and therapy needs. Funding was used flexibly by teams, with an emphasis placed on meeting students' individual needs. However, in one region, the unavailability of therapists and the local use of 'overs and unders' approaches to the distribution of funding meant that one child received no therapy at school.

Where students did not receive ORRS resourcing, levels of service provision were described by all as inadequate, with families paying for resources and supports themselves. In these cases therapists were strong advocates for families and often went out of their way to explore ways to access therapy and other forms of support.



## **Reflecting the principles of integrated effective practice**

This section summarises the findings from the case studies in relation to the indicators of integrated effective practice, and some of the issues identified by those interviewed as barriers to achieving integrated effective practice.

### **Organisational matters**

The researchers found that, in all settings, people were generally positive about the opportunities provided by the Special Education 2000 policy for local control, and schools supported the inclusion of students with disabilities in their communities.

All the schools had established a number of management systems to support students with physical disabilities, and the staff working with the students. In all cases, these systems were seen as integral to the running of programmes and units.

There was a strong relationship between level of funding and the capacity of teams to provide integrated effective practice. Although a number of schools expressed concerns about ORRS resourcing being attached to students and levels of need, and the uncertainty that this created from year to year as students came and went, ORRS was generally considered to be sufficient to meet students' needs.

However, when ORRS-resourced students on the rolls of units spent large amounts of time in regular classrooms, or if they were the only student with physical disabilities in a school, it created a pressure on resources. This was particularly noticeable in the secondary school, where large numbers of aides were required to support students in a wide range of classes, and in the two rural schools attended by students with high needs. In some instances the funding pressure meant that students with disabilities were clustered to enable sufficient aide support.

Also, the researchers found that schools struggled to meet the needs of those children like Ricky and Rose who received neither ORRS nor moderate contract funding.

The researchers' conclusions from the case studies that relate to funding are discussed further at the end of this section.

### **Interagency and professional collaboration**

The researchers found that all service providers recognised the need for collaboration and consultation, both within their own teams and between services to agencies. The self-contained school was able to achieve high levels of collaboration because it had all its staff on-site. Collaboration was more difficult on sites receiving itinerant services, mainly because of time constraints and distance. Nonetheless, the research found that CDS teams and GSE teams worked hard to overcome these barriers and to provide a service based on the key principles of consultation, collaboration, role release and role sharing.

Therapists in some on-site settings seemed to do a great deal of liaison with a wide range of other services and, particularly in the case of students with more severe disabilities, to provide direct support for parents in dealing with those outside agencies. Parents valued this level of support.

Inter-agency collaboration was also a significant part of the work of the CDS team in the rural area. In this instance, however, a great deal of the liaison occurred on an informal basis, because of the small size of the community and the established networks between people.

Parents, especially the parents of students in regular school settings, felt that they had to do considerable liaison work between schools and outside services. Although some parents in the case studies resented this extra burden, others said that the reason they took on the responsibility was to ensure that they kept up to date with what was happening to their child.

Inter-agency collaboration around transition to school was viewed as crucial, and both CDS teams worked hard to establish relationships with schools. Their support continued for the first six weeks at school.

## **Working as a team**

### **Family involvement**

The researchers noted that all services valued family involvement and had strategies in place to ensure that services were client- and family-centred.

Settings with therapy on-site, in particular, were able to maintain high levels of contact with families both at school and at home. In sites with itinerant therapy, workloads were considerably higher, and while teams adopted strategies for managing these, several therapists commented that high workloads and travel time meant they sometimes found it difficult to maintain as high a profile with families as they would have liked.

In two instances, services had appointed key workers to liaise with families. This meant that parents knew whom to contact when necessary, individual relationships could be established, and staff could better respond to parent concerns.

The flow of information between home and school varied across settings. One setting addressed this by having an explicit open-door policy in which parental input and participation were actively encouraged at all levels, including planning meetings. Home-school notebooks were a very common feature in schools and were used regularly.

A number of parents said that they needed to ensure they went to school regularly to see people informally to be kept up with information.

### **IEP: The focus of contact and planning**

The researchers found that in all the case study settings, IEP goals determined the intervention programme. IEP goals included all relevant curriculum areas (in some cases, areas of the curriculum not requiring adaptation were not included in an IEP), communication, social and behavioural skills (or self-management), mobility and vision.

There was some variation in the way in which schools operated their systems for IEPs, but most often schools reviewed progress towards goals one or twice yearly. The IEP meeting was described by all participants as the one key place in which all support team members could meet. Parents were always involved, although some commented that their input at IEPs felt somewhat secondary as others seemed to already have decided on goals. Students were not generally involved in the IEP meetings.



Some classroom teachers said they found it difficult to incorporate IEP goals into their programme. Some did not know what a student's IEP goals were, while others did not know how to adapt what they were doing to better meet a student's needs. In one unit and some regular schools, class teachers were not directly involved in the review and writing of IEPs for the students they taught. In these settings teachers wanted to be more actively involved but needed dedicated release time to consult with therapists and others.

In other settings, teachers were more involved. In one regular school, the classroom teachers were designated as the ones with the primary relationship with students with a physical disability in their class, and with the family of that student. In another school, a teacher considered it her responsibility, as classroom teacher, to implement the IEP and to ensure that the student's therapy was integrated into the classroom programme.

### **Professional development**

Professional development was highly valued in all sites as the key to ensuring that team members worked within a shared framework.

In settings with on-site therapy, most professional development for teacher aides was on-the-job; for therapists, the supervision process and their national associations provided some support, although one therapist found it difficult to get ongoing professional supervision. Teachers and aides also received in-service support from therapists in some of the schools in the study; for example, on lifting and positioning students.

In schools receiving itinerant therapy services, principals supported their teachers and teacher aides to attend any courses relevant to teaching students with disabilities, and some schools provided teacher aides with opportunities to learn on site.

However, teachers, 0.1/0.2 FTTE teachers and teacher aides all said there was a lack of good-quality and relevant professional development opportunities.

GSE teams said they had good access to current research literature, although there was not always a good supply of relevant professional development opportunities on a national basis. Therapists also used occupational therapy and physiotherapy email lists to share ideas.

### **Roles and responsibilities of support team members**

In settings receiving on-site therapy provision, the teacher aides in one school saw themselves primarily as that: aides to teachers. In settings with itinerant services, the role of the teacher aide was generally well-established in schools, although roles and responsibilities varied across case study sites.

Teacher aides were commonly observed to be taking responsibility for adapting curricula and lessons for students with physical disabilities, and often this took place on the spot. The case study researchers noted that the research literature identifies a series of inadvertent detrimental effects associated with the use of teacher aides as teachers, such as separation from classmates, interference with peer interactions, dependence

on adults, loss of personal control, reduced teacher–student interactions, limited access to quality instruction, and a lack of teacher ownership of the student (Giangreco et al., 2001).<sup>30</sup>

The researchers found that classroom teachers were frequently the least well informed about students with physical disabilities in their classrooms. The teachers wanted to know more about learning goals and about how to adapt their lessons to include students in meaningful ways, but they did not have the time in busy classrooms to do that. Some teachers in schools receiving itinerant services said they were not always included in consultations and were not always aware of children’s therapy needs or of their role in relation to their students with physical disabilities. However, therapists did not always have the time needed to collaborate closely with teachers, and teacher aides were often identified as the main point of contact.

Two teachers in their first year of teaching found it difficult to find the time to establish a good relationship with their students with physical disabilities.

However, the researchers found that in one school, a classroom teacher did seem well informed, and was integrating the therapy goals in the classroom.

Across sites with itinerant therapy, the role of the ORRS-funded teacher in the 0.1 or 0.2 FTTE position varied widely. The researchers found that the position worked well in schools where the 0.1/0.2 FTTE knew the student with physical disabilities, and that some schools had very clearly carefully defined roles which were responsive to their school’s local needs. For example, in one school with six students with ORRS resourcing, the teacher had three-and-a-half days per week to provide support and undertake administrative tasks. She allocated one-and-a-half hours per week for one-to-one support with each child and spent the remaining time on administrative and liaison tasks.

In other case study schools, the role of the 0.1/0.2 FTTE position was less clear. In some, the position was part-time, and in the area school the role was complicated by the involvement of a large number of teachers across the primary and secondary parts of the school. The positions were sometimes held by teachers who had not necessarily received training, and for whom relevant professional development was scarce. For example, one teacher who had come from the classroom to this position found learning the ropes had been difficult. She commented on the lack of training and support available to help her do her job well, particularly in the early stages. These teachers felt that to be effective they needed professional development opportunities and some guidance in the most effective ways to support students and teachers.

### **A shared understanding of integrated effective practice**

The case study researchers found that a particular difficulty faced by schools with itinerant therapy was attempting to achieve a good general understanding of what integrated effective practice looked like.

The researchers said that although teams worked hard at establishing and working within a shared framework, it was not always easy for them to achieve this in practice, particularly when the approach to therapy provision was itinerant and consultative. The research found that misunderstandings could arise within teams about whether or not therapy was ‘being done’, and in some cases parents and professionals did not always share an understanding about what integrated effective practice looks like, or about its rationale.

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<sup>30</sup> Giangreco, M., Broer, S., & Edelman, S. (2001). Teacher engagement with students with disabilities: Differences between paraprofessional service delivery models. *Journal of the Association for Students with Severe Handicaps*, 26 (92), 75–86.

Some participants understood therapy to involve physical manipulation that was conducted separately, outside of the classroom, while others saw therapy as using opportunities that occurred in the natural flow of the school day to integrate therapy goals, so that students could access the curriculum. Some students were withdrawn for an apparently unsupervised stretching programme in schools where therapists were trying to encourage the integration of therapy into class routines.

Also, some parents did not have a full understanding of what therapists were trying to do in the school context and this meant that parents worried that their children were not receiving enough therapy. Because itinerant therapists were, in most cases, in schools only once or twice a term, it was difficult for them to follow up on consultations and to monitor the ongoing provision of 'integrated' therapy between visits, although teams tried to share roles across therapies to maintain ongoing support to schools.

In one case study site with itinerant therapy, the high level of involvement by a class teacher clearly demonstrated a shared understanding of integrated effective practice, including respective roles and responsibilities. The school had released the class teacher of a focus student for the 0.1/0.2 FTTE specialist teacher position. This position provided her with an opportunity to focus very closely on the student's learning, and on lesson planning and curriculum adaptation. She took a lead role as the child's teacher and saw herself as the key person in the student's life at school, and she expected therapists and other itinerant staff to approach her first. The teacher aide's role was clearly established as 'in the background', and the primary teaching-learning relationship was between the teacher and the child. These roles were reinforced by therapists who provided itinerant support to the school. Itinerant therapy focused on accessing the curriculum, and therapy goals were integrated into the classroom routines.

In other sites, however, such high levels of teacher ownership were rare, which the researchers suggested may have been related to the common practice of itinerant teams liaising primarily with teacher aides and 0.1/0.2 FTTE teachers who were not classroom teachers.

### **Principals supporting inclusion and schools supporting teachers**

The researchers noted that leadership from principals and senior management, and a shared vision about inclusion, were seen as critical elements in achieving an inclusive school where teachers felt supported, and where diversity in the school population was valued. However, working on a shared school vision of inclusion and creating structures in schools that supported school staff also relied on adequate funding, resources and support for teachers.

### **Working as a team – some practical suggestions**

On the basis of the issues discussed above, the case study researchers made a number of suggestions on ways to support teams to achieve integrated effective practice. Their suggestions included:

- ensure teachers are part of the team, and provide release time for them to consult with other team members such as therapists, school staff, and parents; establish their role in relation to others; work collaboratively with teacher aides to define the roles and responsibilities in the classroom; and review pedagogical practices and planning for curriculum adaptation and teaching
- establish clear roles and responsibilities for all team members that are consistent with the current literature on effective teaching and practice, and allow adequate release time for everyone, including teachers, teacher aides, therapists, and 0.1/0.2 FTTE teachers to work as a team

- reduce workloads for itinerant therapists to allow them to support schools to provide safe therapy, to liaise more closely with and support families, and to monitor and support integrated therapy in practice
- provide professional development for principals, teachers, teacher aides, therapists, 0.1/0.2 FTTE specialist teachers, and parents.

The researchers suggested that the professional development could include scrutiny of different theoretical positions which support teachers and others to address the key issues of diversity, oppression and exclusion in schools. It could also focus on practical issues relating to teaching students with physical disabilities, such as

- days at the start of each school year that focus on integrated effective practice – what it is, what it looks like and why it is important)
- team-based professional development to address issues relating to assessment, the curriculum, teaching and learning for students with physical disabilities in schools
- courses for teachers on curriculum adaptation, development of effective pedagogy, and enhancing friendships and relationships in school contexts
- courses for therapists on the New Zealand curriculum and its implications for student support, and on evidence-based therapy in schools
- courses for teachers, therapists, and relevant others on working effectively and collaboratively as teams
- courses for principals and senior personnel in schools on managing and supporting teachers of children with physical disabilities and other relevant staff, and on making changes in the school to support inclusive education.

## **Interventions**

The researchers commented that in several settings, it was difficult for staff to achieve a good balance between attending to students' physical needs and educational needs. Most of the people interviewed said they would like to work much more closely together in order that therapy goals could be better integrated across a student's programme and day.

The amount of time that some students spent on activities outside the classroom and away from academic and social activities and interactions also caused some conflict.

For some students, there was a significant focus on social goals in the classroom rather than on academic learning. The researchers said that this was especially true in classrooms where students did not receive ORRS resourcing and teachers struggled to meet the sometimes challenging and wide-ranging needs of their students.

In some cases the student with a disability was expected to be the one who changed in order to fit into the classroom, by learning acceptable social skills and by meeting the same curriculum expectations of others in the class as a pre-requisite to entry.

The case study researchers noted that the literature has identified high expectations as a key element for effective teaching in classrooms with diverse groups of students.<sup>31</sup> While the expectations of case study schools varied in relation to the curriculum and student achievement for students with physical disabilities, there were some schools where decisions relating to the children's curriculum and learning opportunities were driven by high expectations.

ORRS resourcing was considered to contribute to low expectations. Several teachers, principals, parents, and therapists alluded to the fact that if students were thought to be succeeding (for example, by achieving above level 1<sup>32</sup> in the curriculum) they were in danger of losing their funding.

The self-contained school and the primary school with the attached unit used a wide range of assessment tools to focus on multiple outcomes. These included ecological and standardised assessments, as well as those related to the particular philosophy of the school. In other schools, assessments were primarily subjective and informal, and included progress towards IEP goals, observations in classrooms, and general impressions about how the student looked. The educational achievements of students with more severe disabilities were assessed against IEP goals by their teachers. For those students with significant access to a regular classroom, teachers generally used the same range of assessments they used for any child in their classes (for example, PAT, running records, various formal and informal curriculum measures).

## Funding

As has been discussed previously, the case study researchers found that students receiving ORRS resourcing were seen as being relatively well served. However, they found that the setting and the approach to providing services made a significant difference to the extent to which ORRS resourcing met actual student need. Access to funding and support for students not included in ORRS was also problematic and, by-and-large, the less funding available, the less likely it was that integrated effective practice could be achieved.

Funding through the transitional allocations for therapists, where available, and from significant numbers of ORRS-funded students and operations and Special Education Grants (SEGs) meant that the self-contained school in particular felt well-resourced to support their students' educational and therapy needs. The research found, however, that the closer students moved towards the regular classroom setting, the greater the challenges faced by teams to provide integrated effective practice. The researchers suggested the following reasons for this:

1. Individual students moving into regular classes from units were often seen to need teacher aide support. This resulted in the need to employ large numbers of aides to support students in single classes. This compromised the extent to which therapy could be funded outside of schools and units that were designated for students with physical disabilities where no transitional funding existed for therapists. In these instances, funding for therapists competed with funding for aides, and limited opportunities for shared planning, teaming, and liaison with parents and families.

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<sup>31</sup> Alton-Lee, A. (2003). *Quality teaching for diverse students in schooling: Best evidence synthesis*. Wellington: Ministry of Education.

<sup>32</sup> Curriculum levels indicate progressive achievement within the essential learning areas of the New Zealand curriculum.

2. The greater the number of classroom teachers for therapists to liaise with, the greater the strain on time for this to happen. This meant teachers did not know some of the therapists, were sometimes not included in consultations when therapists visited the school and, on occasions, did not have the opportunity to attend IEP or other planning meetings.
3. The more that students attended their local schools, the greater the stress on therapists and other specialists in terms of workload, time for travel, shared planning and collaboration. This resulted in a general perception that it was less attractive for therapists to work in Education than in Health. As a result, a number of Education-funded therapy positions remained vacant and children did not receive services. In other cases, this resulted in Education-funded therapists having workloads of more than 100 students.
4. The lower the level of funding support, the less likely it is that students will have educational, therapeutic, or integrated programmes to meet their needs. The research team's observations (as experienced teachers, therapists, and researchers in this field) confirmed what teachers, principals, and parents were saying about the level of need and the associated need for support. That is, that even though therapists were being creative and finding ways to meet student needs within the resources available, parents, teachers and principals did not think students were getting a fair deal. In their view, more resources were required to provide the necessary supports for students around the curriculum, learning and assessment.

Further strains were also reported arising from differences in the allocation of resources. For example, to the research team it appeared that Caitlin, Christopher and Alan all had almost identical physical and learning needs but were not all receiving ORRS support. Alan had received ORRS resourcing for high needs as an 'over' from his first day at school as a five-year-old. Caitlin was initially turned down for ORRS high needs funding, but following advocacy by her mother began to receive ORRS resourcing for medical high needs as an 'under'. Christopher had been turned down for ORRS high needs resourcing and was recently accepted under the moderate contract.

The case study researchers noted that in these three cases the services the students received, and their opportunities for learning, were directly linked to the resourcing they received. Alan's level of resourcing provided therapy and learning support (18 hours of teacher aide time) and there was general agreement that his needs were well met at school. Caitlin also received a small amount of teacher aide support (five hours), but did not receive therapy because of a shortage of physiotherapists. Christopher received 40 minutes of teacher aide support weekly for one-to-one reading, and one hour fortnightly for combined occupational therapy/physiotherapy from the moderate contract.

## Effects on quality of life

This section discusses the conclusions the researchers drew from the case studies in relation to the third research question: What was the effect of the therapy and service provision on the life and quality of life of the students with physical disabilities and their families?

### How well does therapy support children's development?

The researchers noted that, as the case studies were a 'snapshot', any inferences could only be tentative. However, they noted that in several instances, adult participants described clear gains occurring for students. Also, the provision of equipment had a significant effect on students' ability to access the curriculum and supported their learning and development. For example, Laura's and Leah's computers supported them, particularly in the area of literacy. Leah was also preparing for a new power chair, which improve her independence and choice.

Ashley and Alan's learning and physical goals were generally well supported at their area school. Ashley was encouraged to be physically active, and to be independently mobile using his walker. Alan also showed good physical gains, with both his teacher and teacher aide using opportunities arising naturally throughout the school day to support therapy goals. Therapeutic interventions were considered by school and therapy staff to be leading to functional gains.

Ian and Harry were receiving post-surgery-related therapy and goals related primarily, in Ian's case, to stamina and, in Harry's case, recovery. In both cases there were strong links between health and education settings and therapists, with a good flow of information across sectors.

However, the case study researchers said that for some students, poor levels of resourcing meant that approaches to therapy were compromised, and there appeared to be little effect on their development and ability to access the curriculum. For example, although it was considered that Rose would have benefited from a sensory intervention programme, a lack of resources meant the CDS team therapist could have only minimal contact with Rose's teacher and teacher aide. Caitlin did not receive any physiotherapy because of a shortage of therapists in her area, despite having ORRS resourcing for high needs.

When therapists were asked to describe how they knew their students had changed, assessments were generally described as anecdotal and based on observations or discussions at IEP meetings. The researchers said that while observation was an important part of assessment, the indicators of effective integrated practice described in the scoping study for this project had emphasised the use of a range of ecologically valid approaches to assessment.

### The balance between learning and therapy

Achieving the right balance between therapy and academic learning was an issue raised by several participants, including children.

Even though some therapists were working to integrate therapy into classroom routines, withdrawal for therapy was common in schools and the researchers said that there did not seem to be a good understanding about the effect of this on students' school life and opportunities for learning.

For example, during the case study observations, Ian was withdrawn several times from his regular class for therapy and wheelchair maintenance. The researchers said that this programme was unusual in that it was the start of the school year, but that his class teacher was worried that he was missing out on important classroom experiences, including some assessments. When Ian was asked about withdrawal for therapy, he said that it did not worry him that much, but he concluded that ‘It’s better to sit in your wheelchair and know your maths than to walk’.

Neither Laura nor Leah, both primary school students, liked being taken out of the classroom for therapy because they felt that they were missing out on what was going on in the classroom. However, another student, Harry, was happy to be withdrawn for physiotherapy twice weekly; as a senior secondary school student, he valued privacy for this activity, and the therapy was a necessary part of his post-surgery recovery.

Some parents and teacher aides also questioned whether there was an emphasis on learning outcomes to the detriment of physical outcomes. In particular, where therapy team members used an integrated and functional approach to therapy in the classroom and school, the school staff and parents did not always appreciate that therapy goals were being catered for. The researchers suggested that therapists and school staff might need additional time and support to ensure that there was a shared understanding of the overall goal of therapy (that is, to support students’ access to the curriculum), and what was involved in the integration of therapy goals into functional routines at school, and what that looked like in practice.

## **Friendships and relationships**

An unresolved issue identified by many parents was that by and large their children were socially isolated in their schools. In the self-contained school, and in some schools with attached units, active participation and a sense of belonging with a diverse peer group and the local community – which the researchers noted were key elements of inclusion – could be difficult to achieve. Being in a regular school setting meant that children with physical disabilities could experience a range of relationships with their non-disabled peers, although the quality of these relationships varied considerably between schools.

Across settings, many students did not have close friendships. School staff were usually aware of this, but the researchers said that, in general, few schools had prioritised this important area of children’s lives as a focus for change and intervention. Some schools sought creative ways to help students overcome barriers to participation. For example, at one school, a buddy system of senior students was organised to support a focus student during break times.

Other schools created barriers, the most obvious being physical barriers. Several of the focus students described issues of access as of paramount concern, and as having a huge effect on their quality of life at school. In particular, poor access prevented students from being with their peers, from making choices about activities and social relationships, and from participating in school events. In contrast, the case studies showed that adults in some schools appeared to be less aware of the importance of poor physical access in children’s lives.

The researchers said that classroom practices and some approaches to therapy could also create barriers to children forming and developing friendship; they said that, for example, putting children in wheelchairs at the back of the room, having teacher aides rather than teachers primarily responsible for teaching, withdrawing students from the classroom, and having low expectations in relation to the curriculum and learning could all reinforce notions of ‘the other’, and undermine the development of friendships.



Class promotion decisions did not always take children's friendships into consideration. For Caitlin, for example, the effect of being moved away from the peer group that she had been well integrated with, and within which she had a number of friends, including one particular friend, had been dramatic. She became lonely, withdrawn and sad. When she was later moved back in with her peer group, she and her friend struck up a relationship in and out of school again, and she was reported to be back to her happy self.

A number of students were involved in school activities such as kapa haka or choir, and after-school activities such as swimming or other sports. Although these options had helped a small number of students to develop and maintain relationships with others, most spent a good deal of time alone or with family members or adults.

One student, Alan, did have a number of friends out of school, but this was largely due to his involvement in a community rugby team, and to efforts by his parents to support friendships. At school, poor physical access made it difficult for him to participate in break-time activities with friends – an issue raised by several other children in the case studies.

## **Parental involvement**

All parents found the active support and advocacy frequently provided by therapists particularly valuable. The '24–7' reality of caring for a child with a disability along with other family responsibilities was demanding for most parents. Many therapists worked outside their hours and roles to ensure that families had access to support and entitlements, and the researchers said that the case studies indicated a clear need for therapists to have time to work with families and in the home setting. Some parents also did considerable liaison work, which was time consuming.

## **Children's voices and children's rights**

The focus students' experiences at school differed, as did their understanding about their learning and their therapy. The case studies showed that children's voices did not always have a place in the decisions made about them at school, and that those children who did have a voice valued the opportunity to participate in decisions that affected their lives.

Children described their difficulties as having more to do with discrimination and disabling environments than with their disability. This was particularly clear in the area of physical access, withdrawal for therapy and relationships with others. Students highlighted, in particular, those relationships with adults which they perceived as supporting them and their families.

Although the inclusion of students with disabilities in regular schools was seen as very positive for all students in those schools, the students with disabilities interviewed as part of the case studies all made the point that schools needed to do more to break down the barriers existing around physical disability. A number of students spoke of having been bullied at school, of being repeatedly pushed over and having glasses and mobility aides taken away, and of being abused verbally. In some cases, teachers had been aware of this and had taken action to stop these things happening, but in other cases school staff had not known of the actions of some students until parents approached them.

Several of the students interviewed suggested that schools needed to do disability awareness training for other students.



# Glossary

## **0.1/0.1 FTTE specialist teaching position**

This refers to additional teacher time provided through the Ongoing and Reviewable Resourcing Schemes for a specialist teacher to support students with physical disabilities. It provides for either 0.1 of a full-time teacher equivalent (FTTE) (half a day a week) for students with high needs and 0.2 FTTE (a day a week) for students with very high needs.

## **Additional central funding for therapy**

See transitional funding below.

## **Consultative approach to service provision**

In the consultative approach to service provision, the therapist works collaboratively with the classroom and specialist teachers; providers of other services; parents; and, where appropriate, the student; to jointly assess, problem-solve, plan and devise a programme that is incorporated into the student's typical daily activities. The therapist usually models the interventions and coaches the team most directly involved with the student. This team then carries out the programme. This emphasis on the therapeutic programme being provided by those who have contact with the student during everyday activities at home and at school is a major strength of the consultative approach.

## **Ecological assessment**

An approach to assessment which recognises that the student does not operate in a vacuum, but that surroundings and context also have an effect on abilities and needs. Ecological assessments include a study of the student's physical environment and students' interactions with the people in close contact with them.

## **GSE**

The term GSE is the standard abbreviation used for Ministry of Education, Special Education.

## **Individual Education Programme (IEP)**

An IEP is a documented programme for an individual student that covers the complete cycle of assessment, planning, provision, and evaluation.

## **Moderate needs contract funding**

Students in this group are those who have sensory impairments and/or physical disabilities and who are not eligible for funding under the Ongoing and Renewable Resourcing Scheme but who need the support of people who have specialist training to provide for their needs. For students with physical impairments, therapy is provided through Ministry of Education, Special Education or by therapists working in units or schools for students with physical disabilities.

## **Ongoing and Reviewable Resourcing Schemes (ORRS)**

The Ongoing and Reviewable Resourcing Schemes provide funding through the Ministry of Education for individually verified students with high and very high special educational needs who need additional help to take part in education. The schemes provide money for specialist services and therapies, teacher aide support, and additional teacher time (the 0.1/0.2 FTTE positions). There are two funding rates – for students with very high needs and students with high needs. Regardless of the level, funding is either ongoing (for the whole of the student’s time at school) or reviewable (reviewed after three to four years). Around 7,000 students or 1% school-age population can receive support under ORRS at any one time.

## **Special Education 2000**

Introduced in 1996, Special Education 2000 was a major new policy for special education. It instigated a range of changes relating to resourcing and service provision approaches for learners with special educational needs, and was implemented over three years.

## **Special Education Grant (SEG)**

The Special Education Grant was introduced as part of Special Education 2000. It is a grant paid directly to schools so they can use it in the best ways to meet the needs of their students with special education needs.

## **Specialist service providers**

The Ministry of Education, Special Education (GSE) is the overall fundholder for all types of education funding for students with physical disabilities. But GSE allocates some of the money to particular schools approved by the Ministry as specialist service providers. In some instances, a specialist service provider might hold the money for just itself; in other instances, a specialist service provider holds the money on behalf of a cluster of schools.

## **Transitional funding**

Transitional funding was additional central resourcing was provided to 26 schools and units to help the schools make the transition to the new Special Education 2000 (SE 2000) framework so they would not be disadvantaged. The term ‘transitional funding’ is no longer used but the units still receive additional centrally funded physiotherapy and occupational therapy positions.

## **‘Unders and overs’**

A term used to describe a method for allocating resources. Funding for ORRS-verified students is managed at the local level by a range of specialist service providers. Each provider pools all the funds for the students and allocates according to changing student needs.

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# List of Terms and Abbreviations

ACC	Accident Compensation Corporation
ADHD	Attention Deficit Hyperactivity Disorder
Alphasmart	An electronic notetaker or word processor – essentially a simple computer for writing.
Additional central resourcing	Initially provided as transitional funding for three years to 26 schools and units to help them make the transition to the new Special Education 2000 (SE2000) framework so they would not be disadvantaged. The term ‘transitional funding’ is no longer used but some schools and units still receive additional centrally funded physiotherapy and occupational therapy positions.
CCS	New Zealand CCS provides support and services to people with physical disabilities and advocates for the rights of disabled people. The organisation was formerly known as the New Zealand Crippled Children Society, and adopted the name of CCS in 1989.
CDA	Child Disability Allowance
Consultative service model	In the consultative service model, the therapist works collaboratively with the classroom and specialist teachers; providers of other services; parents; and, where appropriate, the student to jointly assess, problem-solve, plan and devise a programme that is incorporated into the student’s typical daily activities. The therapist usually models the interventions and coaches the team most directly involved with the student. This team then carries out the programme.
Ecological assessment	An approach to assessment that recognises that surroundings and context also have an effect on abilities and needs. Ecological assessments include a study of the student’s physical environment and their interactions with the people in close contact with them.
FTE/FTTE	Full-time equivalent/full-time teacher equivalent
GSE	The term GSE is the standard abbreviation used for Ministry of Education, Special Education.
HDS 2001	The 2001 Household Disability Survey
HOD	Head of department

IA	Independence Allowance
IEP	Individual Education Programme
Moderate contract	Education-funded contract for provision of therapy for services for students with moderate physical disabilities
NACS	Needs Assessment and Co-ordination Services
ORRS	Ongoing and Reviewable Resourcing Schemes
OT	Occupational therapy
PT	Physiotherapy
RTLB	Resource Teacher/s: Learning and Behaviour
SE2000	Special Education 2000. Introduced in 1996, Special Education 2000 was a major new policy for special education. It instigated a range of changes relating to resourcing and service provision approaches for learners with special educational needs, and was implemented over three years.
SEG	Special Education Grant
SLT	Speech-language therapy/therapist
Specialist service provider	The Ministry of Education, Special Education (GSE) is the overall fundholder for all types of education funding for students with physical disabilities. But GSE allocates some of the money to particular schools approved by the Ministry as specialist service providers. In some instances, a specialist service provider might hold the money for just itself; in other instances, a specialist service provider holds the money on behalf of a cluster of schools. Specialist service providers were formerly known as fundholder schools.
Transitional funding	Additional central resourcing provided for three years to 26 schools and units to help the schools make the transition to the new Special Education 2000 (SE2000) framework so they would not be disadvantaged. The term 'transitional funding' is no longer used but some schools and units still receive additional centrally resourced physiotherapy and occupational therapy positions.
TLA	Territorial local authority
'Unders and overs'	A term used to describe a method for allocating resources. Funding for ORRS-verified students is managed at the local level by a range of specialist service providers. Each provider pools all the funds for the students and allocates according to changing student needs.

## Appendix A: Summary of case study sites and students

Schools with therapy provision on site

**Table A1: Self-contained school**

<i>SCHOOL</i>	
<b>Type and level</b>	Self-contained special school; year 1–
<b>Decile</b>	1
<i>FOCUS STUDENT: Simon</i>	
Age / year at school	18 years / year 14
Disability	Cerebral palsy (spastic diplegia), epilepsy, learning disability; uses wheelchair
Funding stream and level	ORRS very high need
Supports (at school)	Specialist teacher, teacher aide, special education assistant, PT, OT, SLT, music teacher. Cost of these services = \$11,500 plus teacher component.
Supports (itinerant)	
Transport	Taxi funded by Ministry of Education
<i>FOCUS STUDENT: Selena</i>	
Age / year at school	12.8 years / year 9
Disability	Physical and learning disability, scoliosis; uses wheelchair
Funding stream and level	ORRS, very high needs
Supports (at school)	Specialist teacher, teacher aide, special education assistant, PT, OT, SLT, music teacher. Cost of these services = \$11,500 plus teacher component.
Supports (itinerant)	–
Transport	–

**Table A2: Secondary school with an attached unit**

<i>SCHOOL</i>	
<b>Type and level</b>	Secondary school with attached unit – unit has transitional funding; years 9–13
<b>Decile</b>	6
<i>FOCUS STUDENT: Heather</i>	
Age / year at school	14 years / year 10
Disability	Cerebral palsy, learning disability; uses wheelchair, learning to use power chair
Funding stream and level	ORRS, high needs
Supports (at school)	Teacher aide, physiotherapy 2 x week (swimming at the public pool, and PT in the unit), OT support approx. 2 x week for writing and positioning, independent living, independent mobility
Supports (itinerant)	
Transport	Taxi funded by Ministry of Education
<b>Other</b>	Combined programme in regular classes and unit, adapted curriculum, home-care support
<i>FOCUS STUDENT: Harry</i>	
Age / year at school	16 years / year 12
Disability	Spinal bifida; uses wheelchair independently
Funding stream and level	ORRS, high needs
Supports (at school)	Teacher aide in study lines, OT and PT 3 x week, primarily in the unit
Supports (itinerant)	–
Transport	Taxi funded by Ministry of Education
Other	Education is in regular classroom, and regular curriculum



**Table A3: Primary school with an attached unit (urban)**

<i>SCHOOL</i>	
<b>Type and level</b>	Primary school with attached unit – unit has transitional funding. Years 1–8; 22 students on unit roll; unit staffing = 3 full-time teachers, 2.5 therapy positions, 22 full- or part-time teacher aides
<b>Decile</b>	2
<i>FOCUS STUDENT: Penny</i>	
Age / year at school	11 years / year 7
Disability	Spastic cerebral palsy, visual impairment, autism spectrum disorder; uses wheelchair independently
Funding stream and level	ORRS, funded as an ‘over’
Supports (at school)	1 hour per day integrated therapy in the unit
Supports (itinerant)	–
Transport	Private
<b>Other</b>	In regular class; home-care support
<i>FOCUS STUDENT: Paul</i>	
Age / year at school	8 years / year 4
Disability	Cerebral palsy, visual impairment, serious illness
Funding stream and level	ORRS, very high needs
Supports (at school)	Teacher aide support – 30 hours
Supports (itinerant)	
Transport	Taxi funded by Ministry of Education
Other	In unit full-time; private SLT paid for by parents

**Table A4: Intermediate school with attached unit**

<i>SCHOOL</i>	
<b>Type and level</b>	Intermediate with attached unit. Years 7 & 8; 31 students on unit roll (some in regular classes); unit has transitional funding; staffing = 3 teachers, 1.5 OT positions, part-time SLT, 1 full-time PT, one therapy assistant, several teacher aides and special ed. assistants.
<b>Decile</b>	3
<i>FOCUS STUDENT: Isobel</i>	
Age / year at school	12 years / year 8
Disability	Hemiplegia, seizures
Funding stream and level	ORRS, high needs
Supports (at school)	SLT: <ul style="list-style-type: none"> <li>• 1 hour individual per week</li> <li>• 3 group oral-motor sessions per week.</li> </ul> OT: <ul style="list-style-type: none"> <li>• 45 mins per week 1:1</li> <li>• community integration group 1 hour per week (with 7 others) for 2 terms</li> </ul> PT: <ul style="list-style-type: none"> <li>• 1 hour per week 1:1 per week</li> <li>• hydrotherapy 1 x per week.</li> </ul> Counselling from teaching staff; RDA 1x per week; special ed. assistant and teacher aide support in class (aide shared between 4 students). Total cost = \$10,250.
Supports (itinerant)	–
Transport	Taxi funded by Ministry of Education
<b>Other</b>	In unit full-time except for reading (in regular class); reads 2 years above chronological age
<i>FOCUS STUDENT: Ian</i>	
Age / year at school	11 years old / year 7
Disability	Cerebral palsy (spastic diplegia)
Funding stream and level	ORRS, high needs

Supports (at school)	Full-time teacher aide (shared with 3 other children); therapies provided mostly in school hours. PT: <ul style="list-style-type: none"> <li>• 3 x weekly (individual)</li> <li>• 3 x weekly stretches</li> <li>• daily walking.</li> </ul> OT: <ul style="list-style-type: none"> <li>• monitoring assistive technology</li> <li>• assessing and prescribing</li> </ul> Total cost of aide and therapy = \$10,200
Supports (itinerant)	–
Transport	Taxi funded by Ministry of Education
Other	In regular class, academically very able; currently has weekly post-operative PT (health)

### Schools with itinerant therapy provision

**Table A5: Health-provided Child Development Service in a rural area**

<b>SCHOOL</b>	
<i>Type and level</i>	Rural college; years 7–13
<i>Decile</i>	6
<i>FOCUS STUDENT: Ricky</i>	
Age / year at school	11 years / year 7
Disability	Low tone, unstable gait, poor motor and visual-perceptual development, post-accident skin grafts, behavioural and social challenges
Funding stream	Health funding for in-school OT
Supports (at school)	Post-accident ACC-funded teacher aide time of 12.5 hrs/week, now withdrawn
Supports (itinerant)	OT once every 3 weeks; RTLB consults with teacher; RDA in school time
Transport	Private
Other	Recent PT at home (result of parental advocacy)

<b>SCHOOL</b>	
<i>Type and level</i>	Rural primary; years 1–6
<i>Decile</i>	7
<i>FOCUS STUDENT: Rose</i>	
Age / year at school	6 years / year 2
Disability	Sensory integration and motor-planning problems; speech problems; ASD
Funding stream	No funding; turned down twice for ORRS high needs
Supports (at school)	Full-time teacher aide paid for by family (\$3,500 per term); Health-funded OT
Supports (itinerant)	RTLB consults with teacher by telephone as needed
Transport	School bus – put on bus then met at school by mother
Other	At-home learning support from independent organisation (paid for by family)

**Table A6: Health-provided Child Development Service in an urban area**

<b>SCHOOL</b>	
<i>Type and level</i>	Local urban primary school; years 1–8
<i>Decile</i>	5
<i>FOCUS STUDENT: Caitlin</i>	
Age / year at school	8 / year 4
Disability	Cerebral palsy (spastic diplegia), visual perception and memory problems; receives Botox treatment
Funding stream and level	ORRS, medical high needs (following parental advocacy after being turned down for ORRS)
Supports (at school)	Teacher aide – 5 hrs per week for daily stretching and learning support; PT – 1 due to shortage of therapists; special needs teacher – 1.5 hrs for remedial maths in a group, additional time for writing a remedial reading programme, setting up social opportunities in playground
Supports (itinerant)	–
Transport	

<b>SCHOOL</b>	
<i>Type and level</i>	Local urban primary school; years 1–6
<i>Decile</i>	8
<i>FOCUS STUDENT: Christopher</i>	
Age / year at school	7 years / year 3
Disability	Cerebral palsy (spastic diplegia); receives Botox treatment
Funding stream and level	Recently approved for moderate contract for joint therapy; turned down 3 x for ORRS
Supports (at school)	Teacher aide for 1:1 reading 40 mins per week; RTLB consults with teacher for maths adaptation
Supports (itinerant)	1 hour every 2 weeks for joint OT/PT
Transport	Private

**Table A7: GSE service providing itinerant services**

<i>SCHOOL</i>	
<b>Type and level</b>	Rural area school; years 1–13
<b>Decile</b>	5
<i>FOCUS STUDENT: Ashley</i>	
Age / year at school	16 years / year 10 for a second year
Disability	Cerebral palsy, learning disability; uses a wheelchair and K-walker
Funding stream and level	ORRS, very high needs; \$12,583
Supports (at school)	Correspondence school maths; CCS funding for support with eating at lunchtime; RDA in school time
Supports (GSE itinerant)	PT OT SLT Vision support – 6 x per year
<b>Transport</b>	School bus (no hoist)
<b>Other</b>	Home-care support
<i>FOCUS STUDENT: Alan</i>	
Age / year at school	10 years / year 6
Disability	Cerebral palsy, fine motor control problems
Funding stream and level	ORRS, high needs; \$8,300
Supports (at school)	Teacher aide – 18 hours per week class support and community mobility support; 0.1/0.2 special education needs teacher for: <ul style="list-style-type: none"> <li>• 1:1 reading support (daily)</li> <li>• stretching</li> <li>• programme assessment and planning.</li> </ul> Special music – 1:1
Supports (GSE itinerant)	PT OT SLT Vision support – once a fortnight
Transport	School bus

**Table H8: GSE service providing itinerant services**

<i>SCHOOL</i>	
<b>Type and level</b>	Local rural primary; years 1–8
<b>Decile</b>	10
<i>FOCUS STUDENT: Laura</i>	
Age / year at school	12 years / year 8
Disability	Cerebral palsy affecting all parts of her body; uses a wheelchair
Funding stream and level	ORRS high needs; \$6,760
Supports (at school)	Teacher aide – mornings only; school tops up from SEG to get this much; 0.1/0.2 teacher (principal) does specialist programming to support learning
Supports (GSE itinerant)	OT 2 x per term; PT 2 x per term
Transport	

<b>SCHOOL</b>	Rural primary
<b>Type and level</b>	Local rural primary; years 1–8
<b>Decile</b>	2
<i>FOCUS STUDENT: Leah</i>	
Age / year at school	8 years; year 4
Disability	Athetoid cerebral palsy; uses a wheelchair and Hart Walker
Funding stream and level	ORRS high needs; \$10,584
Supports (at school)	Teacher aide – full-time, shared by 2 people
Supports (GSE itinerant)	OT PT SLT: very small amount 0.1/0.2 special education needs teacher (used flexibly by own class teacher)
Transport	Taxi funded by Ministry of Education

Notes to tables: ORRS = Ongoing and Reviewable Resourcing Schemes; PT = physiotherapy; OT = occupational therapy; SLT = speech-language therapy; GSE = Ministry of Education, Special Education; SEG = Special Education Grant; RTLB = Resource Teachers: Learning and Behaviour; ASD = Autism Spectrum Disorder; RDA = Riding for the Disabled Association