Survey of Special Education Resourcing

Report prepared for:

New Zealand Ministry of Education

Submitted by:

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The completion of this Review of Special Needs Resourcing has been a much larger task than anyone could have envisaged when it was begun. In excess of 2 million pieces of data have been collected and analysed; 245 schools were visited and over 600 teachers and more than 500 parents were interviewed. All this was completed by a team of ten field workers; two principal investigators; two data analysts and a project management team.

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> Abbreviations and Definitions

Abbreviations

ACC	Accident Compensation Corporation
AT	Assistive Technologies
EPF	Enhanced Programme Fund
GSE	Group Special Education
IRF	Interim Response Fund
LSF	Learning Support Funding
MoE	Ministry of Education
ORRS	Ongoing and Reviewable Resourcing Schemes
RTLB	Resource Teacher, Learning and Behaviour
SBI	Severe Behaviour Initiative
SEG	Special Education Grant
SENCO	Special Education Needs Co-coordinator in some schools
SHHNF	School High Health Needs Fund
SLS	Supplementary Learning Support
SSP	Specialist Service Providers
TFEA	Targeted Fund for Educational Achievement
M	mean (arithmetic average)
n	number of responses from participants
SD	standard deviation
ANCOVA	Analysis of Covariance
ANOVA	Analysis of Variance

Definitions

Special education is defined in the Special Education Policy Guidelines as "the provision of extra assistance, adapted programmes or learning environments, specialised equipment or materials to support children and young people with accessing the curriculum in a range of settings." (Ministry of Education, 2003).

Special Schools are schools providing specialist education or support for students with specific physical, behaviour, sensory or learning support needs.

Section 9 Agreement is an agreement that allows a child or young person to enrol in a special education facility, or continue to be enrolled in a primary, intermediate or secondary schools beyond the legal age without special needs.

Definitions specific to this study

Resources are the separate streams of Ministry support that are provided, or available on a discretionary basis, to schools to assist in the provision of education to students with special needs. The Ministry provides two broadly defined types of resources to schools. The first of these is not related to an individual student but is either supplied to the school on a roll and decile formula, or, as in the case of EPF, is related to the number of students with moderate special needs in the school. The second is provided to schools with the resources allocated to the school being calculated on the basis of the identified high or very high needs of individual students attending that school.

Services are defined as the way in which the resources are used in the schools to support students with special needs. For instance, services could be additional full-time teacher equivalents, specialist support hours, teacher aide hours, materials for curriculum delivery, and external programmes or activities.

Specialist Support includes all specialist services that are external to the school such as specialist teachers and the different therapists who work with the students. In official Ministry documents this would only include those provided by the Ministry of Education.

Curriculum Delivery is a service that is provided through the creation or purchase of specific material and/or programmes to support the work of the classroom teacher in providing the curriculum to students with special needs.

Resourcing schemes: A brief description

Assistive Technology Grant (AT). This grant reimburses schools for the purchase of a range of specialised equipment and assistive technology such as computers, overlay keyboards, software.

Enhanced Programme Fund (EPF). This contestable fund supports schools with a significant and/or disproportionate number of students with moderate special education needs.

School High Health Needs Fund. This fund provides paraprofessional time for students with high health needs who require care and supervision to attend school.

Interim Response Fund (IRF). The purpose of this fund is to provide temporary support to schools when a student's challenging behaviour reaches a crisis point.

Learning Support Funding (LSF). This funding is provided to, and held by, a nominated school (usually the host school) within an RTLB cluster for distribution to schools in the cluster.

Moderates Contract. These services are targeted at students with physical and sensory disabilities who do not meet the criteria for ORRS, Communication Initiatives or the Severe Behaviour Initiative, but whose needs are significant enough for schools to identify and address.

Ongoing and Reviewable Resourcing Schemes (ORRS). ORRS funding provides resources for a very small group of students (approximately 1% of the total student population) throughout New Zealand who have the highest needs for special education.

Regional Hospital Health Schools – Education provision for students who cannot attend their regular school because they have high health needs.

Resource Teachers: Learning and Behaviour (RTLB). RTLBs are specialist teachers who support and work within schools to assist staff, parents and community members to meet the needs of students with moderate learning and/or behaviour difficulties in Years 1 to 10. Year 11 – 13 funding is allocated to RTLB clusters to support students with moderate needs in Years 11 to 13.

Severe Behaviour Initiative (SBI). This service provides advice and specialist support for children and young people with the most severe behaviour difficulties in schools.

Special Education Grant (SEG). Schools are allocated this funding as part of their operations grant, to assist students with moderate special education needs on their school roll.

Special Needs Property Grant. This grant is provided to schools to undertake capital improvement projects such as alterations or additions to school property for children with high special needs who have recently enrolled or will be enrolling at the school.

Speech Language Support (also known as the Communication Initiative). This support is in place for students with severe communication needs who do not receive ORRS funding but who have a high need for speech-language therapy. These needs may include speech (articulation) difficulties, fluency disorders, voice resonance disorders, language difficulties or significant language delay.

Supplementary Learning Support (SLS). This service provides additional support to children and young people with significant and ongoing learning needs, who do not meet eligibility criteria for ORRS.

Targeted Fund for Educational Achievement (TFEA). This is a resource to assist schools in lowering barriers to learning faced by students from low socio-economic communities. It is allocated within the operations grant.

Transport Assistance Allowance. A subsidy or allowance for travel between home and school (by public transport, private conveyance, or taxi or bus) may be paid for students with high special needs who need this for mobility or safety reasons.

Demographic Definitions.[1]

Area Type. This indicates whether a school is located in an urban or rural area.

Decile. Deciles are used in New Zealand to indicate the socio-economic level of the population from which schools' students are drawn.

Group Special Education (GSE) Region. GSE is the section of the Ministry of Education that has responsibility for special education; it provides services to schools and early childhood services for special educational needs. The Group's regional offices have responsibility for the disbursement of a number of funds and resources.

Isolation Index. The Ministry of Education assigns an index to each school according to a formula that takes into account its distance from each of three urban area types (population centres of 5000 or more, 20 000 or more, and 100 000 or more).

Ministry of Education Regions. The Ministry of Education is organised into four geographic regions, which are used to indicate geographic location throughout the country.

[1] There is a more detailed description of these demographic characteristics (and the way they have been grouped for analysis) in Appendix Two.

Roll Size. Schools have been classified according to the number of students on the roll using the official Ministry of Education roll figures for July 2007.

School Type. For the purposes of this study, only two school types have been used – primary and secondary.

> Executive Summary

This report provides a review of Special Needs Resourcing in New Zealand. Data were gathered primarily on the utilisation of resources by schools to provide services to their students. These resources included those from the Ministry of Education, parental and community donations and the Accident Compensation Corporation. Data are also reported regarding the allocation of special needs resources to schools by the Ministry of Education. The purpose of this report is to provide a detailed description of special needs resourcing in schools over Terms 1 and 2 of 2007.

A total of 245 schools from around New Zealand were visited over four months in 2007 and early 2008. Data collection tools included an electronic spreadsheet on which schools recorded how they utilised the special needs resources available to them across four categories of students with special needs. These were determined specifically for this research. The categories were:

1: Ongoing, very high needs – Students with very high needs who will need ongoing management of that need for their entire school careers.

2: Ongoing, moderate to high needs – Students with moderate to high needs who will need ongoing management of that need for their entire school careers.

3: Short term, very high needs – Students with very high needs whose needs can potentially be met with a specific short term intervention of up to three years.

4: Short term, moderate to high needs – Students with moderate to high needs whose needs can potentially be met with shorter time and limited intervention.

Principals, teachers and parents were also interviewed to gain an understanding of how special needs resources are managed in schools and their adequacy and perceived effectiveness. Data were gathered at three levels: school level data on 13,349 students; more detailed information on a selected group of 1921 students; and case study data from the parents and teachers of 653 students. Schools were asked to select a range of students at both selected and case study group levels. The extent to which these students are representative cannot be determined.

Key findings from the review include the importance of both teacher aide and full time teachers in supporting students with special needs across the survey schools. These were the most frequently utilised services and accounted for much of the total expenditure from the various resource streams. Quality teachers were seen as a key reason for schools' effectiveness in supporting their students with special needs. A key priority for schools was to increase both teacher aide hours and teacher hours. This was considered more important

than external specialist support. That is to say the priority for schools was to increase internal support from within the school rather than to bring in additional outside support.

All school-managed resources (including SEG) were predominantly used to support Category 4 students while ORRS, and most other individually tracked resources, were predominantly used to support Category 1 students. Exceptions were SBI which was used predominantly for Category 3 students, property modification which was reported as being used predominantly for Category 4 students and ACC which was used mainly for Category 2 students.

While Category 4 students accounted for most of the students in our sample, on average a typical Category 4 student received the smallest proportion of (monetised) services from across all resources. Conversely, while Category 1 students made up the smallest proportion of students in our sample, on average a typical Category 1 student received the largest proportion of (monetised) services from across all resources. It should be noted that these are the students with the greatest needs.

Despite some of the concerns expressed both anecdotally and in the literature around the equity of resource distribution across schools, there were few statistically significant differences between schools once roll was controlled for. For example, there were minimal differences linked to either the isolation index or area type.

Low decile schools spent statistically significantly more on a number of resources than other schools. These were professional development, resources for curriculum delivery and additional teacher time (FTTE)[2]. No differences were found in the utilisation of specialist support services by any of the variables tested (e.g., decile group, urban/rural location, and GSE district).

The majority of the case study students did attend their local school. Where parents have made the decision to send their children to another school, the most commonly reported reason was related to the quality of the programmes and general education being offered. Some parents did suggest their children were not welcome at the local school but this was not common.

Overall, there was satisfaction with the progress made by the case study students in this study. There was a weak correlation between the perception of parents and teachers with regard to the progress made. Schools generally gave themselves a high rating in terms of their effectiveness in using the resources supplied.

[2] It should be noted that for formula-based resourcing, low decile schools are resourced at a higher rate than high decile schools and, therefore, receive relatively more resources.

By contrast, the mean rating for adequacy, as reported by the key contacts[3], suggested that there is a level of dissatisfaction with the amount of special needs resourcing being accessed by schools. More than 65% of the key contacts reported that it was inadequate. Parents and teachers were slightly more positive with close to 50% indicating they were satisfied with the resourcing.

The first chapter of the report provides a brief summary of the project and places it in the context of other work being undertaken around the resourcing of special needs within the Ministry of Education.

Chapter Two provides a summary of the methodology used in the review. This includes an explanation of the four categories of special need that were developed for the purpose of this review.

Chapter Three provides an outline of the context within which special needs resourcing operates in New Zealand. It briefly describes the policy context and some of the key literature that has been written regarding its implementation.

The findings from the review are considered over two chapters. Chapter Four is a largely descriptive chapter and provides a summary of the data gathered. It is structured around the data collection tools utilised and answers questions around what schools are allocated; how they utilise the resources they receive and the management and effectiveness of those resources. Also described, are the key demographics of the students on whom these data were gathered.

In Chapter Five the data described previously are collated to better understand the distribution and utilisation of these resources and the services they provide for students. The results of a series of statistical analyses are included in this chapter which consider some issues around equity and attempt to answer some of the questions raised in the contextual chapter.

The final chapter (Chapter Six) is a summary of key findings from across the report. Given the complexity of the subject matter described, we have not attempted to draw conclusions or even implications for policy. Rather, the purpose of this final report is to present the key findings to stakeholders in order to inform their future discussions.

[3] Throughout this report 'key contacts' refers to the people within the school who completed the main survey, in most instances this was the principal and/or SENCO.

> Chapter One: Background to the Project

In August 2007, the New Zealand Government approved a review of special education resourcing. The purpose of the review was to consider three areas of particular interest to the government. These were quality, accountability and coordination. While the survey was commissioned prior to this review being approved it has since been incorporated into the review processes.

Three priority areas within the resourcing system were also identified from a number of previous evaluations as being opportunities for improvement in what was, then, the system of resourcing. These were special education teachers, school-based resources and twenty-first century learning.

Three work-streams approved within the overall review process were: a discussion paper to engage the sector in dialogue around the future of special needs resourcing; policy development to support the introduction of revised and new resourcing schemes, and the evaluation of a number of demonstration models to provide evidence and to demonstrate the success of new ways of organising the special education workforce.

The role of this survey, as the fourth work-stream in the overall review, was to provide an overview of special education resourcing. As the primary unit of analysis was the school, the survey was particularly focussed around school-based resources, although it captured information on all elements of the resourcing system.

The research questions that informed the development of this report are:

1. What is the range of special education resources supplied to the surveyed schools?
2. What special education resources are received by students in the surveyed schools?
3. How are special education resources deployed in the schools?
4. What special education resources are allocated to individual students and how are they allocated by schools?
5. How do the schools ensure that students are receiving the special education resources that are appropriate to their needs?
6. Have the challenges of achieving an equitable distribution of special education resources been met at the school, regional and national levels?

Through a mixed methods approach involving the collection of both quantitative and qualitative data, we have sought to reference the information we obtained from schools against the funding data that the Ministry of Education has supplied for the schools in the study, and address the above research questions.

The Ministry has a model for resourcing special needs in New Zealand (Figure 1.1)[4], which gives an indication not only of the relationship among the many funding pools, but also of the expected percentage of students that will benefit from support, from these pools, in order to maximise the educational opportunities available to them. The students in this report come solely from the primary and secondary school sectors, and not from the early childhood sector shown at the bottom of the triangle.

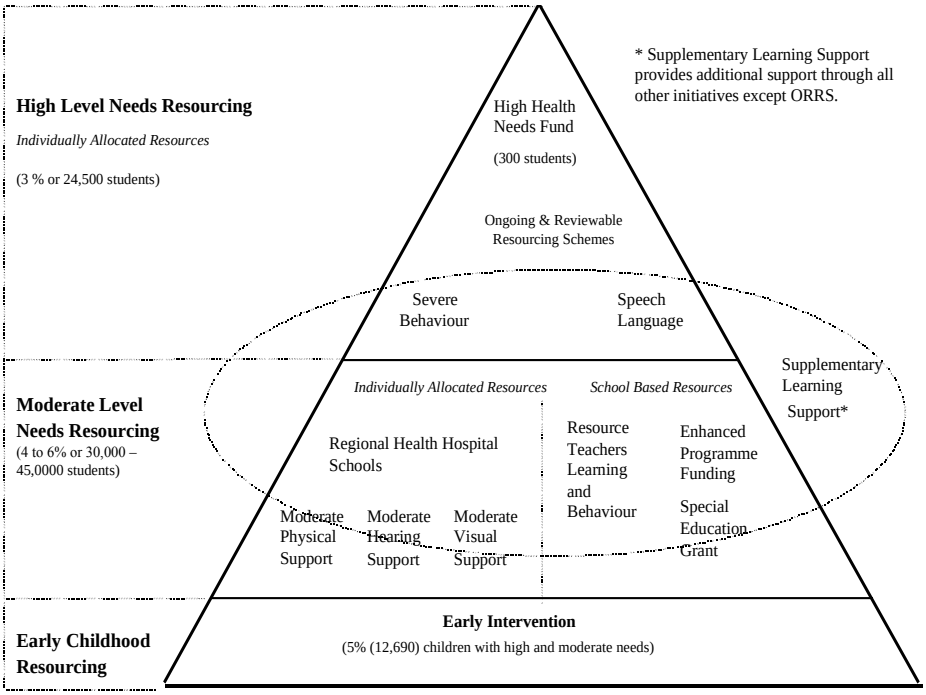

Figure1.1: Triangle for resourcing of special needs in New Zealand[5].

The triangle underlines the fact that there is a wide range of resources available to support students with special education needs. However, it is important to note that the triangle does not cover all of the support available to students and schools for special needs education, as some individually allocated resources are not shown (e.g., transport, Interim Response Fund, Special Needs Property Grant, and Assistive Technology Grant, as well as additional support to some students covered by ACC).

[4] At the time the report was being developed the Ministry was reviewing the logic that initially informed this diagram and it may not be an accurate representation of the current resourcing model.

[5] Source: Ministry of Education, 2008

> Chapter Two: The New Zealand Special Education Context

Introduction

The intention of this chapter is to provide a background and policy context for how students with special education needs are currently resourced in New Zealand. The content focuses particularly on allocative policies, allocative efficiency and effectiveness, and equity considerations. It examines the relationship between legislation, policy and practice and is strongly linked to the research questions that were investigated in this study. While there are brief references to some of the international literature available these were not foci for this report.

This chapter is structured in four main sections. First, is a brief description of the development of current education resourcing policies in New Zealand.

The second section summarizes how special education resources are allocated in New Zealand within an overarching national framework. This section contains an overview of the development of the Special Education 2000 policy and an examination of how this policy has been reviewed and amended since its inception.

The third section examines what is currently known about the allocative efficiency and effectiveness of the resourcing of students with special needs in New Zealand.

The fourth section concentrates on equity considerations in relation to the identification of and provision for students with special education needs.

A brief summary of the key points from the literature completes the chapter.

The definition of special education that is used comes from the Special Education Policy Guidelines which state it is "the provision of extra assistance, adapted programmes or learning environments, specialised equipment or materials to support children and young people with accessing the curriculum in a range of settings." (Ministry of Education, 2003).

Overview of Education Resourcing in New Zealand

The New Zealand compulsory schooling sector underwent considerable change as a result of the 1989 education administration reforms (Butterworth & Butterworth, 1998; Fiske & Ladd, 2000; Gilbert, 2005). These education reforms stemmed from two different and sometimes conflicting sources: a longstanding interest in bringing schools and their communities closer, and the sweeping reform of the whole New Zealand public sector, based on a New Public Management Framework (Wylie, 2007), with the intention of creating allocative efficiency and devolved decision making about resource use. The reforms were based on the principles

of "equity, quality, efficiency, effectiveness and economy" (Lange, 1988 quoted in Murray, 2003).

One major theme of the education reforms was the establishment of partnerships between local communities and self-managing schools (Caldwell & Spinks, 1988). This theme was underpinned by a belief that improvements in efficiency and effectiveness, leading to better outcomes, would most likely be achieved by giving schools greater flexibility over their resources and letting schools make more decisions (Department of Education, 1988b). The reforms led to what has been described as the most devolved system of educational administration amongst developed countries (Wylie, 2007).

Part of these policy changes included the development of new approaches to resource allocation. From 1990, the Ministry of Education started to resource compulsory schooling differently. Operational funding was provided directly to all state and integrated schools for their general operation. The amount of funding schools received was dependent on the type of school, student numbers and ages, and the property profile of the school. Much of the funding that had previously been managed and allocated separately and centrally was now incorporated in this one bulk fund.

Funding for a formula driven allocation of staffing to each school is a separate item. Except for a period in the 1990s when some schools received this resource as a cash sum, formula staffing is allocated to schools on an FTTE basis, based on roll numbers, education level of the students and the type of school, and the actual salary costs are met centrally. Schools are allowed to employ teachers above the number of FTTEs they are allocated and must meet the salary costs of these teachers from other funding sources.

Provision was made in this new policy framework to target some of schools' funding to needs. Initially, these were allocated individually to schools on an historic allocation pattern until a new set of indicators was developed to create a formula to allocate funding weighted by a proxy measure for educational needs. This targeted funding approach, which grouped schools into ten divisions (or deciles) of need, recognised that schools drawing students from lower socio-economic homes would be funded to a relatively higher level than schools with a more economically advantaged demographic.

A key feature of the regulatory environment, in which this devolution of funding took place, is the legislated requirement and associated national guidelines that require all schools to accept and provide appropriate education for all of their students (Ministry of Education 1989b). The National Education Guidelines (which consist of educational goals, curriculum and the National Administration Guidelines) set out in more detail the government's requirements and expectations. These regulations provide a mandatory reference point for

local decisions made by individual schools. They are supplemented by material such as the e-learning and special education frameworks, as well as by specific administrative and other requirements (Ministry of Education, 2006b).

Responsibility for allocating funds and resources at each school was devolved to Boards of Trustees, who would base their decisions on their view of priorities within their school, taking into account the regulatory framework of the National Education Guidelines (NEGs) and National Administrative Guidelines (NAGs) within which they are required to operate. The majority of the trustees were to be elected by the parents of students attending each school. There was also allowance for a smaller number of members to be co-opted to better reflect the local community or to provide particular expertise. A teacher representative, student representative (for secondary schools), and the Principal were also to be on the board.

Devolution of funding and decision making about resource use, key features of New Zealand's educational reforms, are also seen in the changes made to schooling systems in overseas jurisdictions. For example, England has devolved some decision making and funding to Local Education Authorities (LEAs). A number of Australian states have bulk funding systems with different levels of decision making discretion about its use at the school level.

Overview of Special Needs Resourcing in New Zealand Since 1989

This section tracks the development of the current special education policy, which affirms the right of every student to learn in accordance with the principles and values of the Education Act (Ministry of Education, 1989b), the National Education Guidelines (Ministry of Education, 1989a), and the Special Education Policy Guidelines (Ministry of Education, 1995).

When the Education Act was amended in 1989, the provision for students with special educational needs was made explicit. The Act stated that "people who have special education needs (whether because of disability or otherwise) have the same rights to enrol and receive education at state schools as people who do not" (Ministry of Education, 1989b, Section 8). Davies and Prangnell (2000) suggest that initial changes to special education needs provision were not considered a priority although there was an intention to devote time to its development. Subsequent legislative changes were underpinned by the implementation of the "New Zealand Disability Strategy: Making a World of Difference" (Ministry of Health, 2001).

In 1991, the newly elected National government developed a policy called "The Statement of Intent for Special Education" (Ministry of Education, 1991) which was followed by two reports (Ministry of Education, 1993; Mitchell & Ryba, 1994). The first report was the result

of widespread consultation within the sector by the Special Education Policy Implementation Team. The second report related primarily to the resourcing of students with special educational needs according to an educational needs basis.

In 1995, the National Advisory Committee on Special Needs was established. In the same year the Ministry of Education began further work on special education that resulted in the policy known as Special Education 2000. This policy was developed in stages between 1995 and 1999 (Davies & Prangnell 2000). The Special Education 2000 policy framework put the legislative intent of the 1989 reforms into practice and was first announced in the 1996 Budget. It was described as the first comprehensive policy exclusively for special education in Aotearoa New Zealand (Ministry of Education, 2002).

The Special Education 2000 policy reflected both an international move toward inclusion for all children with special education needs in local educational settings (Ministry of Education, 2005), and the practices in New Zealand that had been moving in that direction for some time. This policy focused on identifying children's needs to support their participation and achievement. There was a stronger focus on how the social and physical environment impacted on learning across all domains. These changes in New Zealand reflected wider international trends, including a shift in values towards greater equity for all (Davies & Prangnell, 2000).

A new resourcing framework was developed to align the Special Education 2000 policy with the general approach to funding allocation described in the previous section. The framework tried to balance the relatively high and specific resourcing requirements of some students with special education needs with the general notion of funding use decisions being made at the school level. A distinction was made between funding for special needs which could be allocated by the school and resourcing for specific, approved children with verified high special education needs. This implementation of Special Education 2000 led to a restructuring of the way resources and service provisions were distributed to schools and the way schools utilised them. The resourcing framework was based on four key principles (Ministry of Education, 1995):

- There is a small group of students who need a high level of support if they are to participate in and benefit from the school programme.
- The term 'high needs' is defined by the amount of additional resourcing the student needs in order to participate in and benefit from the school programme.
- There is a guaranteed level of resourcing for individual students with high special education needs in a variety of school settings as determined by parental and school

choice, including special schools, special education units attached to regular schools, and regular classes.

- Students with moderate special education needs should be resourced through a system of direct, formula-based funding to schools (the Special Education Grant) and clusters of schools (Resource Teachers: Learning and Behaviour).

Thus the Special Education 2000 policy had two important components:

1. Tracked resourcing for identified students who were verified as having high or very high needs was provided to the school they were attending based on that need. This resourcing remained the responsibility of government, under the auspices of Group Special Education (GSE).
2. A variety of resourcing approaches for low to moderate students that were now under the control of schools or groups of schools (Davies & Pragnell, 2000). The new emphasis for resourcing decisions was the individual's learning needs rather than on a diagnosis or categorisation of disability. The funds were devolved directly to schools because "it is believed that schools and parents/caregivers are best able to make resourcing decisions about their students" (Ministry of Education, 1998).

There was also provision for a child with special education needs to attend a special school. This required agreement between the Secretary for Education and the child's parents or a direction by the Secretary for Education (Ministry of Education, 1989b). This provision was maintained to ensure that the best interest of a student could be served by ensuring an appropriate placement.

A number of reports and research projects have reviewed aspects of Special Education 2000. A small sample is discussed subsequently. By and large these reports focus on the policy intents while policy implementation, as reported by participants, and data about actual educational outcomes for students, is rare.

The Wylie (2000) review of Special Education 2000 concluded that the policy was sound in principle but in practice had resulted in fragmented provision of specialist support. The most far-reaching of the decisions made as a result of this report was the disestablishment of Specialist Education Services (SES) as a stand-alone agency and establishment of Special Education as a group within the Ministry of Education to coordinate provision of special education support across the education sector.

Massey University was commissioned by the Ministry of Education to undertake a three-year evaluation (1999–2001) to monitor and evaluate changes as they took place. One finding in the final report (Massey University College of Education, 2002) stated that principals and

teachers in rural schools and schools with a high transient population felt that the distribution of the Special Education Grant (SEG) was inequitable because of specific factors associated with their schools. There was also a view expressed that the SEG funding formula disadvantaged 'magnet' schools that attract a higher than expected proportion of students with special educational needs because they are known for their ability and willingness to cater for those needs.

The Education Review Office (ERO) completed several reports on aspects of special needs education. The report on RTLB (ERO, 2002) found variable impact of RTLBs on student achievement. Over half of all clusters had reliable and valid evidence that they had improved student achievement, but there was less evidence regarding the achievement of Māori students, who comprise a large proportion of the RTLB workload. Over two-thirds of the schools that were examined in the ERO report on ORRS resourcing (ERO, 2005a) were using and managing the resourcing effectively, but for one in six schools there were significant weaknesses in this respect. They noted that those schools that were effective for ORRS students were also the schools which they judged to be effective for all students.

A high court challenge by a group of parents of special needs children also led to the development of some new understandings about special education resourcing and service delivery, including an expectation of higher levels of transparency and accountability for resourcing decisions.

A nation-wide consultation was undertaken regarding the implementation of Special Education 2000. The outcome of the consultation was the Local Service Profiling National Report (Ministry of Education, 2005). The consultation focussed on the current state of special education and considered questions such as the aspirations people had for children and young people with special education needs, what was or was not working well in special education and any priorities for change.

At the same time, the Ministry of Education embarked on a programme of review of its own performance (Ministry of Education, 2006a). The eight focus areas were funding and resourcing, service quality, transition, staffing, early intervention, cooperation and relationships, information and communication, parent involvement and services for Māori. These led to the development of an action plan for GSE services called *"Better outcomes for children – an action plan for GSE 2006-2011"* (Ministry of Education, 2006b).

It should be noted that while there have been a number of legislative changes since 1989, none have directly affected provisions for special needs students.

McMenamin et al. (2004) describe how some overseas education systems (e.g. in the United Kingdom, Australia, United States of America, and Canada) provide curriculum support for students with special educational needs. In these countries there is a legislative framework that describes the legal entitlement for students with special educational needs. In England this includes the 1996 Education Act, and the Special Education Needs and Discrimination Act. A variety of different systems for the identification and provision of targeted support of students with special educational needs have been developed internationally.

Effectiveness of Special Education Resourcing

There is very little research in New Zealand or overseas linking resource allocation decisions to educational outcomes for students. Much of the research focuses on perceptions of teachers, principals, boards, and parents.

There is more general research considering how overall levels of funding affect achievement. For example, Perez et al. (2007) found that the overall level of funding did not explain differences in achievement between schools. What appears to be more important is the way the funding is used; that is; whether it is used specifically for learning related expenditures or on administration and other non-learning related activities (Pan et al, 2003).

Wilkins (2002) attributes this lack of information regarding resource allocation within schools to the increasing devolution of responsibility for financial management to schools. He also states that in his conversations with Principals (who were reportedly proficient financial managers), it was difficult to get them to articulate the links between resourcing decisions and education aims.

Issues of Equity in Funding of Special Education Needs

In this section, literature surrounding equity considerations in the identification of students with special educational needs and in the provision of resources for students with special needs is discussed. What is evident in this brief review is the extent to which reported opinion rather than hard data is used as evidence.

The special education system that was established in New Zealand through the Education Act 1989 and subsequent policy changes, including Special Education 2000, was intended to ensure that all students, regardless of geographical location, socio economic strata or any other factor, had equal access to resources that would enable their needs to be met (Davies & Prangnell 2000; Wylie 2000). The Government's aim was to "*achieve, over the next decade, a world class inclusive education system that provides learning opportunities of equal quality to all students*" (Ministry of Education, 1996).

There is a broad base of literature that examines the extent to which these goals and the Special Education 2000 policy objectives have been met with regards to equity. Most of the literature relating to equity of provision does not investigate the philosophical underpinnings of the reform but investigates the practical aspects in implementing policy. Both McBeath et al. (2006) and McMenamin et al. (2004), for example, contend that regardless of the stated policy, educators will make sense of policy at a local level based on the resources available to them.

Wylie (2000) observed that while Special Education 2000 had improved opportunities for students with special needs with its increased percentage of funding, not all students benefitted due to identified inequalities of resourcing and opportunity for students with special needs. She found that the division of the policy into its separate initiatives and funding pools has made it difficult to offer students, parents, and schools the seamless, integrated service that was claimed as working best for students with special needs.

Bourke and O'Neil (2001) found that principals and teachers of rural schools, high decile schools and magnet schools reported inequities with Special Education Grant (SEG) on the basis that there were specific factors associated with their schools that required more funding than was provided to other schools.

A longitudinal evaluation of Special Education 2000 (Massey University College of Education, 2002) found that schools were able to identify students who were eligible for services or support, but contend that some students were not able to access equitable support or resources. Evidence from this evaluation also indicated that location and parental choice put pressure on these resources.

The Education Review Office (2005b) review into the use of the SEG also highlighted areas of concern. One concern was that schools used the fund largely for literacy skill development, meaning that some students with moderate special educational needs, other than in literacy, may not have received appropriate support for their needs. Another was that some schools used the SEG to top up funding for ORRS-verified students, or for those students supported by the Severe Behaviour Initiative, which potentially diverted support from students with moderate needs. Students with physical or social/emotional needs or intellectual disability were identified as not receiving their entitlement.

In their summary of previous literature, authors of the Education Review Office review (2005) noted that schools, particularly rural and small schools, reported that they had difficulty attracting suitably qualified and experienced staff, or their SEG only purchased a small amount of the required support.

A report from the Ministry of Education (2005) stated that "The Lets Talk" consultations had found that parents felt their children had missed out on funding if located in isolated areas, while educators thought that students with moderate needs were missing out on resources. In the "Lets Talk" consultations, educators called for adequate, accessible and needs-based funding/resourcing and service levels.

Previous consultations had also shown that students with special education needs from low-decile schools were under performing compared with other students (Ministry of Education, 1998; Wylie, Thompson, & Lythe, 1999). Wylie et al. (1999) also contend that low-decile and high-Māori-enrolment schools were more likely to have gained least under the reforms, and may even have been more disadvantaged through: falling rolls when schools rolls were generally rising, additional administrative loads, and through a lack of parental involvement in schooling.

Since its introduction, ORRS has been the subject of vigorous debate with stakeholders variously feeling that criteria were not clear or were too restrictive (New Zealand Principals Federation, 2004), that some schools lacked either the time, inclination or ability to try to facilitate/support verification, or that there are inconsistencies in decisions (Ministry of Education, 2005).

In the United Kingdom, equity issues have been found at various levels in relation to social class, gender, and ethnicity (Sacker, Schoon, & Bartley, 2001). At a system wide level, the Audit Commission Report (2002) and Ofsted (2004) have outlined that there are disparities and confusion in the ways that special educational needs resourcing is provided. Several researchers agree (McBeath et al., 2006; Sacker et al., 2001) that some schools are perceived to offer higher quality programmes for students with special educational needs, which has created the concept of magnet schools. This puts pressure on schools as they attract a disproportionate number of students with special educational needs (Rouse & Florian, 2001).

Concluding Comment

Special education in New Zealand has undergone extensive changes since 1989. These changes reflect broader changes in government policy and in special education trends internationally. The self-managing schools movement has produced a highly devolved system of educational administration in New Zealand. This movement has given schools greater responsibility and flexibility in how they use the resources that are allocated to them.

The implementation of the Special Education 2000 policy has been well documented and a number of issues related to translating policy into practice have been identified. The New

Zealand literature highlights the complexities associated with defining students with special needs and with the adequacy of provision for students with special needs. At both national and school levels, allocation of resources is inexorably linked to issues of definitions and adequacy of resourcing.

There is also substantial literature that describes how funding is allocated and distributed at a *national* level. However, at the *school* level, literature exploring how schools allocate the resources that they have been given is more difficult to find. There also appears to be a lack of literature that examines the impact of school-level decisions and resource allocation processes on student outcomes.

A number of national and international studies have identified issues of equity and bias in system-level allocation of resources to children with special needs. However, the literature is less explicit in identifying how this impacts on in-school allocation of resources and the effectiveness of resource allocation in terms of student outcomes, and teacher and parent satisfaction. Questions that are the subject of this research are largely a response to a lack of such research in the New Zealand context.

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> Chapter Three: Methodology

Methodological Framework

The research objectives and questions required a study that could examine the operating characteristics and effectiveness of school resourcing of special education as specified in the questions outlined in the introductory chapter. These questions required the collection of components or layers of data that addressed:

- What schools receive from the Ministry of Education;
- What is utilised by schools for their students;
- How schools manage funding; and
- The student experience and outcomes of this resourcing.

The layers and their relationships are represented in Figure 3.1 in the fashion of an ecological model of resourcing systems, structures, and practices that surround and inform the student experience.

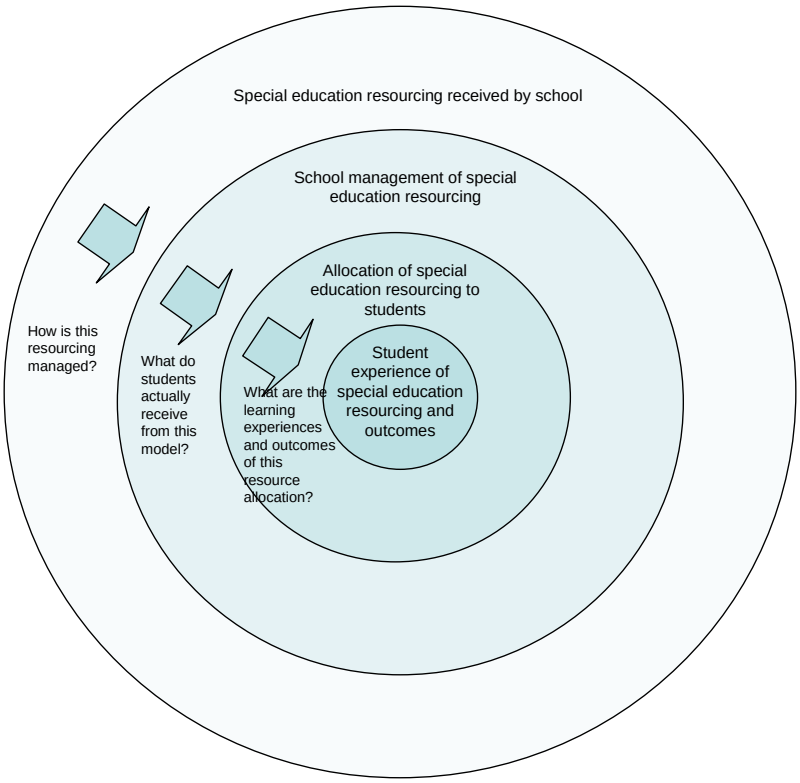

Figure 3.1: Model of resourcing systems, structures, and practices.

Survey Sample

To ensure an adequate representation of the range of schools in New Zealand at the time of the study, the target sample was 250 schools. The final sample was 245 schools due to

difficulties in engaging Kura Kaupapa schools. The process by which both the school sample and student within-school sample were drawn is described below.

School sample

A multi-stage sampling process was used for selecting the schools. A sample of 250 schools was planned, drawing from the entire population of New Zealand schools at the time of the study (n=2594), and from which private, special, correspondence and Kura Teina schools were removed. This led to a total possible pool of 2404 schools from which the sample could be drawn.

An initial stratified sample of 238 schools was drawn, based first on school type (composite, contributing year 1-6, full primary, intermediate, year 7-15, year 9-15), then on GSE region, and then on area type. The sample selected was then reviewed by the Ministry and the project expert group, and modified. The number of secondary schools was increased by 10 to better reflect the fact that while there are fewer secondary school sites in New Zealand, they serve a higher number of special needs students per site. In addition, seven primary schools with no students accessing ORRS funding were replaced by seven schools with high numbers of students accessing ORRS funding to ensure that primary schools serving a high number of special needs students were adequately represented in the sample.

Eight special schools were then added to the sample, by purposefully taking into consideration the special needs being served, the delivery characteristics of non-residential versus residential educational contexts, and whether the school had satellite classes. Finally, the Correspondence School was added to the sample. Thus, there was over-sampling of the special schools and the Correspondence School.

Schools were contacted regarding their voluntary participation in the study (see Appendix 4). In total, 250 schools were contacted, and 101 (40.1%) accepted the initial invitation to participate. The reasons schools gave for declining to participate included: new personnel in key roles who lacked familiarity with the necessary data, workload issues, upcoming Education Review office (ERO) reviews, and participation in other research projects. When schools were unable to participate, a process of replacement with a school with similar demographic characteristics was instigated to maintain sample integrity.

A total of 245 schools participated in the final study (see Table 3.1), representing approximately 10% of all schools in New Zealand.

Table 3.1: Demographic summary of final school sample.

	Percentage of all NZ schools (%)	Final Sample (%)
SCHOOL TYPE		
Composite	3.8	2.9
Contributing (Year 1-6)	33.1	40.0
Full Primary	44.9	30.2
Intermediate	5.0	5.7
Year 7-15	3.9	6.5
Year 9-15	9.2	10.6
Kura/ MM Designated Special Character	3.3	1.2
Restricted Composite	0.2	0.4
Special	2.0	3.3
Correspondence	0.04	0.4
DECILE		
High (Deciles 8-10)	29.6	31.0
Mid (Deciles 4-7)	39.8	42.6
Low (Deciles 1-3)	30.7	26.4
AREA TYPE		
Main Urban	53.6	69.8
Minor Urban	11.3	6.6
Secondary Urban	28.7	17.4
Rural	6.3	6.2
ROLL		
Small Primary (less than 100 students)	28.0	17.4
Medium Primary (101 to 250 students)	25.5	25.1
Large Primary (over 250 students)	27.3	36.6
Small Secondary (less than 300 students)	6.4	3.4
Medium Secondary (301 to 700 students)	6.1	6.8
Large Secondary (over 700 students)	6.7	10.6

The schools in the sample are representative of the national distribution of schools across the three decile groupings and school type, but not for roll size, GSE regions, and area type. It is important to note that the number of variables used for stratification to form the sample means that the sample is less likely to be representative of each characteristic, leading to possible loss of power in some of the statistical analyses.

Student sample

Three levels of data from the 245 sample schools were gathered for the review[6]. These three levels of data are referred to as *school level*, *selected*, and *case study* throughout the report (Table 3.2). The first level included all students with special needs as identified by the schools (n=13,349) using the categories provided to schools and described subsequently.

Within each participating school, student level data were sought for up to 16 students, dependent on school roll size. Schools were asked to select students to ensure a broad representation of the four survey-specific categories of need (see Table 3.2). These individual student data were provided for 1921 students. These data are the selected data referred to in the findings.

From these selected students, up to three were selected from each school to serve as case studies. These cases were intended to exemplify key elements of the special education resourcing framework in practice in schools, or to represent different levels/kinds of special education need within each school community. In total 653 case study students were included in the study.

Table 3.2: Summary of number of case study, selected and school level students.

	Number of Students	Percent of school level students	Percent of total roll (%)
Case study students	653	4.9	0.7
Selected students	1921	14.4	2.1
School level students (all Category 1 to 4 students)	13,349	100	14.3
Total school roll	93,163	-	100

Category of Special Need

Four categories of special needs were defined for this study in close consultation with the Ministry of Education. Information about these categories was sent to schools in preparation for the field worker visit. Each school was asked to give the number of students in their school that fell within each of the categories as described in Table 3.3.

[6] Both the selected and case study students were chosen by the schools and although they were given instructions on the nature of the representation required we cannot be certain of the extent to which this occurred.

Table 3.3: Four Categories of Special Needs Students.

Category 1 – Very High Needs, Ongoing Students with very high needs who will need ongoing management of that need for their entire school careers (e.g.; ORRS verification; Section 9 agreement to attend a special day school; Assistive technologies - those students are most often ORRS; ACC if needs require ongoing as above).	**Category 2 – Moderate to High Needs, Ongoing** Students with moderate to high needs who will need ongoing management of that need for their entire school careers (e.g., SLS, Moderate Physical Contract, Moderate Contract: Vision; Moderate Contract: Hearing; ACC if needs require ongoing as above).
Category 3 – Very High Needs, Short Term Students with very high needs whose needs can potentially be met with a specific short term intervention up to 3 years (e.g., School High Health Needs funding; Severe Behaviour funding; Communication Service (Speech Language Therapy); Enhanced Performance Funding; Residential Special School (behaviour or learning); whole school systemic interventions such as Eliminating Violence/ Incredible Years programmes; ACC if needs require ongoing as above).	**Category 4 – Moderate to High Needs, Short Term** Students with moderate to high needs whose needs can potentially be met with shorter time and limited intervention (e.g., RTLB; Learning Support Fund; Year 11-13 funding; RT Literacy; ACC if needs require ongoing as above).

Data Sources

School Communities

Several data collection tools (Appendix 3) were developed to collect information about the resources schools received, how these resources were utilised and managed, and perceptions of the effectiveness of the resources.

The content of the survey was informed by the key research questions, and discussions with the Ministry and expert reference group. Specific information was sought about:

- Resources received from the Ministry (e.g. operations grant, individually allocated funding streams);
- Resources received from external sources (e.g. donations, ACC);

- Allocations at a school level of resources and decisions around those allocations (e.g. staffing time, curriculum materials, purchase of external services, expenditures on capital development and assistive technologies); and
- Effectiveness of resourcing (parent/caregiver, teacher and key contact perceptions).

The survey was designed to be completed in separate sections by different respondents: one section was to be completed by the school-nominated main contact (in most cases, either by the principal or the Special Needs Coordinator (SENCO)), another section was to be completed by the class teacher of the nominated case study students, and another section was to be completed by the parents/caregivers of nominated case study students.

Ministry of Education

Data were also sought from the Ministry of Education regarding the school-managed and tracked individual special needs resources allocated to the schools in the study. Agreement was reached for the Ministry to populate a database with information on allocations and demographics for all surveyed schools. These data were stored in a number of different Ministry databases, requiring the cooperation of numerous data analysts within various sections of the Ministry. This information has not been used to audit Ministry resourcing against reported individual school allocation.

Procedure

Survey pilot

The study instrument, communication with schools and field visit techniques were piloted across five schools prior to data collection. Two secondary schools, two contributing primary and one special school were visited. The intention was to pilot the study in a Kura Kaupapa school, but because of issues gaining participation from these schools this did not occur. Schools were selected at the suggestion of the Ministry, based on their knowledge of sites that would be able to provide data within the limited period of piloting.

In most instances two field workers from the project team visited each school. A Ministry representative observed some of the pilot visits. The field workers trialled various sections of the study. Particular emphases were placed on the interview with a key contact, and the collection of school data on resources utilised for students with special needs. Based on feedback received, minor modifications were made to the study instruments to make them more user friendly for both the field workers and the respondents. During piloting, it was recognised that while some aspects of the study could be sent to schools prior to the site

visit, assuring quality of study completion would require the field worker to sit alongside the respondents at each school on the day of data collection.

Field Worker Recruitment and Training

Given the number of school visits required in the designated timeframe, ten field workers[7] from within and closely associated with Cognition were recruited for the purpose of data collection. Field workers were selected on the basis of their prior experience, and their credibility in, and understanding of, New Zealand schools. Many came from prior roles as school principals, or they had an extensive background in working with students with special needs. The lead field workers were experienced in the necessary data collection methods.

All field workers undertook one day's training prior to their first school visit to familiarise them with the study tools and data collection procedures. During this induction, they were provided with detailed information about the study and its purpose (including information about issues of sensitivity to special education issues). They were also given training in the data collection procedures used for this project, including the use of the survey, interview and observation techniques, and documentation of materials and recording of relevant information. Many of the field workers also observed the lead field workers in practice. Moderation of field work was undertaken at various points throughout the data collection process.

Data collection

Schools from the sample were sent a letter, an information sheet, and a school consent form in July 2007 requesting their participation in the study and the return of the consent form (Appendix 4). Schools that consented were then sent a follow-up letter outlining the sources of data that would be collected on the day of the field worker visit. They were directed to a section of the Cognition website and asked to download a series of documents in preparation for the visit. These included detailed step by step instructions. Schools were required to gather and review necessary documentation on school-wide and individual student resourcing for special needs prior to the data collection visit, and to complete the tables. Frequent contact between consenting schools, the Cognition office and the field worker responsible for collecting data minimised pre-visit issues. Nonetheless, there were some schools that did withdraw from the study after initially agreeing to participate, once they were more fully cognisant of the scope of data to be collected.

[7] Three senior consultants from the Cognition Research and Evaluation team were used as lead field workers.

The majority of data collection occurred between July and December 2007, with the remaining schools visited in February 2008. Each school was visited by a Cognition field worker for an average of one full school day. The nature and size of some schools necessitated further visits, whereas, in other schools a whole day was not required.

On the day of the school visit, the field worker reviewed and entered data, regarding school-wide and individual student special-needs resourcing, into a spreadsheet. In many instances, this was done with the principal and/or the SENCO. The principal and/or SENCO were then interviewed regarding their perspective on the management and effectiveness of special needs resourcing in their school. Short interviews with the parents/caregivers and teachers regarding their perspectives on the effectiveness of resourcing targeted to up to three case study students were also conducted.

All research participants were provided with full information about the nature of the project prior to them agreeing to participate. Signed voluntary consent or verbal consent on the day was required prior to data being collected from individuals in the study. A copy of the information sheets and consent forms distributed to the school, parent/caregiver, and teacher are included in Appendix 3.

Attempts were made to follow up any outstanding data within five days of the initial visit. However, there were a significant number of participants who could not be contacted despite repeated attempts by field staff. In many cases, parents/caregivers were not available on the day of the interview so field workers also attempted to contact them three times by telephone to ensure that their experiences were included.

Risk Management

Cognition was well aware of the risks involved in a research project of this scope and size. As a result, a number of preventative measures, as discussed below, were put in place to mitigate against these. Despite these measures, some difficulties were still experienced. These are also discussed below and serve to explain why not all data sets can be labelled as 'complete' and why there are variations in the number of students and/or schools reported in the subsequent analyses.

Inconsistencies in data collection

It was recognised that utilising a number of different field workers across a multitude of school contexts could result in variation in the quality and interpretations of the data collected. As previously stated, all field workers were trained in a uniform fashion prior to their first school visit. Additionally, spreadsheets and interview guides used in the data

collection were standardised and all field workers were provided with booklets containing a number of templates for them to work in.

At various stages throughout the project, check pointing was undertaken as was peer observation of field work. Once the bulk of data collection was completed, the field work team was brought together for a day, in late 2007, to discuss their observations and to reach consensus on points of interpretation.

As part of the internal quality assurance, each return of data was also checked prior to data collation and missing data or inconsistencies were followed up by members of the core research team. Differences or difficulties in making judgements upon data entry were dealt with through discussion, re-examination of data, or by referring back to the field book or field worker.

School non-participation

It was recognised that some schools would decline to participate in the study. A number of measures were put in place to address possible school concerns and to maximise school participation. Measures introduced included field workers making themselves available around the schedules of the schools. Being on site for an entire day allowed schools flexibility in finding suitable times to speak with parents, the key contact person and teachers. Additionally, field workers worked alongside the key contact to analyse school financial data on resources received and allocated to students with special needs. This aspect of the project was available on the Cognition website. Schools were encouraged to visit the website prior to the visit to enable them to gather the necessary information at their convenience.

Frequent contact (through phone, email and post), without being overbearing, and the development of positive rapport between the school contact and the field worker were recognised as being important.

Despite these measures, some schools still declined to participate. Reasons provided included perceptions about the logistical complexities, the time involved in participating, and concerns about the sharing of financial or student data with the Ministry. In addition, a number of schools were over-represented in other research projects due to characteristics such as their location, decile or specific nature. Increasingly, these schools are declining to participate in further research.

There was particular recognition of the importance of engaging Kura Kaupapa schools with this research. A number of steps were put in place to increase their participation rate. The team's Operations Manager, who was fluent in Te Reo and who had five years experience in

an immersion education setting, was responsible for all contact with Kura Kaupapa. This task was on-going throughout the research and analysis period and resulted in three Kura Kaupapa schools finally being included in the sample. Reasons for declining to participate included pressing workloads of principal and staff and the absence from school of key personnel (through illness or leave). In a number of instances, it was difficult to get an audience with the Principal to discuss the nature of the research before a decision to participate could be made. Where Kura Kaupapa declined to participate, a snowball sampling procedure was used involving personal contacts, suggestions from Ministry of Education officials, and suggestions from participating Kura Kaupapa schools. Despite our best efforts, the recruitment of Kura Kaupapa schools remained difficult and only three agreed to participate[8].

Incomplete and/or inconsistent data

We were mindful that the quality of information that schools provided on the survey regarding resources utilised for students with special needs would be related to both their ability to review financial data and to their confidence about the overall purpose and impact of the study. To address these issues, the survey design took into consideration the variety of financial reporting systems utilised by schools. The sections which asked schools to provide data on the financial (monetary, staffing, and resources purchased/received) aspects of special needs resourcing were designed in a manner that was user friendly and on an interface that could be transferred across school sites. Schools were provided with information about aspects of the study prior to the visit of the field worker, including detailed step-by-step support materials for survey completion. As a result of the pilot, it was decided that the field worker would review all data the school provided on the day of the visit to ensure consistency and accuracy of data. Field workers supported completion of the data collection by being available to talk through and populate these sections of the survey on the day of the school visit. The aim of obtaining Ministry data concerning what schools were provided with in terms of special needs resourcing also helped to reduce the respondent burden in this area.

Multiple assurances were provided to research participants that no student, family, teacher, or school would be identified in the report or in any other way. Field workers built positive rapport with key individuals prior to and on the day of data collection to reinforce this

[8] We are becoming increasingly aware of the difficulties of gaining participation from schools who, because of certain characteristics, are frequently being asked to take part in research and/or evaluation. This is particularly true of Kura Kaupapa as there is a relatively small number to choose from. They also hold certain philosophical beliefs which can also lead to some reluctance on their part.

message. Nevertheless, a few participant schools declined to provide data on special need resources allocated to individual case study students. There were gaps in some data sets because in some schools resourcing entitlements had been pooled, budgets had been set by previous principals, key staff were absent or on leave, or because it was not possible to attribute resources to specific funds/initiatives.

Parental participation in the study

Schools were asked to schedule a time for the field worker to speak with the parents/caregivers of up to three case study students at their site. Some parents/caregivers were not available during school hours or in the period immediately prior to or after school for this to occur. In such situations, field workers asked for contact details to allow for an individual telephone interview to be conducted at a more convenient time. Field workers attempted to reach these individuals on no less than three separate occasions over the following five days. After this, they submitted their data to the research team, whether it was completed or not.

Data Management and Analysis

Following each school visit, the field worker responsible was required to enter all interview data into purposely developed MS Excel spreadsheets which were then sent electronically to the Cognition office. The electronic data files (containing interviews and resourcing data) for each school were stored in a secure location as discrete files. The paper copies of the completed surveys were posted to and securely stored at the Cognition office.

Quantitative data.

During the school visit the field worker sat alongside the key contact/s as they completed the data collection tools. Together they worked systematically through the process to ensure that the tools were filled out as completely and accurately as possible. The field workers preparation included instruction on a questioning process that supported the unravelling of complex accounting practices.

A process of data cleaning of individual files was undertaken. All spreadsheets were checked for missing fields and values, data recording errors, and differences in field worker coding interpretations. Where there were gaps or anomalies analysts' referred these back to the field workers for further clarification.

The process of cleaning the data involved checking that all values in each spreadsheet column were valid for the type of data expected (e.g., a dollar value and not hours per week; full time teacher equivalent (FTTE) given and not salary). Once data were sufficiently

cleaned, individual school spreadsheets were merged into master spreadsheets, first in MS Excel and then in SPSS for the planned analyses. Where this could not be done satisfactorily, a code for missing data was inserted.

A total of 1031 variables were obtained from the field data related to 1921 individual student cases, giving a total database containing 1.98 million pieces of information. Ministry supplied data containing a further 105 variables was added to the SPSS database, to give a total of almost 2.2 million pieces of data. The Ministry data included demographic data about the school (such as school roll, geographical location, school type, and isolation index) that was obtained from the Ministry website, plus the operational and special needs funding resources specifically provided by the Ministry and which related to the two terms of this study (Terms 1 and 2, 2007).

SPSS syntax was written to analyse the database. A systematic approach was taken to analysing each of the original sources of data (including school data and responses, teacher interviews, parent/caregiver interviews, and Ministry data), and then across the multiple sources of data. The initial process of analysis focused on the use of descriptive statistics (frequencies and percentages) to summarise the data collected and to present it in a more manageable form.

Additional variables were generated to allow for ease of analysis and to clarify understandings about the outcomes. Where a variable was to be used for comparison purposes and it had numerous values (for example, ten decile values), the variable was recoded/grouped. In this case, three groups were used for deciles - high (deciles 8-10), medium (deciles 4-7), and low (deciles 1-3). Where there were existing groups already established and used for funding, such as the Isolation Index and targeted funding for isolation (TFI), these groups were utilised. Descriptions of all groupings can be found in the Definitions section at the beginning of this report.

Subsequent analyses (cross tabulations and analysis of variance - ANOVA) allowed for comparisons across various categories (e.g., types of student need, and school type). Cross-tabulations enable the data to be shown across the range of categories for variables of interest, to generate meaningful analysis. For instance, the amount of resource used and the amount of resource received can be shown for the three levels of decile – high, medium and low – to show the levels of funding each decile group was receiving. Analyses of variance (ANOVA) were also employed to explore whether there were differences that were

statistically significant for the variables of interest[9]. Bivariate correlation statistics were also used where comparable data were obtained from two or more sources to determine the degree to which these sources were in agreement. For instance, the ratings of progress that teachers and parents independently gave for case study students were compared in this way.

For the purposes of aggregation across a resource, an estimated monetary value was ascribed to each of the services provided through the different resources. The official payroll data for 2007 were used to estimate the value of the teacher FTTE ($58 000 per annum, or $29 000 for the two terms of this study), and the average teacher aide rate for this period was $14 per hour. Voluntary time donated by parents was also calculated at this rate. The salary rate[10] for all other out of school specialist support was estimated at $40 per hour. Other services, such as resources for curriculum delivery were already captured in dollar terms.

Qualitative data

The purpose of the qualitative data in this study was to supplement the findings from the very large body of quantitative data. These data were gathered during the interviews with the school key contact and the parents and teachers of the case study students. They provided a more in-depth understanding of the implementation and effectiveness of special needs resourcing in schools.

In all instances the questions asked during these interviews were open-ended with the exception of those requiring a rating of one to five such as the effectiveness questions. Although the interviewers were aware of some pre-determined response categories, all comments were coded using an open-coding method during analysis. One person completed all coding once reliability had been confirmed through a process of inter-coder reliability with another researcher.

General comments made during the field visits were entered into an Excel spreadsheet and provided a commentary in the participants' own words around the issues of special needs resourcing. Each comment was entered against the research questions, with the source of the data – the school, and the position of the person interviewed – retained for reference. These comments have not been included in this report but are available for future analyses if required.

[9] Where significant differences were detected through ANOVA, post-hoc Tukey tests were used to determine which pair(s) of variables these differences existed between.

[10] This salary rate does not account for all the costs to an external provider for the provision of specialist services.

Limitations of the Data Collected

There are six potential limitations to the data reported here which need to be acknowledged. Each of these has arisen out of the pragmatic realities of collecting data of the scope and range discussed in this report. Balances were made against ensuring sufficient school participation and the likelihood of reasonably accurate data and the specificity of the information collected.

1. The data regarding school allocation of resource to students is self-report data only. It is, therefore, dependent on school-based knowledge and understanding.
2. The schools selected the students on whom additional data were provided. They were asked to provide a representative sample of the students with special needs in their schools. However, it would appear that they are predominantly higher needs students.
3. Where data have been aggregated, an estimated monetary value has been assigned to resources and services which may not have been reported as such originally e.g. FTTE. This monetary value, in some instances, does not reflect the true cost to an external provider of providing this service. Rather, it is the actual time the school perceives the resource being available to their students. An example of this is that a school cites the hours that they see the specialist support in the school. They will not have included the supporting activities required for each hour of provision which they are unlikely to be aware of. This is, at least in part, due to the nature of the questions asked regarding the provision of students to identified students as opposed to the overall provision of services.
4. Schools were asked to disaggregate resourcing across specific services. The combination of a variety of accounting practices, and the depth of knowledge of these, from key people engaged in the survey may have resulted in some limitations around the accuracy with which the utilisation of individual resources and the services have been reported. Field workers tried to reframe questions where necessary for clarification and to tease out answers to ensure that there were shared understandings of the schools responses.
5. The design of parts of the data collection tools meant a wide range of responses were possible and in instances this may have allowed for answers which are not likely given the nature of the resource.

Chapter Four: The Allocation, Utilisation and Effectiveness of Special Needs Resources

Overview

This chapter presents largely descriptive findings from the school, selected and case study data. The analyses and reporting of these data have been structured around the following questions.

1. What is the profile of students identified by schools as belonging to one of the four categories provided?
2. What is the range of special education resources supplied to the surveyed schools by the Ministry of Education?
3. How have the surveyed schools reported utilising these resources?
4. How does the allocation of resources by the Ministry compare with the reported utilisation by schools?
5. How are these resources managed by schools?
6. What is the perceived effectiveness of these resources?

Profile of Students

Teachers and key personnel in the schools in this study identified a total of 13,349 school level students in the four categories provided as shown in Table 4.1. The total school roll for the 245 schools in the study was 93,163. The percentage of that roll of each category of students with special needs is also shown.

Table 4.1: Number of students nominated in four special needs categories and percentage of total school roll.

Category	Number of Students	Percentage of Total School Roll (%)
Category 1	1034	1.1
Category 2	1171	1.3
Category 3	1799	1.9
Category 4	9345	10.0
Total Categories 1 to 4	13,349	14.3
Total Roll for Sample Schools	93,163	-

When the number of school level students in Categories 1 to 4 in each school is referenced against the total school roll, the proportion of students classified in one of these four

categories ranges from a low of 0.4% to over 75% of the total roll for that school. After excluding those schools designated as Special Schools (n=9) and schools that did not complete the section of the survey that asked for their classification of students (n=11), in fifteen of the remaining schools in the sample, over half the students have been categorised in this way (Table 4.2).

Table 4.2: Percentage of school roll classified in Categories 1 to 4[11].

Percentage of Roll	Number of Schools	Percentage of Schools	High decile	Mid decile	Low decile
0% to 24%	164	72.9	65	70	29
25% to 49%	46	20.4	6	23	17
50% to 74%	11	4.9	0	2	9
75% to 100%	4	1.8	0	2	2
Total	225	100	71	97	57

Most of the high decile schools, for which data were available (92%, n=65), reported that less than 25% of their roll was in one of the special needs categories used in the survey. Eleven low and four medium decile schools (9.7%) reported that over 50% of their school roll was in one of the categories. No high decile schools reported this.

Gender

There were substantially more boys (n=1271, 69.4%) in the selected student group than girls (n=561, 30.6%)[12]. The boys outnumbered the girls in each of the four special needs categories. There is a statistically significant difference in the distribution of boys and girls across the four special needs categories[13], as shown in Figure 4.1.

[11] Correspondence School and special schools not included. Category data was not available for all of the remaining schools.

[12] Gender information was not available for 89 students.

[13] $\chi^2(3)=13.712$, p=.003

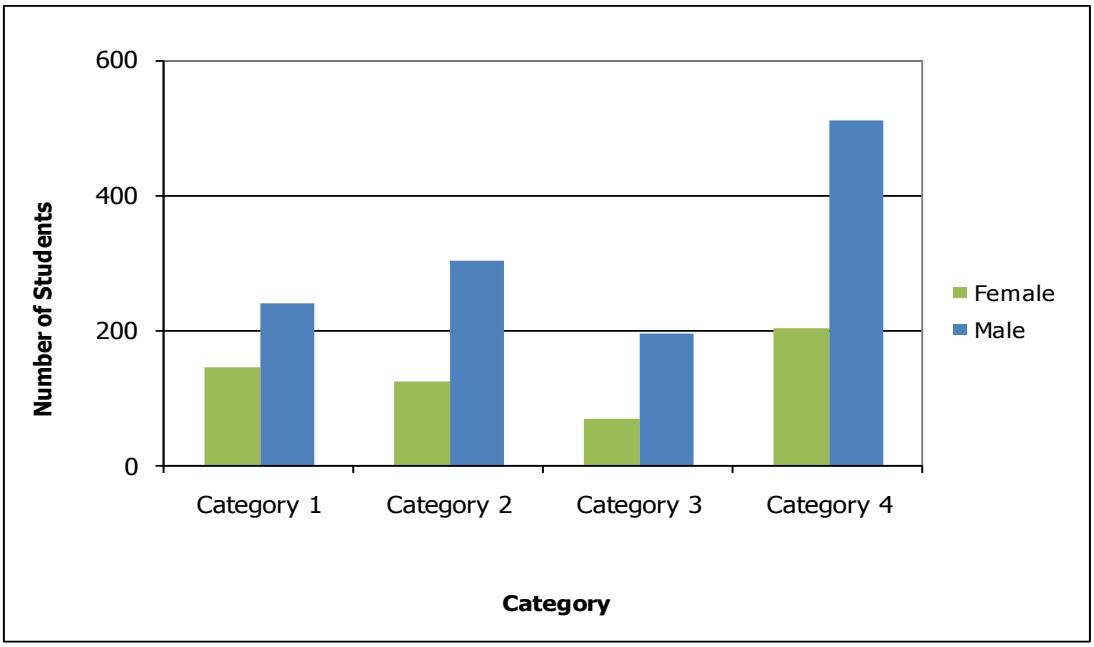

Figure 4.1: Distribution of males and females by special needs category (n=1802)[14].

Ethnicity

The ethnicity of the students in the selected student group (n= 1921) is shown in Table 4.3[15]. The percentage for each ethnic group in the total New Zealand student population from the July 1 roll return for 2007 is also given[16]. Asian and Pasifika students are slightly under-represented and European/Pakeha and Māori students are slightly over-represented.

[14] Gender and/or Special Needs category not available for 119 students.

[15] It should be noted that we have no way of determining the extent to which these 1921 students are representative of the 13,349 as we do not have demographic data for those students. However, given that the 1921 are representative of the total population one could assume they are also reflective of the 13,349.

[16] Figures taken from www.educationcounts.govt.nz as at 1 July 2007

Table 4.3: Number of selected students by ethnicity, compared with New Zealand student population[17].

	Number of Selected Students	Percentage of Selected Students	New Zealand Student Population (%)
European/Pakeha	1191	64.2	58.3
Māori	458	24.7	21.9
Pasifika	82	4.4	9.3
Asian	55	3.0	8.4
Other	68	3.7	2.1
Total	1854	100.0	100.0

There are statistically significant differences in the distribution of these ethnicities across the four special needs categories[18]. In particular, these differences are between the distribution of Asian students and Māori students, and between Asian and Other students in Categories 2, 3 and 4 (Figure 4.2).

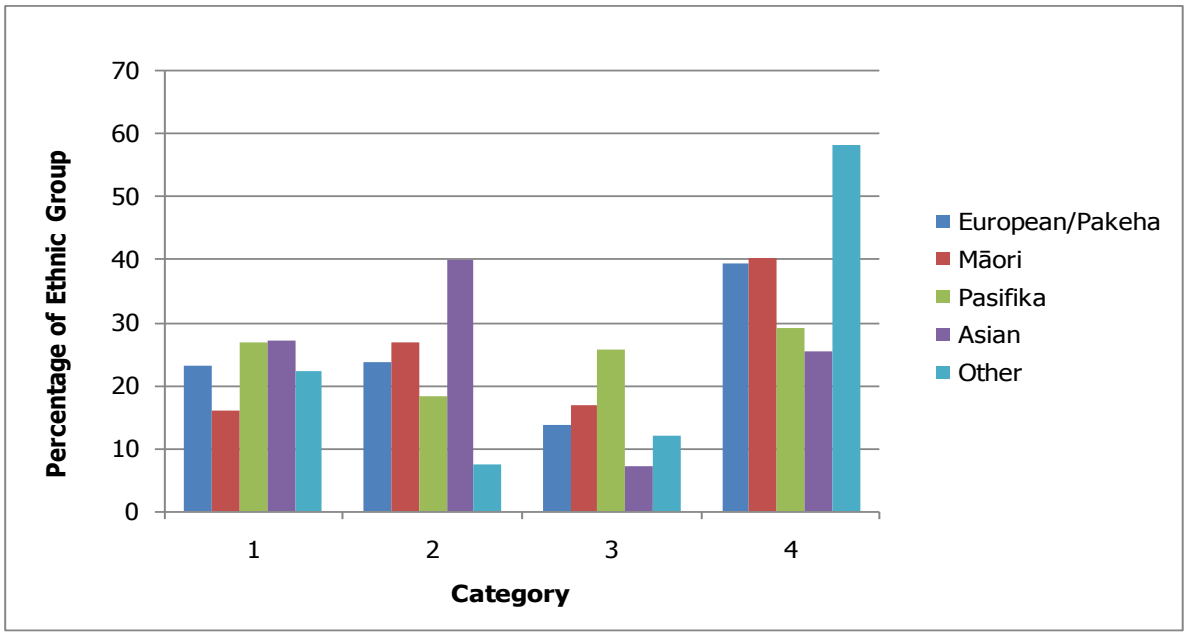

Figure 4.2: Percentage of ethnicities by category (n=1836)[19].

Type of Special Need

School identified need

Schools were provided with a list of six types of special needs and asked to choose up to three needs for each of the students in the selected student group (n=1921). They were not

[17] Ethnicity data not available for 67 students.

[18] $\chi^2(12)=47.74$ $p<.001$

[19] Ethnicity and/or Category data not available for 85 students.

asked to rank these needs in order of relevance. For just over three-quarters (76.5%) of these students (n=1470), learning needs was chosen as one of the three (Table 4.4).

The next most frequently chosen need was behaviour/social communication. This was identified as one of the three needs for a total of 802 students (41.7% of the sample).

Multiple needs were selected for 859 students (44.7% of the sample), with 574 (29.9%) students having two needs, and a further 285 (14.8%) having three needs specified.

Table 4.4: Educational needs of selected students (n=1921)[20].

Need	Selected Students			
	No of Students	*Percent*	*Boys*	*Girls*
Learning	1470	76.5	1004	444
Behaviour/ social communication	802	41.7	606	176
Vision	60	3.1	38	22
Hearing	61	3.2	38	22
Mobility/ personal care	228	11.9	131	95
Communication	360	18.7	217	131

Although boys (n=1270) outnumber girls (n=561) in the selected group of students by a ratio of a little over 2:1, in the behavioural/social communication category they outnumber girls by over 3:1. In the other categories, listed above, the proportion of boys and girls was more closely aligned with the 2:1 ratio.

Professionally diagnosed needs

Schools were also asked to indicate those students whose special need(s) had been professionally diagnosed[21] as a recognised condition (e.g., autism, dyslexia). Schools reported a total of 754 recognised conditions for 672 (35.0%) of the 1921 selected students in this study. For 1249 (65.0%) of the selected students there was no professionally diagnosed condition reported.

The conditions reported included specific congenital or genetic disorders (e.g., Down Syndrome) and other conditions such as dyslexia and global development delay. Of the selected students, 110 (5.7%) were reported as having autism spectrum disorder. A further 49 (2.6%) were reported as having Aspergers syndrome. Approximately 2.9% of students (n=56) were reported as having dyslexia; 2.7% (n=52) were reported as having Down syndrome, and 2.2% (n=42) were reported as having ADHD, or learning

[20] Gender information was not available for all selected students, so number of boys and girls may not match the total number of students shown.

[21] That is diagnosed by a recognised external expert in the field not by the teacher or school.

difficulty/developmental delay/learning disability. Other conditions were reported as being professionally diagnosed but only small percentages of students (less than 2.0%) were reported as having each of these conditions.

Multiple conditions were reported for 65 students (3.4% of all students). Fifty-five students (2.9%) were reported with two conditions, 4 students (0.2%) with three conditions, 5 students (0.3%) with four conditions, and there was 1 student (0.05%) with five reported conditions. Each of the "Other" conditions (e.g., brain injury, epilepsy, fragile X, spina bifida, muscular dystrophy) were reported for fewer than 20 individual students.

Table 4.5 presents a summary of professionally diagnosed conditions.

Table 4.5: Number of students with professionally diagnosed conditions (n=1921).

Condition	Number of Students	Percent of All Students
Autism Spectrum Disorder	110	5.7
Dyslexia	56	2.9
Down Syndrome	52	2.7
Aspergers Syndrome	49	2.6
ADHD	42	2.2
Learning difficulty, developmental delay or learning disability	42	2.2
Cerebral palsy	32	1.6
Dyspraxia	31	1.6
Other conditions	258	13.4
Total number with reported conditions	672	100

> Resources allocated to the Schools by the Ministry of Education

The Ministry provides two broadly defined types of resources. The first of these is not related to an individual student but is either supplied to the school on a roll and decile formula, or, as in the case of EPF, is based on need. These are called *school-managed resources* in this report. The second is provided to schools based on the verified needs of individual students and is tracked to those students. These are referred to as *tracked individual resources* in this report.

In this section we provide a description of these resources (see Appendix One for a more detailed description of each resourcing scheme), and the amount of each, in monetary values, that the Ministry reported they supplied to the 245 schools in this study over Terms 1 and 2 of 2007. Again, note, that in some instances the full cost of providing a particular service is not reported.

These resources were originally supplied in several forms – additional teacher salaries (FTTE), additional teacher aide hours, provisions for specialist support, and in a variety of other ways including through the provision of funds. However, in order for data to be aggregated for reporting purposes, we have assigned a monetary value to all resources as explained in the methodology chapter.

School-Managed Resources

In this section, we discuss a broadly defined category of resources. These range from the EPF which is a discretionary fund, to the Operations Grant and TFEA, both of which are utilised for a wider range of purposes than special education alone. It includes resources that are allocated based on need and some that are allocated based on a roll and decile formula. The key difference between this group of resources and the subsequent one is that they are not tracked to an individual student. The school roll is also a factor in determining the total amount of each of these resources. In all instances the value of the resource reported is for Terms 1 and 2 of 2007 only.

Enhanced Programme Fund (EPF)

This fund is available, on application to the Ministry, for those schools (sometimes referred to as magnet schools[22]) which have a disproportionate number of students with moderate special education needs. It is a discretionary fund and is prioritised in districts. It is also a

[22] Ministry of Education (2007) Funding, Staffing and Allowances Handbook. Chapter 1, Operational Funding, p. 10

contestable fund. To receive this discretionary fund schools are asked to demonstrate the prevalence of students with special needs who are not in receipt of ORRS or SLS. They must also be able to demonstrate that they will provide an appropriate programme to these students.

At the time of the survey, the application process for this fund was being reviewed. This report reflects the outcomes of the process as it stood in early 2007, and may not reflect the revised process.

The Ministry allocation to schools in this study for this resource was $806,495 in the first two terms of 2007.

Learning Support Fund (LSF)

Apart from the Correspondence School, all school clusters received funding from the Ministry from this pool. This fund is held by a nominated school (the host school) within each RTLB cluster. Its purpose is to provide in-school support to implement a programme that has been developed for a student or students and on some occasions to enable teachers to access professional development.

This is one of the few special needs resources that specifically makes mention of professional development. Over the cluster, funding is calculated using a formula that takes roll and decile into account.

The Ministry allocation to the sample schools for this resource was $397,995.

Resource Teachers, Learning and Behaviour (RTLB)

RTLBs are specialist teachers who provide advice and guidance within schools to teachers of students in Years 1 to 10 who are at risk of low achievement due to moderate learning and/or behaviour difficulties. They work in a cluster of schools, with decisions about the use of this resource under the control of a management committee for that cluster. They are based in a particular school, known as the host school.

The RTLB allocation of FTTE for each cluster is determined by aggregating a weighted score based on roll size and decile for each individual school within that cluster. Payments are made to the school(s) designated as the 'fund holder' school. The cluster management committee then makes decisions about how the RTLB for their cluster will be deployed. These payments cover the costs of staffing plus administration and travel for RTLB staff within the cluster.

Additional funding is available to support students in Years 11 to 13 who also have learning and behavioural difficulties. This fund is also calculated based on the roll and decile of each school within the cluster.

The total Ministry allocation to the sample schools for the RTLB resource was valued at $3,341,763.[23]

Special Education Grant (SEG)

The Special Education Grant is paid to all schools using a base amount plus a roll by decile related formula. SEG is included with the annual Operations Grant, and is automatically paid to schools each quarter. There is no application process. Schools have total discretion over the expenditure of this grant to provide services to students with special educational needs as part of their overall operational expenditure. None of the grant is tagged.

The Ministry allocation to the sample schools for SEG was $2,174,055.

Targeted Fund for Educational Achievement (TFEA)

TFEA is a resource to assist schools in lowering barriers to learning faced by students from lower socio-economic communities. It was introduced prior to Special Education 2000 and is not a special education resource per se. TFEA can be used for "at risk" children many of whom may have special needs. Schools have complete discretion over the way in which this resource is utilised. The allocation of this fund is on a per student basis, with an adjustment to take into account the school's decile rating. Schools with lower decile rankings receive greater allocations per pupil.

The Ministry allocation to the sample schools for this resource was $5,849,376.

Operations Grant[24] (Ops)

The largest source of resourcing for schools, other than their formula staffing entitlement, is the Operations Grant, which is provided to meet the administrative, operational and general learning needs of the school. This is the basic resource that schools receive to support teaching, learning and achievement for all students, including students with special needs. Under a self-managing governance model, schools have considerable discretion over the uses to which this grant is put.

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[23] The salary component for RTLBs working in the sample schools has been calculated for an estimated 78 RTLB (10% of all RTLBs). This value does not include any additional costs such as preparation, administration and travel time.

[24] The Operations Grant as referred to in this report does not include the other school-managed funding.

The Ministry allocation to the sample schools for the Operations Grant was $60,165,046 for the two terms of this study.

Tracked Individual Resources

In this section, we consider the resources that the Ministry provides to schools to meet the identified needs of individual students. These resources are generally provided as services (e.g., FTTE or Specialist Support). As with the school-managed resources, we have ascribed monetary values where necessary. Again this is with the proviso that not all costs associated with the delivery of these services have been included.

Accident Compensation Corporation (ACC)

The Ministry of Education provides services for the assessment of student needs with relation to ACC funding. This does not include the support received directly from ACC. In the subsequent section we have not discussed ACC in terms of Ministry allocations, as the amount schools have reported is from the Accident Compensation Corporation rather than from the Ministry.

In Terms 1 and 2, 2007, the Ministry allocation to the sample schools for this resource was $3732.

Assistive Technology (AT)

Provision is made for the purchase or supply of technologies/equipment that will assist students to maximise their learning opportunities. These are targeted for quite specific needs. This provision also includes the Centre for Assistive Technology which provides access to support and assistive technology experts.

In the two terms of this study, the sample schools received support from the Ministry for resources to the value of $116,296 for these purposes.

School High Health Needs

This resource is intended to provide for para-professional assistance (teacher aides), to assist the student to safely attend school.

The estimated monetary value of the Ministry allocation to the sample schools for this resource was $281,544.

Interim Response Fund

This fund is managed by regional student support managers in the Ministry, to assist schools when a student's behaviour has reached crisis point. The fund was in its initial stages of

implementation at the time of the survey and none of the schools involved had received any funding.

Moderate Support

Moderate support includes provisions for students with physical needs/disabilities and students with sensory impairment i.e. vision or hearing. There is no provision for teacher aide support or consumables.

The monetary value of the Ministry allocation to the sample schools for this resource was $31,060.

Ongoing and Reviewable Resourcing Schemes (ORRS)

To qualify for support under these schemes, a student must have the highest needs on either an ongoing basis for their entire school life (the Ongoing Resourcing Scheme) or for short periods of up to four years (the Reviewable Resourcing Scheme). The resources for these schemes follow each verified student throughout the approved period of resourcing[25], and the resources are allocated on the basis of individual needs. They comprise several elements.

Firstly, additional staffing is allocated directly to schools, depending on the classification of the student – high needs, or very high needs. High needs students receive a staffing allocation of 0.1 FTTE, and very high needs students receive an allocation of 0.2 FTTE. This staffing is in addition to each school's roll-related entitlement, and can be added to the overall staffing pool, thus giving each school some flexibility over how this is used.

Three other resourcing elements of the ORRS schemes are *specialist expertise* (for instance, psychologists, speech language therapists, physiotherapists, occupational therapists, conductors in conductive education programmes, advisors for deaf, as well as time for assessing students), *paraprofessional support* (i.e., teacher aide hours), and a *consumables grant* for small items such as disposable gloves, and audio tapes.

These three resources are handled in one of two ways: (a) by the Ministry through GSE for the majority of schools in New Zealand); or (b) by a small number of schools in New Zealand that hold these funds, either for themselves or through a cluster arrangement. These schools

[25] Verifiers assess each child that is nominated for ORRS resourcing. The verifiers have experience and additional qualifications in special education in the early childhood, primary and secondary sectors of education and provide reports to the Ministry of Education regarding the eligibility of each child for ORRS resourcing. To ensure their impartiality when making independent decisions about eligibility, each verifier works from a separate location.

are known as Specialist Service Providers (SSP). There are 121 schools in New Zealand covered by this arrangement.

The Ministry allocation to schools in this study for all ORRS resources was valued at $11,072,732.[26]

Property

Property modifications are capital works that enable access to the physical facilities of a school for special needs students.

The Ministry allocation to the sample schools for this resource was $958,990.

Severe Behaviour Initiative (SBI)

This resource is specifically targeted at students with the most severe behaviour difficulties. Under this resource the Ministry sends people (specialist services and some paraprofessional support) into schools to provide assistance.

The monetary value reported for this service in the sample schools was $267,981.

Speech Language Initiative (Communication Initiative)

This initiative provides for speech-language therapists who work with students with severe communication needs who have speech (articulation) difficulties, fluency disorders, voice resonance disorders, language difficulties or significant language delay. The speech-language therapist may provide support to the student and advise families and teachers about communication programmes. The focus is on students in their first three years of school, although some older students may receive a service.

The approximate monetary value of this service in the sample, as provided by the Ministry, was valued at $194,682.

Supplementary Learning Support (SLS)

The purpose of this resource is to support those students who are not accessing ORRS funding but still require a range of support to assist learning. This support includes 0.1 of a FTTE and access to other services as required.

The monetary value of this resource for the sample schools was $353,800.

[26] It is important to note that this figure does not include all of the overheads and non-school-based work such as travel and preparation time. Rather it is based on is an estimated salary cost for additional staffing, teacher aide funding and specialist support as well as consumables funding over terms 1 and 2, 2007.

Summary of Ministry of Education Special Education Resourcing Streams

Table 4.6 provides a summary of the estimated monetised value for the 16 resource streams supplied in Terms 1 and 2, 2007 to the sample schools. The Ministry supplied school-managed resources to these schools to a total monetised value of $6,720,308 and tracked individual resources to a total value of $13,280,817. The amounts of the Operations Grant and the TFEA supplied to the schools in this study are also given for completeness, although they are not specifically dedicated to students with special educational needs and also serve other purposes.

Table 4.6: Summary of resources reported as supplied to the sample schools by the Ministry of Education in Terms 1 and 2, 2007.

Resource	Ministry Supplied ($)
School-Managed Resources	
Enhanced Programme Fund	806,495
Learning Support Fund	397,995
Resource Teachers: Learning and Behaviour	3,341,763
Special Education Grant	2,174,055
Sub-Total	**6,720,308**
Tracked Individual Resources	
Accident Compensation Corporation	3732
Assistive Technologies	116,296
School High Health Needs	281,544
Interim Response Fund	0
Moderate Support	31,060
Ongoing and Reviewable Resourcing Schemes	11,072,732
Property	958,990
Severe Behaviour Initiative	267,981
Speech Language Initiative	194,682
Supplementary Learning Support	353,800
Sub-Total	**13,280,817**
Total School-Managed and Tracked Individual Resources	**20,001,125**
Operations Grant	60 165 046
Targeted Fund for Educational Achievement	5,849,376

> Utilisation of resources as reported by schools

Once the resources are received by the schools, they are able, to varying degrees, to make decisions about how they are utilised. This section describes the way in which each resource is reported as being utilised within schools. Unless specifically noted otherwise, the numbers of students reported in the tables in this section are at the school level (i.e., related to the overall sample of 13,349 students).

Data for these resources are analysed in three ways.

1. The total number of times the resource is accessed by students from across the four categories. This could include multiple accesses by one student as the resources are spread across many services.
2. The reported use of the resources across a range of services by category of student.
3. The division of the total monetary value of the resource across services.

In the tables of reported use for each of these funds, different units of use are reported dependent on the nature of the resource. These are either: total hours across the two terms (teacher aides and specialist support[27]); full time teacher equivalents (FTTE) for teachers and special needs coordinators (SENCO); or a dollar value (for curriculum delivery, external programmes and activities, professional development, and other). Dashes have been used in these tables where there was no direct student access reported by schools, such as the SENCO activities and professional development.

When considering these data their limitations, as noted in the methodology, must be remembered. These are school self-report data. In addition, broadly determined monetary values have been ascribed to services which were not reported as dollar values. That there are discrepancies between what the Ministry reports providing and what the schools report using should not, therefore, be surprising. The extent and nature of these discrepancies is briefly discussed after this reporting of school utilisation.

School-Managed Resources

Enhanced Programme Fund (EPF)

A total of 44 schools (18.0% of the survey schools) reported utilising this resource. The estimated value, in terms of reported usage, was $583,568.

[27] Note that specialist support is a more generic term than is often used. In this instance it can refer to range of external specialist services such as a therapist or a specialist teacher.

The resource was accessed 1995 times by students across the four categories (Table 4.7). The largest group of students accessing this resource were from Category 4, accounting for 68.9% (n=1375) of the total number of times the resource was accessed. Category 3 students accounted for 21.7% (n=433) of the total accessed.

Table 4.7: Summary of estimated value for EPF and the number of times accessed in each category.

EPF	Estimated Value
Quantity	$583,568
	Number of times accessed
Category 1	63
Category 2	124
Category 3	433
Category 4	1375
TOTAL	1995

Table 4.8 summarises the reported use of this resource. A total of 4722 teacher aide hours were allocated to 1349 students. This equates to an average of 3.5 hours of teacher aide time per student over terms 1 and 2. Twelve FTTE were also provided by this resource across 162 students. In addition, resources for curriculum delivery[28] to the value of $71,198 were accessed by 421 students, at an average per student expenditure of almost $170. Specialist support was provided for a small number of students (n=9). For each of these nine students, specialists were used for an average of 29 hours over the two terms – effectively, almost one and half hours per week.

[28] Note that throughout this report curriculum delivery refers to programmes and/or resources created to support the delivery of the curriculum for students with special needs. That is it refers to the materials related to curriculum delivery.

Table 4.8: Reported use of EPF by service and category of student.

EPF	Teacher Aide	Specialist Support	Teacher	Resources for Delivering Curriculum	External Programmes & Activities	SENCO	PD for Teachers	PD for TA	Other
	Hours T1 and 2	*Hours T1 and 2*	*FTTE*	*$ value*	*$ value*	*FTTE*	*$ value*	*$ value*	$ value
Quantity	4722	264	12	71,198	750	2	13,080	2240	13,632
Category 1	38	1	1	10	3	-	-	-	10
Category 2	74	4	1	24	6	-	-	-	15
Category 3	245	4	64	103	0	-	-	-	17
Category 4	992	0	96	284	0	-	-	-	3
N students	1349	9	162	421	9	-	-	-	45
Mean per student	3.5	29.3	0.07	169.1	83.3	-	-	-	302.9

Over half of the monetised value of the EPF was used to provide full time teachers (59.6%), followed by resources for delivering curriculum (12.2%) and teacher aides (11.3%). Almost ten percent of the total monetary value was used to fund SENCO activities, although no students were reported as directly accessing this (Figure 4.3).

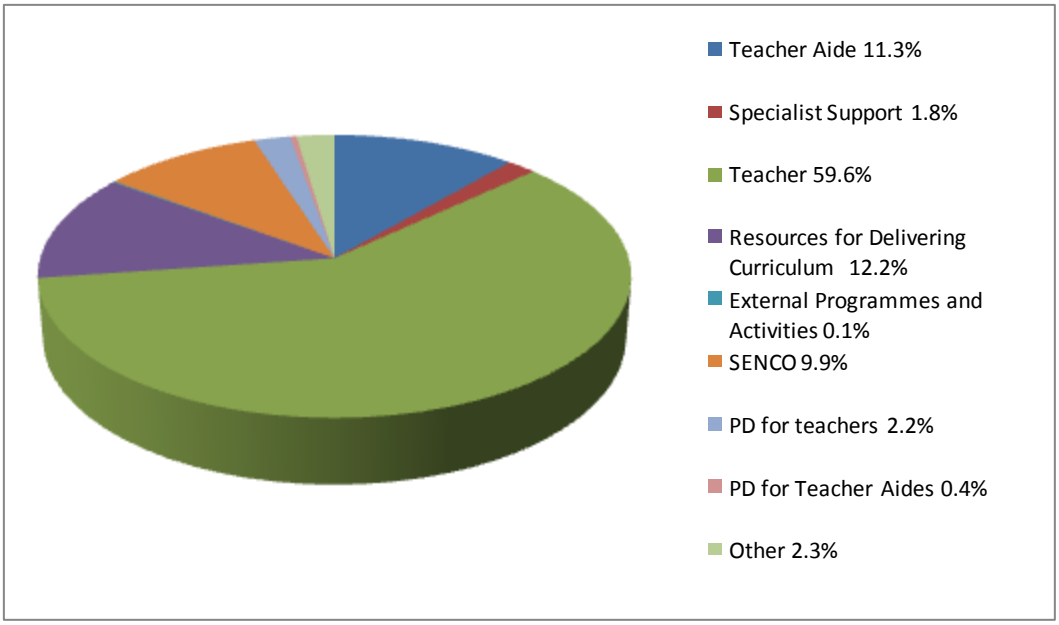


Figure 4.3: Reported use of EPF.

Learning Support Fund (LSF)

Schools reported that they utilised an estimated $319,190 from this resource (Table 4.9). The resource was accessed 1955 times by students. Category 4 students constitute the largest proportion of those who were reported as accessing the LSF (1495 times, 76.5%). Students in Category 1 (2.8%), Category 2 (7.1%) and Category 3 (13.6%) accessed the remaining one-quarter of the services from this fund.

Table 4.9: Summary of estimated value for LSF and number of times accessed in each category.

LSF	Estimated Value
Quantity	$319,190
	Number of Times Accessed
Category 1	55
Category 2	139
Category 3	266
Category 4	1495
TOTAL	1955

1281 students were provided with a total of 12,744 hours of teacher aide time (Table 4.10), with each student averaging almost ten hours spread over the two terms, or approximately half an hour per week of teacher aide assistance. A small number of schools provided additional teacher time for 46 of their students (at an average of about one hour of teacher time per week per student). A further 9.9% of the value of this resource was used on curriculum delivery with 408 of the students. On average, each of the 126 students for whom specialist support was obtained received almost five hours of support.

Table 4.10: Reported use of LSF by service and category of student.

LSF	Teacher Aide	Specialist Support	Teacher	Resources for Delivering Curriculum	External Programmes & Activities	SENCO	PD for teachers	PD for TA	Other
	Hours T1 & 2	*Hours T1 & 2*	*FTTE*	*$ value*	*$ value*	*FTTE*	*$ value*	*$ value*	$ value
Quantity	1 2,744	615	2.281	31,715	4640	-	77	1289	12,304
Category 1	25	0	2	22	5	-	-	-	1
Category 2	83	8	11	32	4	-	-	-	1
Category 3	119	5	0	125	1	-	-	-	16
Category 4	1054	113	33	229	59	-	-	-	7
N students	1281	126	46	408	69	-	-	-	25
Mean per student	10.0	4.9	0.05	77.7	67.3	-	-	-	492.2

Over one half (55.9%) of the monetary value of this resource was used to provide teacher aide time (Figure 4.4) A further fifth of the value of the fund was used to provide additional teacher time, and smaller proportions were used for curriculum delivery (9.9%) and specialist support (7.7%).

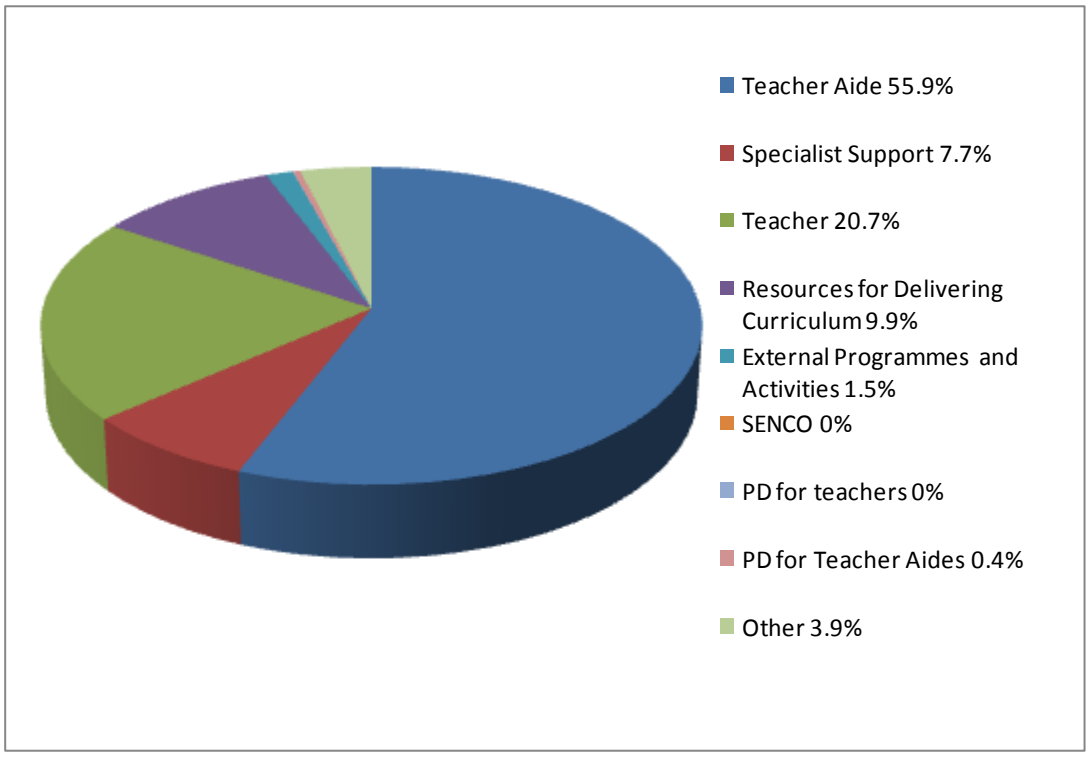


Figure 4.4: Reported use of LSF.

Resource Teachers, Learning and Behaviour (RTLB)

RTLB staffing is managed through a cluster arrangement. A fundholder school receives cluster funding from the Ministry of Education on behalf of cluster schools. Cluster resources are the sum of the allocations made for each of the cluster schools based on the schools' roll numbers and decile ratings. The distribution of resources to the cluster schools is determined by the cluster management committee.

At the time of the study, RTLB clusters could decide whether to allocate RTLB service to schools on an 'as needs' basis, or according to a plan which allocated a certain number of hours of service to each school. Current policy now requires clusters to prioritise RTLB service to schools on a needs-based system.

To gain an understanding of how these cluster arrangements worked, schools were asked two additional questions about this resource. The first was how much resourcing schools expected to receive, and the second was what they actually received. Responses to these questions are discussed at the beginning of this section prior to the standard discussion on how schools report utilising this resource for students with special needs.

Where schools reported an expected allocation of hours, this ranged from as little as a quarter of an hour to as many as 800 hours over the first two terms of 2007. Of the schools that reported an expected allocation of hours (n=107), the mean number of hours was 65.1

(SD=115.9)[29]. Ninety-five percent of these schools expected to receive between 0.5 and 350 hours of RTLB time. Table 4.11 shows the range of expected hours across these schools. A further 112 schools reported that the RTLB service was determined by ongoing need and that they had no expectations of allocated time as a result. Twenty six schools did not provide any data in response to this question.

Table 4.11: Amount of allocated RTLB service in Terms 1 and 2 (n=107).

Number of hours	Number of schools	Percentage of schools
Less than 10	40	37.4
10 to 19	18	16.8
20 to 50	18	16.8
50 to 99	12	11.2
100 to 200	6	5.6
More than 200	13	12.1

Schools were also asked to report any shortfall in hours actually received compared with what they had expected. Of the 107 schools reporting on expected allocation, the majority (n=86; 80.4%) reported no shortfall. Of the remaining 21 schools, ten reported a shortfall of less than ten hours.

The estimated monetary value of the reported utilisation of the RTLB resourcing stream was almost $850,000 (Table 4.12). Schools reported that this resource was accessed 1902 times. The RTLB resource was used primarily with Category 4 students who comprised almost eighty percent of the students accessing this resource. Students classified in Category 2 made up the next most numerous group (11.4%), closely followed by Category 3 (7.8%), then a small number of Category 1 students.

[29] The very large standard deviation is accounted for by an extreme outlier of 800 planned allocation hours reported by a single school.

Table 4.12: Summary of estimated value for RTLB and the number of times accessed in each category.

Resource Teachers: Behaviour and Learning	Estimated Value
Quantity	$849 140
	Number of Time Accessed
Category 1	29
Category 2	216
Category 3	149
Category 4	1508
TOTAL	1902

RTLBs were reported as spending 12,847 hours working in ways that benefitted 1245 different students (Table 4.13). This could include support for individual students, working with groups of students or providing support for teachers. Most of this time was reported as being spent on Category 4 students (approximately 10,000 hours). Support from the RTLB equated to, on average, about 10 hours of time over the two terms, or approximately half an hour per week.

Teacher aide time (almost 5000 hours) was reported as being provided for a smaller number of students (n=323), with each child receiving about 15 hours of teacher aide time, or 45 minutes per week. There was a large investment in resources for delivering curriculum (total value $152,208), which was accessed predominantly by Category 4 students (n=158). Smaller amounts of the RTLB resource were reported as being used for specialist support, additional teacher time, SENCO, and professional development for both teachers and, to a lesser extent, teacher aides. In each case, Category 4 students drew the most from these services.

It should be noted that RTLB do not have generally have access to funds to provide teacher aides. However they can, and do, access the LSF to supply this support and it is likely there has been some confusion here with LSF resourcing. They do have some funding for resource development.

Table 4.13: Reported use of RTLB by service and category of student[30].

RTLB	Working with Students	Teacher Aide	Specialist Support	Teacher	Resources for Delivering Curriculum	External Programmes & Activities	SENCO	PD for teachers	PD for TA	Other
	Hours T1 and 2	*Hours T1 and 2*	*Hours T1 and 2*	*FTTE*	*$ value*	*$ value*	*FTTE*	*$ value*	*$ value*	*$ value*
Quantity	12846.5	4960	80	3	152208	0	0.37	8877	2498	1327
Category 1	10	9	0	6	4	0	-	-	-	0
Category 2	152	41	0	7	15	0	-	-	-	1
Category 3	114	23	0	5	5	0	-	-	-	2
Category 4	969	250	8	76	158	3	-	-	-	44
N students	1245	323	8	94	182	3	-	-	-	47
Mean per student	10.3	15.4	10	0.03	836.3	0	-	-	-	28.2

The data that schools reported indicate that the majority of the value of this resource (Figure 4.5) involves RTLBs working with students referred to them by the school (60.5% of the services provided on a monetary basis). We acknowledge that Ministry of Education personnel have queried these findings as not being the correct use of this resource. However, it should be noted that schools were asked to match actual students with each of the categories of support in the table.

This idea of working with students is likely to have been interpreted in a variety of ways by informants. For some, it will have included working with a teacher aide or an individual or group of teachers to support their work with regard to particular students. For others, it could be related to any work that was tagged to a student in such a way that the school could actually identify the hours spent. It is also possible that the school believes that the RTLB has worked face to face with students.

In addition, the resource was reported as providing resources for curriculum delivery (17.9% of the value of the resource), teacher aide hours (8.2%) and additional teacher staffing (10.2%)

[30] As reported by the schools and their understanding of the services provided by RTLBs

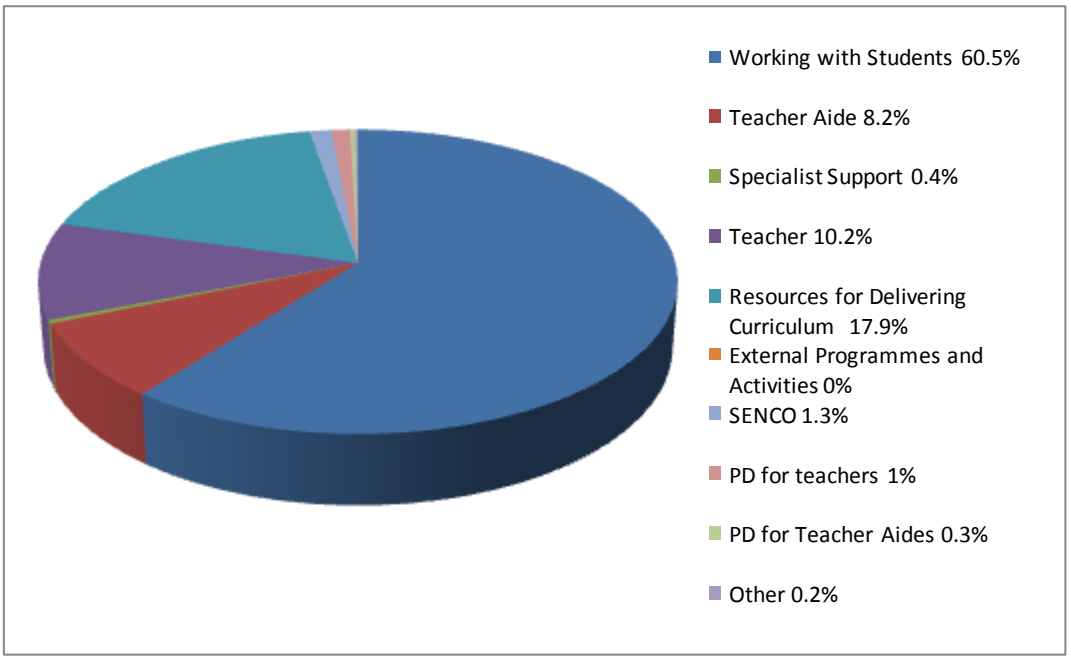


Figure 4.5: Reported use of RTLB.

Special Education Grant (SEG).

All schools receive the Special Education Grant as part of the quarterly instalments of the Operations Grant. However, 40 schools did not specifically report using this grant. This may not be a case of 'not using' but rather the contact person not being able to identify the specific expenditure when funding may have been pooled with the origin and composition being blurred.

One of these schools was the Correspondence School which has a unique funding and resourcing formula and half of the special schools were included in this grouping. Three-quarters of the schools (n=30) were located in Main Urban areas and almost half of them (n=18, 46.32%) were large schools. Year 7-13 schools were over represented in this group by a ratio of 2:1 (7.5% compared with 3.9% in the population of New Zealand schools). Due to the size and complexity of this school type some field workers spent up to two days with the key contacts endeavouring to collect information and to confirm its accuracy. However, there was a limit to the extent that the field workers could question the data provided and retain participation.

The 205 schools that reported using the SEG fund indicated that it was accessed 9105 times by students. Table 4.14 also shows that these 205 schools reported a total expenditure from their SEG funds of $2.7 million.

Table 4.14: Summary of estimated value for SEG and the number of times accessed in each category.

SEG	Estimated Value
Quantity	$2,720,181
	Number of Times Accessed
Category 1	284
Category 2	815
Category 3	1165
Category 4	6841
TOTAL	9105

Category 4 students accessed the resource the greatest number of times (n=6841, 75.1%). Category 3 students accessed the resource 1165 times (12.8%) and Category 2 students 815 times (8.9%). A smaller proportion of accesses were by Category 1 students (284 times, 3.1%).

Table 4.15 summarises the way in which the resource was delivered to students in the four categories. Teacher aide hours (118,414) were provided to over 6600 students across all four categories, at a little over 17 hours per student for the two terms (or approximately 50 minutes per week). The 205 schools provided an additional 25 FTTE overall, and this was accessed by 428 students who received an average of about an hour and half per week. Almost 600 hours of specialist support were accessed for 254 students, who received support for approximately two and a half hours each. A total of $169,143 was used for curriculum delivery for over 1500 students.

Table 4.15: Reported use of SEG by service and category of student.

SEG	Teacher Aide	Specialist Support	Teacher	Resources for Delivering Curriculum	External Programmes & Activities	SENCO	PD for Teachers	PD for TA	Other
	Hours T1 and 2	*Hours T1 and 2*	*FTTE*	*$ value*	*$ value*	*FTTE*	*$ value*	*$ value*	$ value
Quantity	118,414	591	25	169,143	5060	2	26,745	13,581	41,216
Category 1	157	22	12	57	14	-	-	-	22
Category 2	568	17	11	154	20	-	-	-	41
Category 3	862	32	84	147	21	-	-	-	19
Category 4	5074	183	321	1171	17	-	-	-	75
N students	6661	254	428	1529	72	-	-	-	157
Mean per student	17.8	2.3	0.06	110.6	70.3	-	-	-	262.5

On monetised values, the major proportion of the SEG funds was used to employ teacher aides (60.9% of the monetised value), and additional teachers (26.7%) (Figure 4.6).

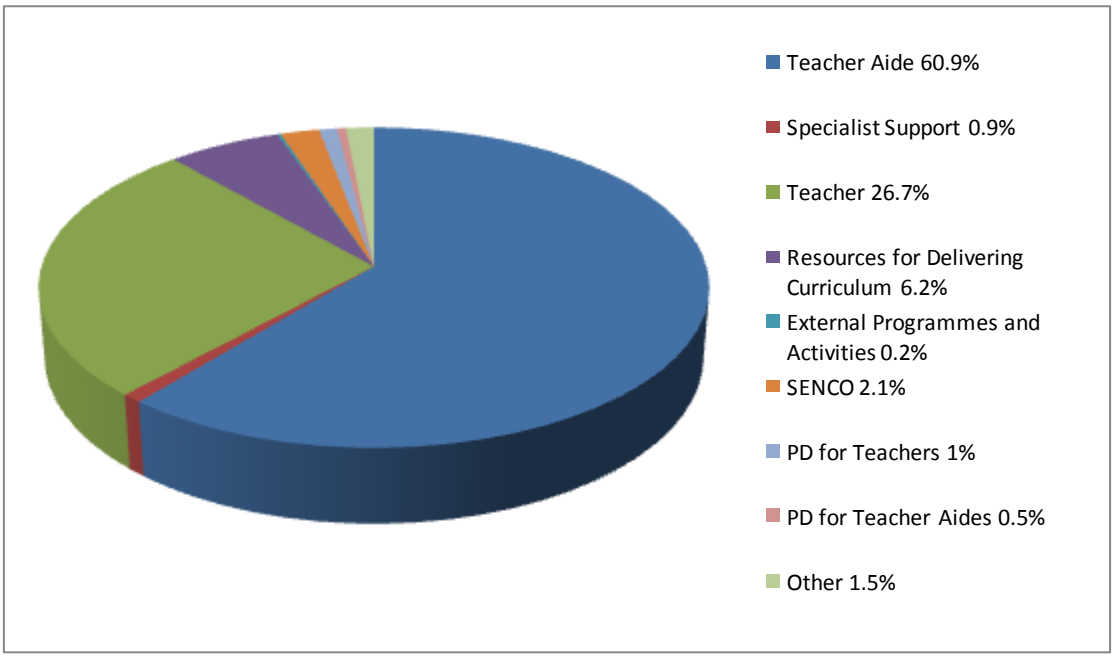


Figure 4.6: Reported use of SEG.

Target Funding for Educational Achievement (TFEA)

A total of 104 schools reported specifically using TFEA funds for students with special needs. That the other schools did not do so maybe a result of the inclusion of TFEA with their Operations Grant.

The total value of the services that these schools reported that they purchased with the TFEA resource was approximately $1.6million (Table 4.16). The resource was predominantly accessed by Category 4 students (n= 3680 times, 68.8%). The other three categories accessed it a similar number of times: Category 3 (n= 657, 12.3%); Category 1 (n= 535, 10.0%), and Category 2 (n= 475, 8.9%).

Table 4.16: Summary of estimated value for TFEA and the number of times accessed in each category.

TFEA	Estimated Value
Quantity	$1,631,944
	Number of Times Accessed
Category 1	535
Category 2	475
Category 3	657
Category 4	3680
TOTAL	5347

A total of over 52,000 teacher aide hours were provided to 3214 students, the majority of whom (74.2%) are in Category 4 (Table 4.17). Each student received an average of a little over 16 hours across the two terms, or an average of about three-quarters of an hour per week. Curriculum delivery, to the value of over a quarter of a million dollars, was provided to

over 900 students at an average value of $280.55 each, with about a half of these students in Category 4 (51.1%). Category 1 students also made up a substantial proportion (just under 30%) of the users of this service. Teacher time equivalent to 14 additional teachers was made possible through this resource to provide about half an hour per week for the 814 students who accessed this. Specialist support was provided for a few students (n=14), most of whom were in Category 3.

Table 4.17: Reported use of TFEA by service and category of student.

TFEA	Teacher Aide	Specialist Support	Teacher	Resources for Delivering Curriculum	External Programmes & Activities	SENCO	PD for teachers	PD for TA	Other
	Hours T1 and 2	*Hours T1 and 2*	*FTTE*	*$ value*	*$ value*	*FTTE*	*$ value*	*$ value*	*$ value*
Quantity	52,478	2303	14	255,304	21,900	1	50,361	3086	39,481
Category 1	65	0	7	263	2	-	-	-	100
Category 2	361	1	32	62	16	-	-	-	3
Category 3	402	10	102	120	20	-	-	-	3
Category 4	2386	3	673	465	127	-	-	-	26
N students	3214	14	814	910	165	-	-	-	132
Mean per student	16.3	164.5	0.02	280.6	132.7	-	-	-	299.1

On a monetised basis, most of the TFEA resource is used for teacher aides (45.0%), additional teacher staffing (24.9%), and curriculum delivery (15.6%). The total proportion utilised directly in the classroom amounts to over 85% of reported expenditure (Figure 4.7). Small amounts are used for external programmes and activities, professional development, SENCO, and for other unspecified purposes.

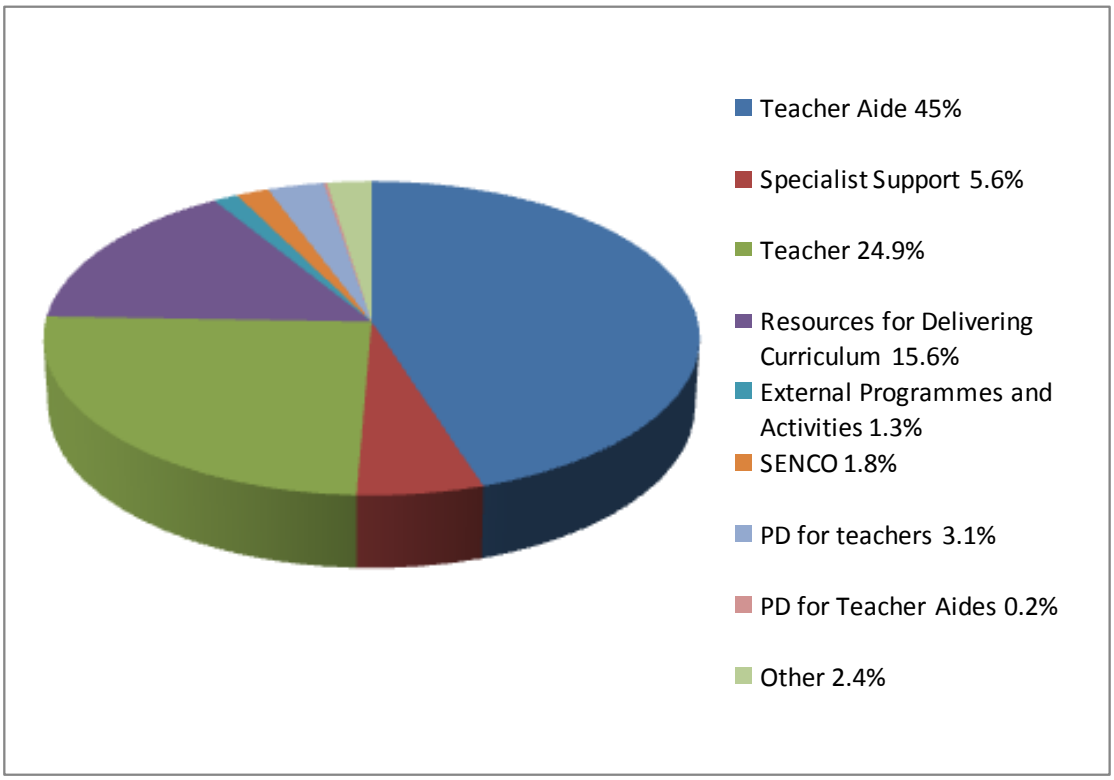


Figure 4.7: Reported use of TFEA.

Operations Grant

Schools were asked to provide information about the extent to which they utilised the Operations Grant for special needs students, *excluding* the allocation of SEG and TFEA that are included in the Operations Grant entitlement and instalment notices they receive each quarter.

Data were obtained from 182 schools (74.3%) regarding use of this resource for special needs. Given the nature of the Operations Grant and the fact that TFEA and SEG are incorporated in the allocations of this grant it may be that schools are considering all special needs use as coming from SEG and have reported any use there. It should be noted that the Operations Grant is provided based on the total school roll and as such a proportion of it is for the use of students with special needs.

Of the 182 schools reporting usage, the estimated amount utilised for special needs ranged from a low of $50 (less than half a percent of the total Operations Grant for that school) to a high of $40,000 (38.0% of the total grant). Table 4.17 shows that the total estimated amount of special needs services purchased from this resource was nearly $5.4 million.

This resource was reportedly accessed 9291 times to support students from across the four categories (Table 4.18). The resource was accessed over 6000 times by Category 4 students (65.8% of all times). It was also accessed to a lesser extent by Category 3 students

(n=1201, 12.9%), Category 1 students (n= 1101, 11.9%) and Category 2 students (n=875, 9.4%).

Table 4.18: Summary of estimated value for Operations Grant and the number of times accessed in each category.

Operations Grant	Estimated Value
Quantity	$5 391 595
	Number of Times Accessed
Category 1	1101
Category 2	875
Category 3	1201
Category 4	6114
TOTAL	9291

The Operations Grant was reported as providing for a wide range of services for students with special needs (Table 4.19). This included $116,510 worth of professional development for teachers; 89,914 hours of teacher aide time equating to 19 hours per student across the first two terms of 2007 and $880,255 worth of curriculum delivery. A total of 89.5 FTTE were also funded through this resource and 1299 hours of specialist support. In addition, schools provided professional development for teachers and teacher aides as well as SENCO time. None of these latter services were attributed to individual students.

Table 4.19: Reported use of Operations Grant by service and category of student.

OPS	Teacher Aide	Specialist Support	Teacher	Resources for Delivering Curriculum	External Programmes & Activities	SENCO	PD for teachers	PD for Teacher Aides	Other
	Hours T1 and 2	*Hours T1 and 2*	*FTTE*	*$ value*	*$ value*	*FTTE*	*$ value*	*$ value*	$ value
Quantity	89914	1299	89.5	880255	3505	8.696	116510	40620	191788.9
Category 1	213	8	136	427	58	0	0	0	1369
Category 2	474	15	120	230	1	0	0	0	28
Category 3	645	9	198	292	0	0	0	0	55
Category 4	3393	117	930	1424	0	0	0	0	244
N students	4725	149	1384	2373	59	0	0	0	1696
Mean per student	19.0	8.7	0.06	371.0	59.4	-	-	-	113.1

Figure 4.8 shows that where schools did specifically report using the Operations Grant for their students with special needs, they did so primarily to purchase additional teacher time (48.1% of the Operations Grant money spent), Teacher aide hours (23.3%) and resources for delivering curriculum (16.3%) also accounted for much of the value of this resource as utilised for students with special needs.

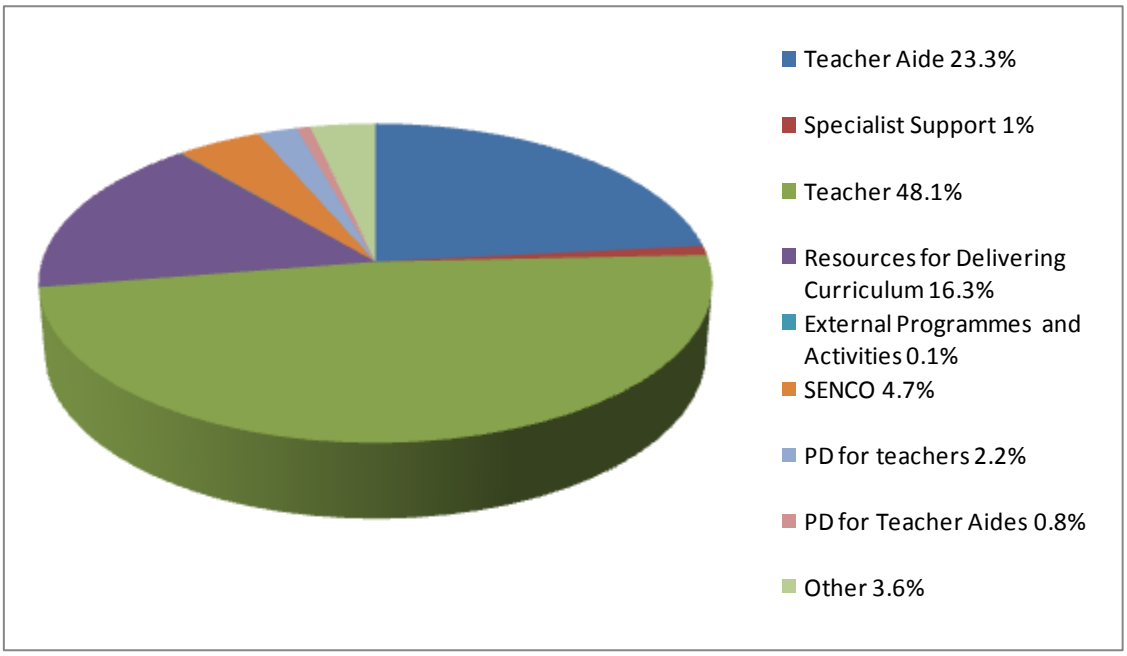


Figure 4.8: Reported use of Operations Grant.

Tracked Individual Resources

Assistive Technology (AT)

Schools reported that this resource was accessed 55 times for a total monetary value of $134,328 (Table 4.20). This resource was accessed by Category 1 (42 times, 76.4%) and Category 2 (13 times, 23.6%) students. It was not accessed by Category 3 or 4 students.

Table 4.20: Summary of estimated value for AT and the number of times accessed in each category.

AT	Estimated Value
Quantity	$134,328
	Number of Times Accessed
Category 1	42
Category 2	13
Category 3	0
Category 4	0
TOTAL	55

Table 4.21 shows the largest specified expenditure was on computers ($37,727). These were provided for 10 students from Category 1. Audio/transmitting equipment was provided for nine students, six of whom were from Category 2. This was an average cost of $1533 per student. Furniture was also provided for a total of 4 students at an average per student cost of $1899.

Table 4.21: Reported use of AT by service and category of student.

AT	Computers	Software	Computer Accessories	Audio/ Transmitting Equipment	Furniture	Vision Equipment	Un specified	PD for TA
	$ value	*$ value*	*$ value*	*$ value*	*$ value*	*$ value*	*$ value*	*$ value*
Quantity	37,727	2756	1402	13,800	7598	250	68,246	2549
Category 1	10	5	7	3	4	0	13	-
Category 2	0	1	0	6	0	1	5	-
Category 3	0	0	0	0	0	0	0	-
Category 4	0	0	0	0	0	0	0	-
N students	10	6	7	9	4	1	18	-
Mean per student	3772.7	459.4	200.3	1533.4	1899.5	250.0	3791.5	-

Figure 4.9 shows that most of the expenditure ($68,246 or 50.8% of the value of the AT resource) was unspecified in the reports received from schools. Computers (28.1%) were the most common specified purchase, with audio/transmitting equipment (10.3%) being the only other specified purchase to exceed ten percent of the total expenditure.

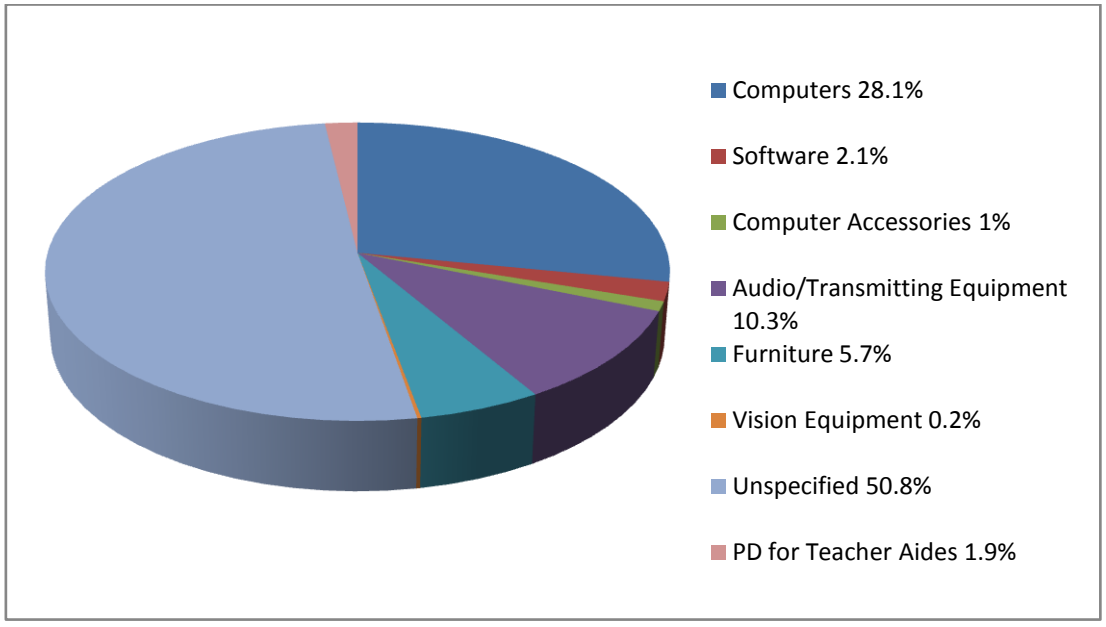


Figure 4.9: Reported use of Assistive Technology.

School High Health Needs

Thirty-one schools reported accessing this resource for their students. It was accessed fifty times across these schools (Table 4.22). Schools reported that they used this resource mainly with Category 1 (17 times, 34.0%) and Category 3 (18 times, 36.0%) students. The estimated monetary value was $159,552.

Table 4.22: Summary of estimated value for School High Health Needs and the number of times accessed in each category.

School High Health	Estimated Value
Quantity	$159,552
	Number of Times Accessed
Category 1	17
Category 2	9
Category 3	18
Category 4	6
TOTAL	50

Table 4.23 shows this resource was reported as being used to provide a total of 1675 hours of specialist support to 18 students and 7038 hours of Teacher Aide time for 32 students[31].

Table 4.23: Reported use of School High Health Needs by service and category of student.

School High Health	Specialist Support	Teacher Aide
	Hrs T1 and 2	*Hrs T1 and 2*
Quantity	1675	7038
Category 1	4	13
Category 2	3	6
Category 3	6	12
Category 4	5	1
N students	18	32
Mean per student	93.1	219.9

A total of 61.6% of the monetised value of the fund was used to access specialist support, and the remaining funds were reported as being used for teacher aide hours[32] (Figure 4.10).

[31] The Specialist Support hours shown here include 120 hours for an Itinerant Teacher of the Deaf in one school, and the Teacher Aide hours include 390 hours for Education Support Workers in two schools.

[32] This resource is intended to provide paraprofessional (teacher aide) support only. The result here is due either to the inclusion of specialist support in the data collection tool or to genuine confusion at a school level.

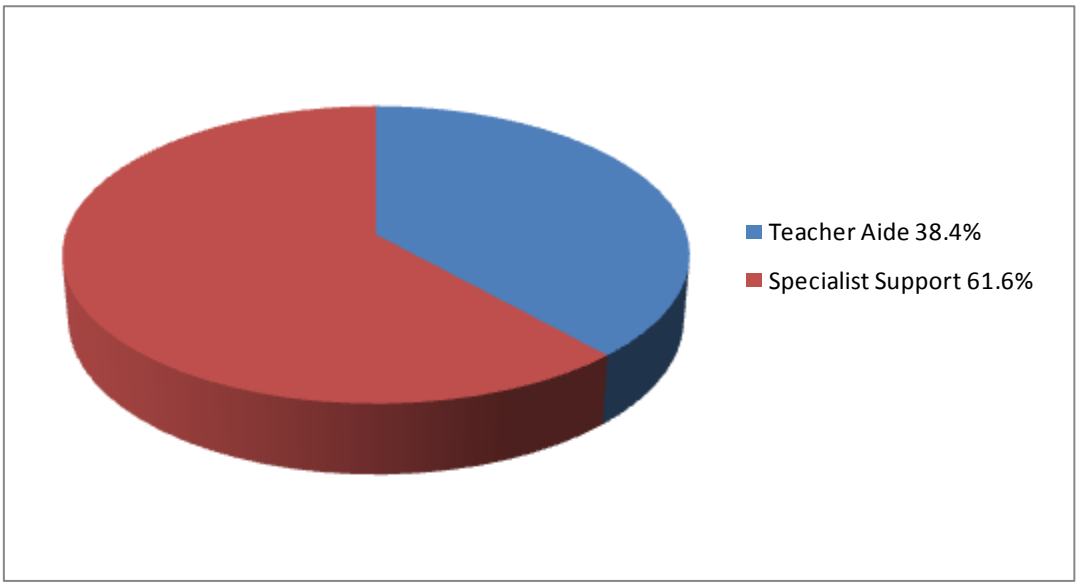


Figure 4.10: Reported use of School High Health.

Moderate Support

Schools reported that they utilised Moderate Support resources to an estimated value of $25,960 which was accessed 221 times by students (Table 4.24). About three-quarters of the students accessing this resource were considered to be in Category 1.

Table 4.24: Summary of estimated value for Moderate Support and the number of times accessed in each category.

Moderate Support	Estimated Value
Quantity	$25,960
	Number of Times Accessed
Category 1	162
Category 2	38
Category 3	11
Category 4	10
TOTAL	221

The services reported as provided by this resource were physiotherapy, occupational therapy, vision specialist support and hearing specialist support. A total of 187 hours of physiotherapy were provided to 62 students (Table 4.25), and 206 hours of occupational therapy was provided to 152 students. The majority in both instances were in Category 1. Vision specialist support was provided for 128 hours to six students, and hearing specialist support for 128 hours to seven students.

Table 4.25: Reported use of Moderate Support by service and category of student.

Moderate Support	Physiotherapy	Occupational Therapy	Vision Specialist Support	Hearing Specialist Support
	Hrs T1 and 2	*Hrs T1 and 2*	*Hrs T1 and 2*	*Hrs T1 and 2*
Quantity	147	250	128	128
Category 1	32	129	1	-
Category 2	16	20	4	4
Category 3	3	5	-	3
Category 4	8	2	-	-
N students	59	156	5	8 [33]
Mean per student	2.5	1.6	25.6	16.0

Approximately one third (38.3%) of the total monetary value was used for occupational therapy, nearly a quarter (22.5%) for physiotherapy, and almost one fifth (19.6%) for each of vision specialist support and hearing specialist support (Figure 4.11).

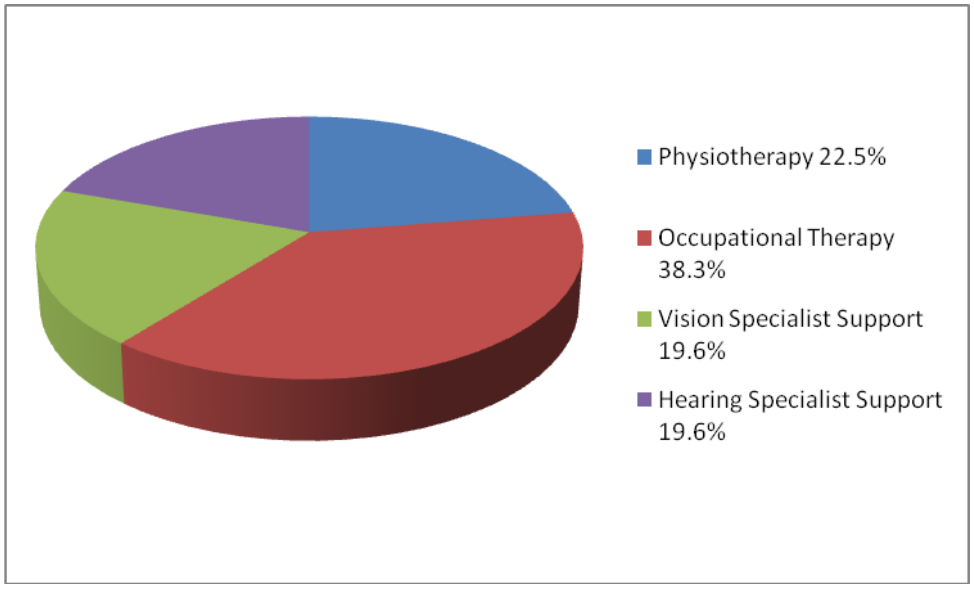


Figure 4.11: Reported use of Moderate Support resource.

Ongoing and Reviewable Resourcing Schemes (ORRS)

We received data from 235 schools regarding ORRS resourcing[34]. This was reported as being accessed 4016 times by students with a total monetary value of $6,410,153 (Table 4.26). Category 1 students were reported as accessing the resource most often (3381 times,

[33] There was no Category information for one student.

[34] The 10 schools which did not provide data on ORRS resourcing also did not have ORRS students according to the Ministry of Education data.

84.2%). The next largest group accessing ORRS was from Category 2 (531 times, 13.2%). Category 3 and 4 students were also reported as accessing it 104 times (2.6%).

Table 4.26: Summary of estimated value for ORRS and the number of times accessed in each category.

ORRS	Estimated Value
Quantity	$6,410,153
	Number of Time Accessed
Category 1	3381
Category 2	531
Category 3	36
Category 4	68
TOTAL	4016

ORRS was reported as providing for 174,497 hours of teacher aide time equating to an average per student of 169.7 hours over Terms 1 and 2 of 2007 (Table 4.27). It also provided for 10194 hours of specialist support accessed by 536 students. A total of just over 101 FTTE were also reported. These were utilised by 836 students. Resources for delivering curriculum accounted for just over $190,000 while $220,850 worth of services was reported as 'Other'[35].

Table 4.27: Reported use of ORRS by service and category of student.

ORRS	Teacher Aide	Specialist Support	Teacher	Resources for Delivering Curriculum	External Programmes & Activities	SENCO	PD for teachers	PD for TA	Other
	Hrs T1 and 2	*Hrs T1 and 2*	*FTTE*	*$ value*	*$ value*	*FTTE*	*$ value*	*$ value*	*$ value*
Quantity	174,497	10,194	101.88	190,066	32,223	4.9	8930	10,746	220,850
Category 1	830	493	704	523	114	5	-	-	325
Category 2	173	40	125	101	54	4	-	-	17
Category 3	10	3	4	8	0	0	-	-	7
Category 4	15	0	3	37	0	0	-	-	13
N students	1028	536	836	669	168	9	-	-	362
Mean per student	169.7	19.0	0.1	284.1	191.8	0.5	-	-	610.1

On a monetised basis, teacher time comprises almost one half (46.1%) of the total value of these resources, and teacher aide hours 38.1% (Figure 4.12). Specialist support comprises 6.4% of the total estimated value of these resources[36]. All other reported uses of the

[35] The category of "Other" covered a wide range of additional support provided to these students. It included, for example, infrastructural developments, mileage allowances for teacher aides who may have transported students to additional activities and in some instances additional courses the students enrolled for.

[36] Again note that, as with other resources, this includes actual "delivery" hours in the school only and not the associated costs of that delivery.

resources available under these schemes amount to less than ten percent of the total estimated resource value.

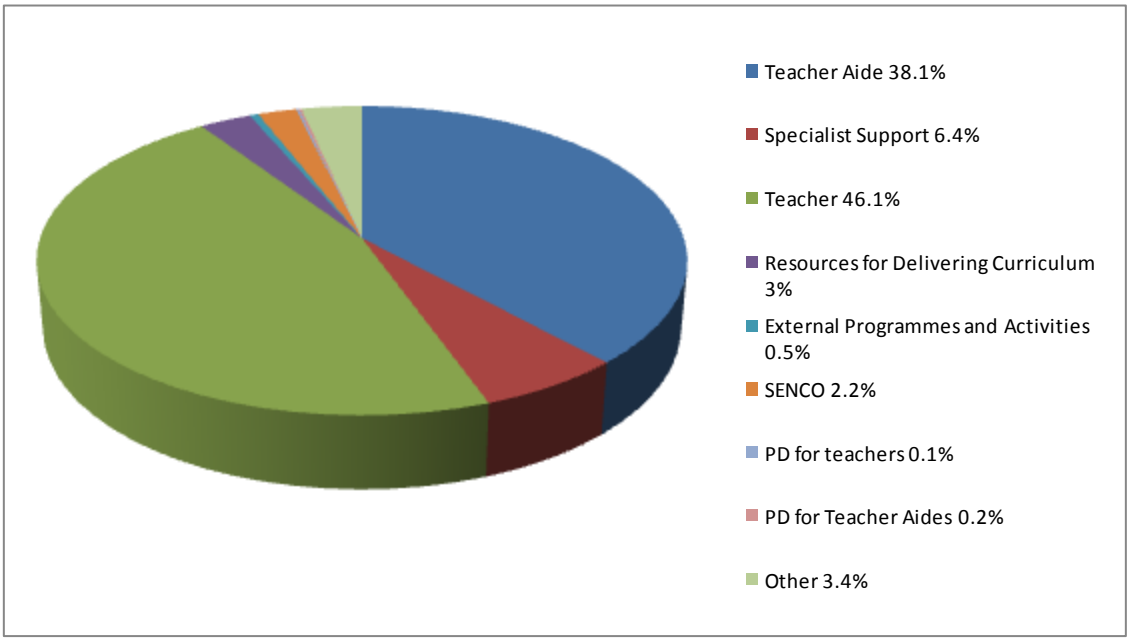


Figure 4.12: Reported use of ORRS.

Property

A limited number of schools (n=22) reported utilising this resource to provide property modifications to accommodate the special needs of their students. Table 4.28 provides a summary of the reported use of this fund by schools. The total estimated monetary value was $1,922,790. The resource was reported as being accessed 330 times, predominantly by Category 4 students (205 times, 62.1%).

Table 4.28: Summary of estimated value for property and the number of students in each category.

Property	Estimated Value
Quantity	$1,922,790
	Number of Times Accessed
Category 1	110
Category 2	6
Category 3	9
Category 4	205
TOTAL	330

Where a modification provided for the needs of one (or a few) student(s) (e.g., a covered walkway or ramp), some schools reported that a large number of students also used this facility. This is likely to account for the relatively large number of students shown in Category 4 (Table 4.29).

Table 4.29: Reported use of Property by service and category of student.

Property	Ramps	Hand rails	Fencing	Automatic Doors	Teacher Aide Space	Covered Walkways	Swimming Pool	Inside School	Un-specified	Other
	$ value	*$ value*	*$ value*	*$ value*	*$ value*	*$ value*	*$ value*	*$ value*	*$ value*	*$ value*
Qty	106891	24120	42000	30410	20000	276000	70000	60000	1221298	2071
Category 1	3	2	1	2	3	0	0	0	44	1
Category 2	0	1	0	0	0	0	0	0	5	0
Category 3	0	0	0	0	0	0	0	0	9	0
Category 4	0	0	0	0	25	0	0	0	180	0
N students	3	3	1	2	28	34	15	5	238	1
Mean per student	35630.3	8040	42000	15205	714.3	8117.7	4666.7	12000	5131.5	2071

The way in which two-thirds of the funds were spent was unspecified in the reports from schools (Figure 4.13). Where a property modification was specified, covered walkways (14.9%) took most of the funding.

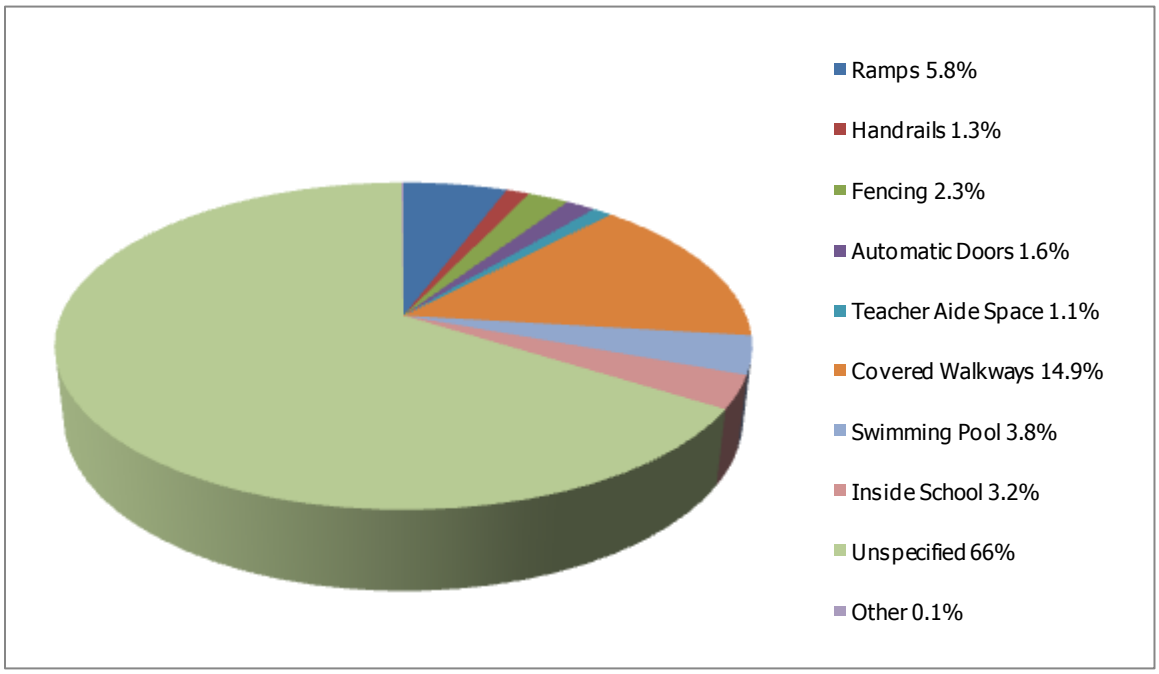


Figure 4.13: Reported use of Property.

Severe Behaviour Initiative

This resource was reported as being accessed 114 times by students for a total estimated value of $257, 878 (Table 4.30). Category 2 students accessed it 31 times (27.2%) and Category 3 students accessed it 68 times (59.6%).

Table 4.30: Summary of estimated value for SBI and the number of students in each category.

Severe Behaviour Initiative	Estimated Value
Quantity	$257,878
	Number of Times Accessed
Category 1	9
Category 2	31
Category 3	68
Category 4	6
TOTAL	114

This resource provided 16,239 hours of Teacher Aide time for 95 students over Terms 1 and 2 (Table 4.31). It also provided 610 Specialist Support hours for 15 students. Curriculum delivery and unspecified 'other' accounted for the rest of the resource for one and three students respectively.

Table 4.31: Reported use of Severe Behaviour Initiative by service and category of student.

SBI	Teacher Aide	Specialist Support	Resources for delivering curriculum	Other
	Hrs T1 and 2	*Hrs T1 and 2*	*$ value*	*$ value*
Quantity	16239	610	3535	2597
Category 1	7	2	0	0
Category 2	25	5	0	1
Category 3	59	8	1	0
Category 4	4	0	0	2
N students	95	15	1	3
Mean per student	170.9	40.7	3535.0	865.7

In terms of monetised value, over 88% of this resource was spent on Teacher Aides with close to 10% being spent on Specialist Support (Figure 4.14).

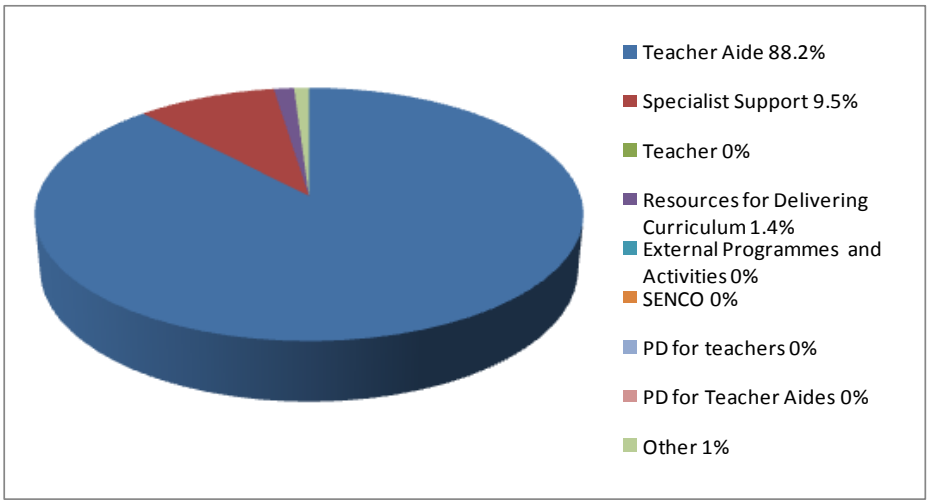


Figure 4.14: Reported use of Severe Behaviour Initiative funds.

Speech Language Initiative (Communication Initiative)

The total estimated value of this resource was $51,320 and it was accessed 174 times (Table 4.32).

All of the resource was used to purchase specialist support (1283 hours) at an average of 7.4 hours per student. Category 3 students accessed it 71 times (40.8%) and Category 4 students accessed it 62 times (35.6%). The remaining 23.6% of times it was accessed by Category 1 students (14 times) and Category 2 students (27 times).

Table 4.32: Summary of estimated value for Speech Language Initiative and the number of students in each category.

Speech Language Initiative	Estimated Value
Quantity	$51,320
	Number of Times Accessed
Category 1	14
Category 2	27
Category 3	71
Category 4	62
TOTAL	174

Supplementary Learning Support (SLS)

From the school reported data, the estimated value of this resource was almost $131,000 (Table 4.33). The resource was accessed 249 times predominantly by Category 1 students (101 times, 40.6%) and Category 2 students (80 times, 32.1%).

Table 4.33: Summary of estimated value for SLS and the number of students in each category.

Supplementary Learning Support	Estimated Value
Quantity	$130 750
	Number of Times Accessed
Category 1	101
Category 2	80
Category 3	56
Category 4	12
TOTAL	249

All of the SLS resources were used to provide 3300 hours of specialist support[37] equating to about 13.3 hours per student over Terms 1 and 2 of 2007.

[37] In the survey no distinction was made between different types of specialist support. For SLS this would have been specialist teacher time.

Other Ministry Resources

To ensure that all possible usage of resources provided by the Ministry were captured, schools were asked to estimate the services that were provided from unspecified Ministry funds[38].

The mean estimated value of the resources provided under this category (Table 4.34) was $947,342. This was accessed 2064 times mainly by Category 4 students (1314 times, 63.7%). Category 1 students accessed it 434 times (21.0%). The remaining 316 times were by Category 2 and 3 students.

Table 4.34: Summary of estimated value for Other Ministry Resources and the number of students in each category.

Other Ministry Resources	Estimated Value
Quantity	$947 342
	Number of Times Accessed
Category 1	434
Category 2	170
Category 3	146
Category 4	1314
TOTAL	2064

A total of 17,355 hours of Teacher Aide time and 605 hours of Specialist Support were provided to students through Other Ministry Resources (Table 4.35). In addition, resources for delivering curriculum to the value of $44,679 were purchased. External programmes and activities were provided for 135 students to a value of $14,893.

Table 4.35: Reported use of Other Ministry resources by service and category of student.

Other Ministry	Teacher Aide	Specialist Support	Teacher	Resources for Delivering Curriculum	External Programmes & Activities	SENCO	PD for teachers	PD for Teacher Aides	Other
	Hrs T1 and 2	*Hrs T1 and 2*	*FTTE*	*$ value*	*$ value*	*FTTE*	*$ value*	*$ value*	*$ value*
Qty	17355	605	7	44679	14893	2	5566	1860	355199.9
Category 1	19	60	147	44	66	5	0	0	93
Category 2	116	12	18	9	1	4	0	0	10
Category 3	110	5	5	3	1	1	0	0	21
Category 4	424	20	323	277	64	22	0	0	184
N students	669	97	493	333	132	32	0	0	308
Mean per student	25.9	6.2	0.01	134.2	112.8	-	-	-	1153.3

[38] These unspecified funds could have come from a number of contestable funding sources within the Ministry.

A quarter of the monetised value was used for teacher aides (25.6%), and additional teachers accounted for a further 21.4% of this resource (Figure 4.15). In addition, a little over a third of the funds were used for 'other' (non-specified) purposes.

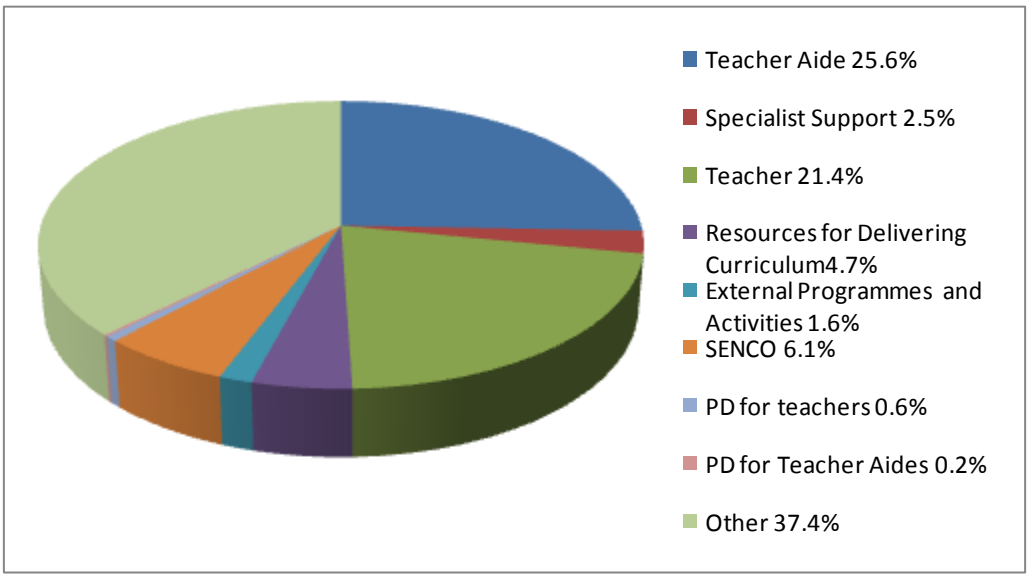


Figure 4.15: Reported use of Other Ministry resources.

Non Ministry of Education Resources.

In addition to Ministry funding, schools access support from a range of external sources including from parent donation (n= 53, 21.6%), from organizations such as Rotary, Brain Injury Association and Autism Support (n= 65, 26.5%), and from charitable trusts such as Pub Charity and the Lotteries Grants Board (n= 20, 8.2%). 'Other' sources of funding (n=32, 13.3%) include CYPF, ACC and other government departments.

Parental Donation

For the purpose of this study, schools were asked to specify any "special needs resource or programme funded by parent donation outside of [voluntary] schools fees". The reason for this was to gauge the extra funding generated by parents/caregivers.

The total estimated contribution through parental donations for special needs in Terms 1 and 2, 2007 was almost $160,000[39] (Table 4.36). These were accessed 1290 times by students. Category 4 students accessed this resource most frequently, (n= 932, 72.2%) followed by Category 1 (n= 207, 16.0%).

[39] Parental voluntary time was costed at the teacher aide rate.

Table 4.36: Summary of estimated value for Parental Donation and the number of students in each category.

Parent Donation	Estimated Value
Quantity	$159,220
	Number of Times Accessed
Category 1	207
Category 2	50
Category 3	101
Category 4	932
TOTAL	1290

Parental donations provided 3627 hours of Teacher Aide time for 129 students (Table 4.37). They also provided 800 hours of Specialist Support for 76 students. A total of $5825 of Curriculum delivery and $6765 worth of external programmes and activities were provided for 256 and 119 students respectively.

Table 4.37: Reported use of Parent Donation by service and category of student.

Parent Donation	Teacher Aide	Specialist Support	Teacher	Resources for Delivering Curriculum	External Programmes & Activities	SENCO	PD for teachers	PD for Teacher Aides	ICT	Voluntary Time	Other
	Hrs T1 and 2	*Hrs T1 and 2*	*FTTE*	*$ value*	*$ value*	*FTTE*	*$ value*	*$ value*	*$ value*	*Hrs T1 and 2*	*$ value*
Qty	3627	800	0	5825	6765	0	1060	1060	4300	6248	1960
Category 1	11	2	2	133	2	0	0	0	2	5	50
Category 2	13	3	3	6	6	0	0	0	0	10	9
Category 3	9	6	7	9	42	0	0	0	0	28	0
Category 4	96	65	65	108	69	0	0	0	0	484	45
N students	129	76	77	256	119	0	0	0	2	527	104
Mean per student	28.1	10.5	0.0	22.8	56.9	-	-	-	2150	11.9	18.9

Most of the value of this resource was provided by way of over 6000 voluntary hours which parents/caregivers contributed to the child/school over two terms (Figure 4.16). Almost half of the monetised value of this resource (45.7%) was in this form. With the contributions that parents made, schools acquired additional teacher aide assistance (representing 26.6% of the value of the resource), and specialist support[40] (16.7%).

[40] This specialist support time would have been additional to that provided by GSE through the various resourcing streams it manages.

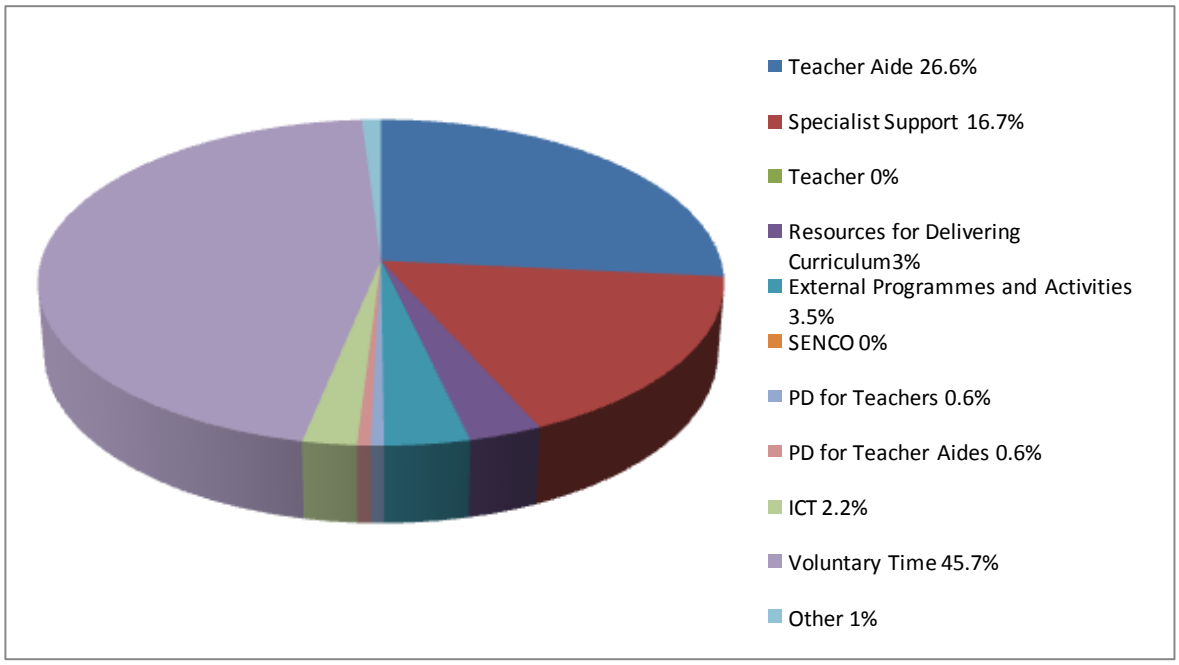


Figure 4.16: Use of funds from Parent Donations.

Other Community Resources

A number of community organisations provide funds to schools for a variety of purposes, including for special educational needs. Rotary, Māori Trust Boards, the McKenzie Trust, Brain Injury Association, Riding for the Disabled, and community gambling trusts are all examples of community bodies that provide funds or have resources that schools can apply for to address specifically stated needs.

Most of the schools in the sample (n=191, 78.0%) did not report receiving any community funds specifically for students with special needs. The total estimated expenditure of community resources for the remaining 54 schools was $376,345 (Table 4.38). This resource was accessed 1355 times, mostly by Category 4 students (n= 511, 37.7%) and Category 2 students (n= 418, 30.8%).

Table 4.38: Summary of estimated value for Other Community resources and the number of students in each category.

Other Community	Estimated Value
Quantity	$376,345
	Number of Times Accessed
Category 1	199
Category 2	418
Category 3	227
Category 4	511
TOTAL	1355

In terms of monetised value, the majority of this resource was used on curriculum delivery (37.8%) and Teacher Aides (33.2%) (Figure 4.17).

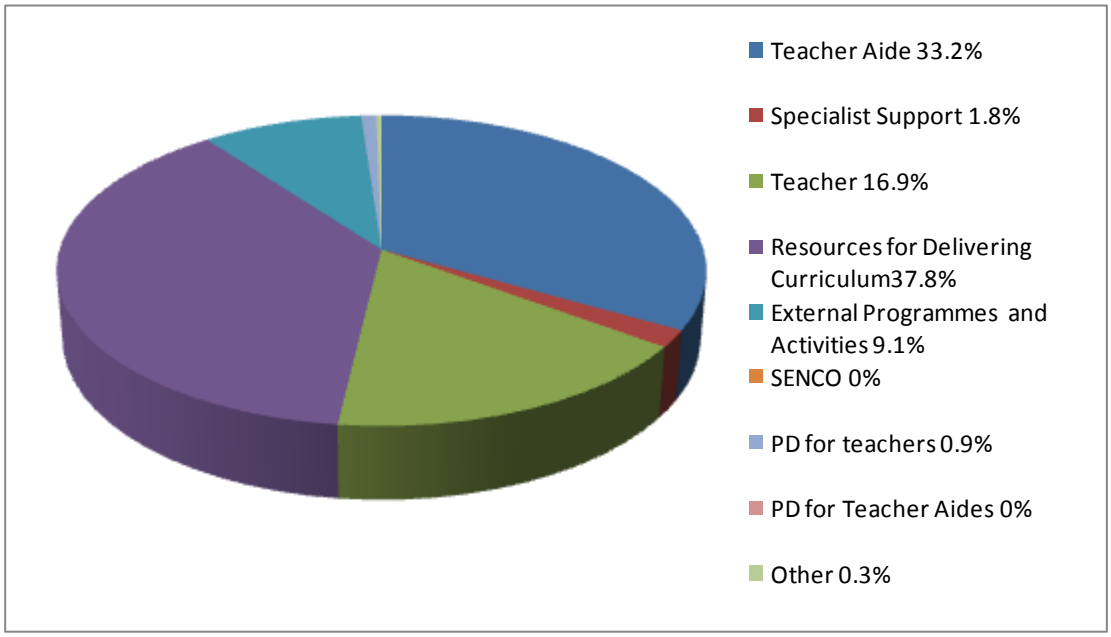


Figure 4.17: Use of funds from Other Community resources.

Accident Compensation Corporation (ACC)

Schools reported that they had 148 students who accessed ACC funding, which amounted to almost $240,000 (Table 4.39). No category breakdown was provided for this resource.

Table 4.39: Summary of estimated value for ACC funding and the number of students.

ACC	Estimated Value
Quantity	$238,902
Number of students	148
Mean per student	$1614.20

ACC funding provided Specialist Support (368 hours) for 89 students. It also provided 14,125 Teacher Aide hours for 51 students (Table 4.40).

Table 4.40: Reported use of ACC sources by service.

ACC	Teacher Aide	Specialist Support	Wheelchair	Communication Support	Other
	Hrs T1 and 2	*Hrs T1 and 2*	*$ value*	*$ value*	*$ value*
Quantity	14125	368	450	2416	19288.72
N students	51	89	1	1	7
Mean per student	277.0	4.1	-	2416	2755.53

Most of the use of this resource was reported for teacher aides (84.3%). (Figure 4.18).

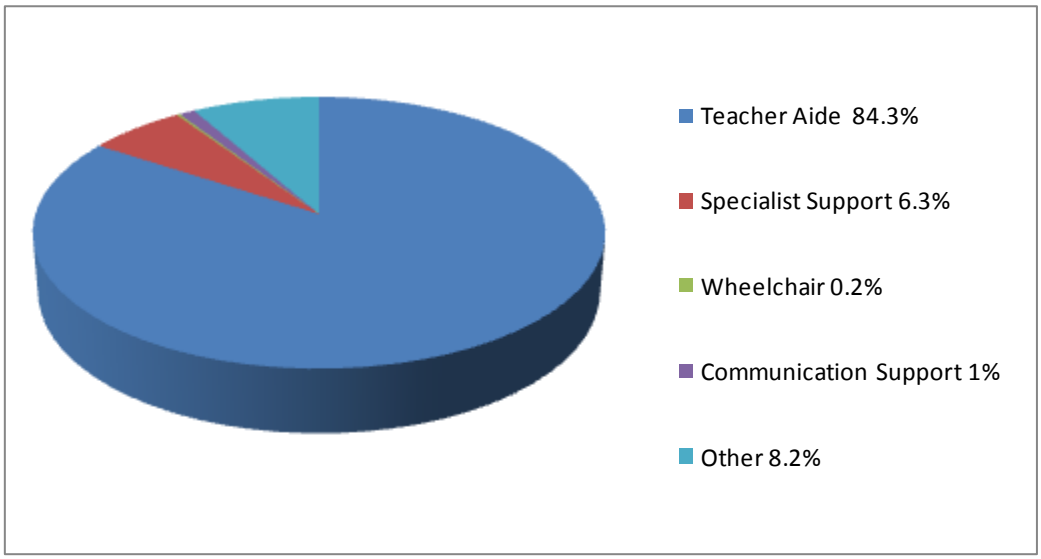


Figure 4.18: Use of funds from ACC.

> Summary of reported resourcing

As has already been alluded to in this report there are discrepancies between what the Ministry reports allocating and what the schools report using. Table 4.41 summarises the allocation and utilisation according to each source discussed in this report. It provides the total monetary value for each source as reported by the Ministry and the schools and also the percentage difference. This has been determined by calculating the difference between the two values and determining what the percentage this figure is of the total Ministry allocation.

Five of the resources discussed in this report cannot be readily compared in this way and while their total values are included at the end of the table there is no percentage difference recorded. These are Resource Teachers: Learning and Behaviour, Learning Support Fund, Accident Compensation Corporation, the Operations Grant and the Targeted Fund for Educational Achievement.

The Operations Grant and the Targeted Fund for Educational Achievement are both allocations to schools which are based on their decile and size. They are not specifically for special education. Schools would not be expected to report the full utilisation of the amount of funding provided by the Ministry in this report and the two values are, therefore, not comparable.

The Ministry reported ACC funding is for the assessment of student needs. What schools have reported is the use of resourcing from the Accident Compensation Corporation. As such the two values are, again, not comparable.

The values the Ministry and the schools reported for both RTLB resourcing and the Learning Support Fund also cannot be readily compared. This resourcing is provided to a host school and a management committee then determines its allocation to schools within a cluster. While the Ministry has provided information regarding the amount of resourcing that it allocated to host schools within our sample it is unlikely that many of the schools within the relevant clusters are also in the sample[41]. The resource discussed in the Ministry allocation is, therefore, unlikely to be the same resource that is discussed in the school utilisation in sufficient quantities to warrant comparison.

Table 4.41: Summary of resources as reported in Terms 1 and 2, 2007.

Resource	Ministry Supplied ($)	School Reported ($)	Percentage difference (Ministry-School)
School-Managed Resources			
Enhanced Programme Fund	806,495	583,568	-27.6
Special Education Grant	2,174,055	2,720,181	25.1
Sub-Total	**2,980,550**	**3,303,749**	**10.8%**
Tracked Individual Resources			
Assistive Technologies	116,296	134,328	15.5
School High Health Needs	281,544	159,552	-43.3
Interim Response Fund	0	0	0
Moderate Support	31,060	25,960	-16.4
Ongoing and Reviewable Resourcing Schemes	11,072,732	6,410,153	-42.1
Property	958,990	1,922,790	100.5
Severe Behaviour Initiative	267,981	257,878	-3.8
Speech Language Initiative	194,682	51,320	-73.6
Supplementary Learning Support	353,800	130,750	-63
Sub-Total	**13,277,085**	**9,092,731**	**-31.5%**
Total School-Managed and Tracked Individual Resources	**16,257,635**	**12,396,480**	**-23.7%**
Resource Teachers: Learning and Behaviour	3,341,763	849,140	N/A
Learning Support Fund	397,995	319,190	N/A
Accident Compensation Corporation	3732	238,902	N/A
Operations Grant	60,165,046	5,391,595	N/A
Targeted Fund for Educational Achievement	5,849,376	1,631,944	N/A
TOTAL including all resourcing	**86,015,547**	**20,827,251**	**N/A**

[41] This is due to the purposive geographic spread of the schools included in the sample.

Removing the resources discussed above from the analysis Table 4.43 shows that schools report utilising $3,861,155 less than the Ministry reports allocating. This equates to $15,760 per school.

There are a number of possible explanations for the discrepancies apparent in Table 4.41 and these are briefly discussed here. These discrepancies do, perhaps, highlight the apparent complexity and fragmentation of special needs funding. However, it must be noted that the overall findings of this report suggest that despite this complexity schools appear to be utilising these resources for the purposes they were intended and managing to achieve the wider goals of special education resourcing within their schools.

If one considers the complexity of resourcing in terms of the number of resources available, the difficulty schools have in identifying the specific source of a service is perhaps understandable. This is particularly true for SEG, TFEA and the Operation Grant, all of which are provided as part of a quarterly allowance. The extent to which schools differentiate between these is variable across our sample.

In addition, the limited nature of the monetisation, which does not take into account variations in salaries or wages across services or the costs of delivering a service means that in many instances the Ministry figures will automatically be higher than the schools. For every resource that is heavily dependent on human services the school utilisation value is lower than the Ministry allocated.

Finally, it should be remembered that the purpose of this survey was never to audit school spending on special needs, or indeed Ministry allocation. Rather it was to describe how special needs resourcing is utilised in schools. A meaningful comparison of Ministry and school values would require a depth of information that was not available to this survey, or indeed part of its brief to gather.

> The Management of Special Needs Resourcing in Schools

Each school's nominated key contact, who was in most cases the principal and/or the SENCO, was interviewed regarding the management of special needs resourcing in their school. The purpose of this was to better understand the processes for allocating and utilising special needs resourcing in schools, including any decision making, monitoring, and reporting processes, and any ongoing reflection about special needs resourcing. In all instances, the questions were open ended with respondents being able to provide multiple responses.

When the key contact was asked how students with special needs were identified in order to determine resourcing priorities, most (n=225, 91.8%) indicated that they referred to student achievement data (Figure 4.19). Behavioural (n=115, 46.9%) and social (n=98, 40.0%) information about students, students' RTLB (n=94, 38.4%) and ORRS (n=92, 37.6%) classifications, or their disability type (n=67, 27.3%) were also used. Referral or enrolment information (n=105, 42.9%) and professional knowledge held within the school about students (n=89, 36.3%) were other identified means of determining resourcing priorities. The category 'Other' (n=34, 13.9%) included using Ministry held information and information gained in discussions with parents.

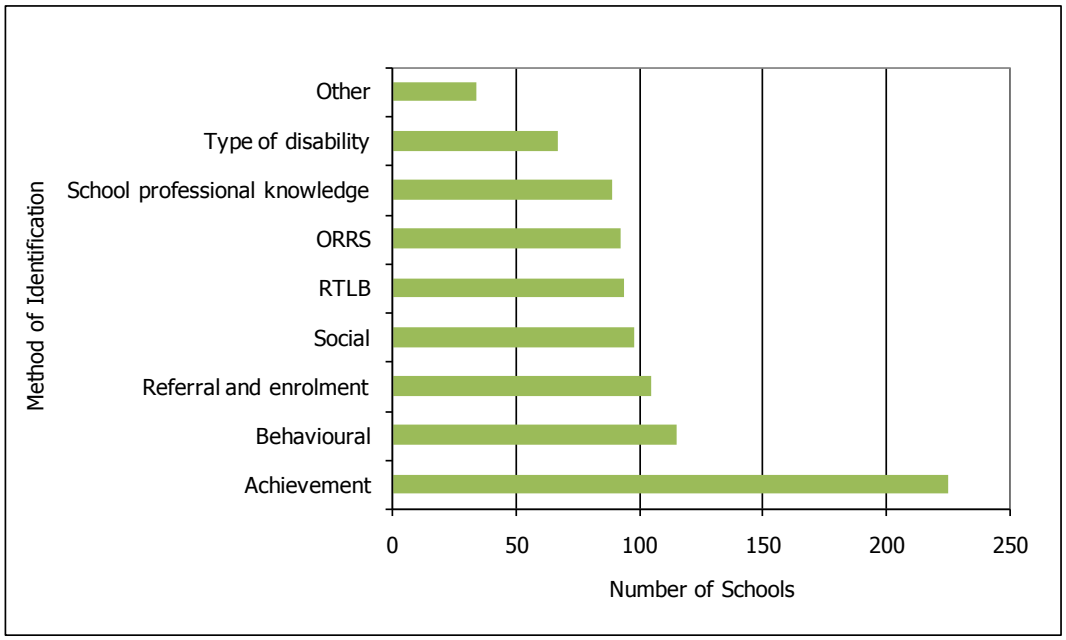


Figure 4.19: How students are identified for resourcing priorities.

Multiple methods for determining resourcing priorities were used by 224 (91.4%) of the schools (Table 4.42), with over 50% of them using four or more different methods.

Table 4.42 Number of methods used to determine resourcing priorities.

Number of Methods	N	Percent of all schools
0	2	0.8
1	19	7.8
2	41	16.7
3	54	22.0
4	55	22.4
5	28	11.4
6	30	12.2
7	12	4.9
8	4	1.6
Total	**245**	

Several criteria were reported by the key contact as being used to make decisions regarding the allocation of resourcing (Figure 4.20). An identified student need was the most frequently mentioned criteria across the participant schools (n=195, 79.4% of schools). The availability of both funds (n=133, 54.3%) and staffing (n=111, 45.3%) were also frequently mentioned. The key contacts also indicated that students were often ranked according to identified need (as opposed to simply identifying need as mentioned above) (n=82, 33.5%), and some students had individual funding that determined allocation decisions (n=80, 32.7%). Geographic location was also a factor in decisions about whether to employ staff or what services could be provided for 11 of the schools (4.5%).

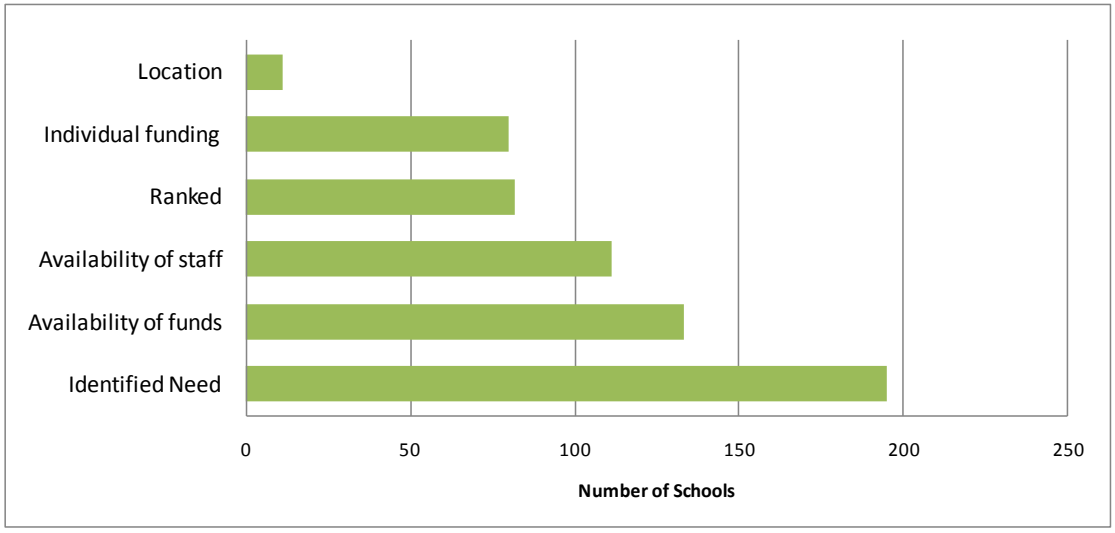


Figure 4.20: Criteria for making decisions around allocation of resources.

Participants were also asked who was involved in the decision making process. In almost half (n=120, 49.0%) of the schools, this was reported as a collaborative exercise involving consultation and discussion amongst a number of stakeholders (Figure 4.21). Where an

individual person was mentioned as being responsible for any decision making the Principal (n=81, 33.1%) and the SENCO (n=47, 19.2%) were the most frequently mentioned. The Board of Trustees were reported as being involved in the decision making process in about 8% of all respondent schools.[42] Each of these groups or people was also likely to have been part of any consultative process. The nature of this decision making was not defined but was likely to have been around the allocation of resources at a school-wide level.

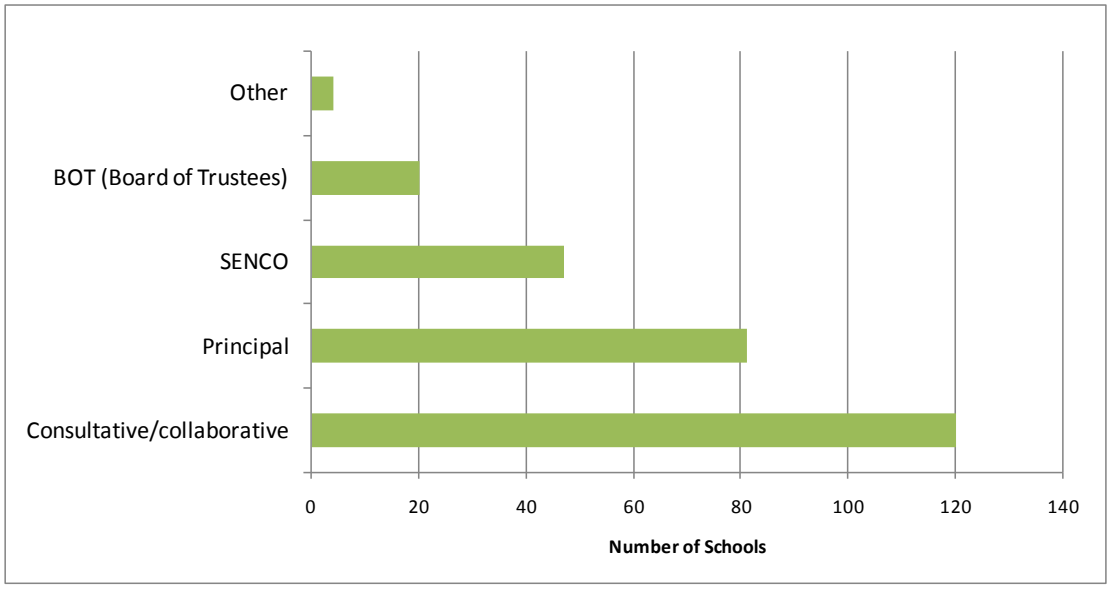


Figure 4.21: Who is involved in school decisions around allocation of resourcing?

The key contact was also asked about the reporting processes and systems in their schools to monitor the effectiveness of resourcing. Analysing student data was the most frequently reported process for monitoring the effectiveness of resourcing (n=207, 84.5% of schools) (Figure 4.22). In many schools, this was supported by regular formal observation (n=181, 73.9%), monitoring of student IEPs (n=192, 78.4%), and regular meetings of interested parties (n=174, 71.0%). The high frequency of these monitoring processes indicates that schools employ multiple ways of monitoring and do not depend solely on any one of them.

[42] This is in contrast to a reporting process which may or may not involve decision making.

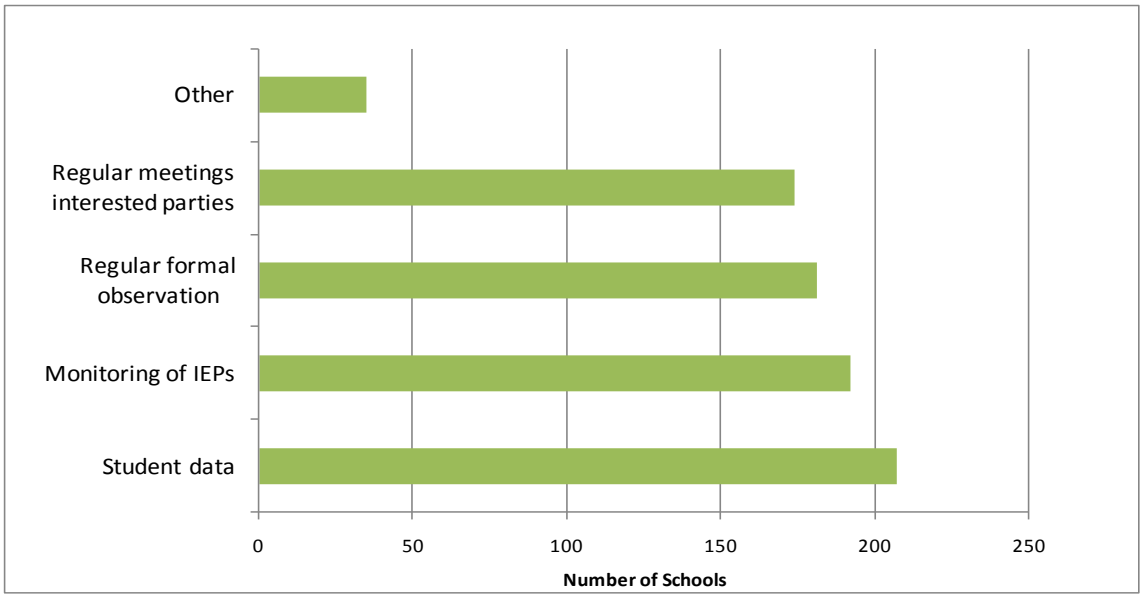


Figure 4.22: Processes for monitoring effectiveness of resourcing.

The key contact was asked what reporting processes and/or systems were in place to inform decision making based on any evidence gathered about effectiveness. Some responses related to the context of reporting while other responses related to who was involved or how the reporting was done. Figure 4.23 summarises the breadth of responses. Most frequently mentioned were Board of Trustee meetings (n=153, 62.5%); IEP process/meetings (147, 60.0%); parent meetings/interviews (n=120, 49.0%), and special education committees (n=109, 44.5%). The SENCO register was mentioned as a reporting tool by 72 schools (29.4%).

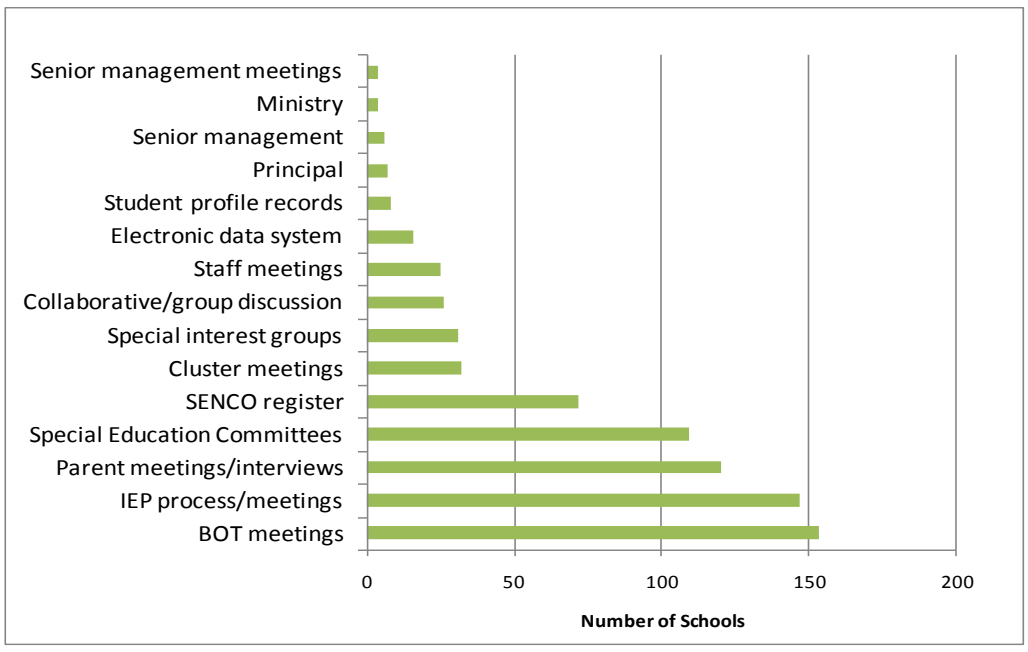


Figure 4.23: Reporting processes to inform future decision making.

As well as questions around the process of decision making, participants were asked what the outcomes of those decisions were. The reported outcomes included modifying the level of support (n=202, 82.4%), adjusting the level of funding (n=189, 77.1%), and accessing external funds (n=98, 40.0%) (Figure 4.24). Decisions were also made around the professional development of teachers and teacher aides (n=87, 35.5%). Access to external support and all other categories were mentioned by less than 10% of schools.

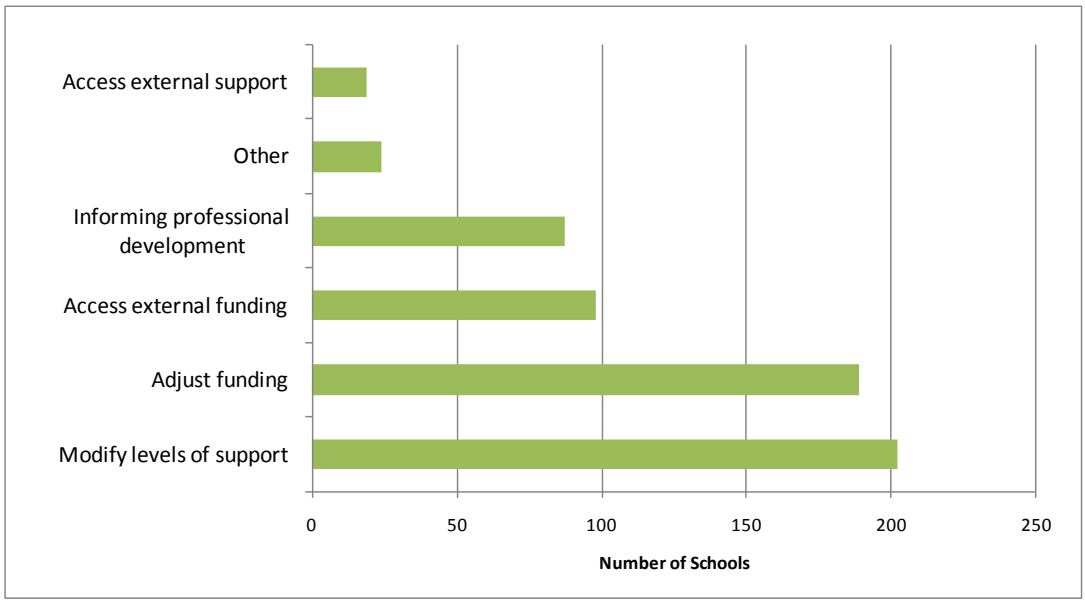


Figure 4.24: Future decisions for support.

The key contacts, in most schools, reported that the general budget for special needs was determined through a consultative process (n=168, 68.6%). It was determined by committees in 64 of the schools (26.1%) and driven by policy in 34 schools (13.9%). 'Other' processes (such as needs determined budget, using the SEG funding only, referrals, special needs school wide structure) were used in just under ten percent of the schools (n=23, 9.4%) (Figure 4.25). Some schools used multiple processes - two of these processes were used in 65 schools (26.5%), and three in 12 schools (4.9%).

The Board of Trustees (n=119, 48.6%) and the senior management[43]) (n=105, 42.9%) were reported as being most commonly involved in budgetary decision making. The SENCO was specifically reported as playing a prominent role in 41 schools (16.7%). In 59 schools (24.1%), two of these groups were involved in budgetary decision making, while all three groups were involved in 18 schools (7.3%).

[43] It should be noted that in some schools the SENCO may be part of the Senior Management Team.

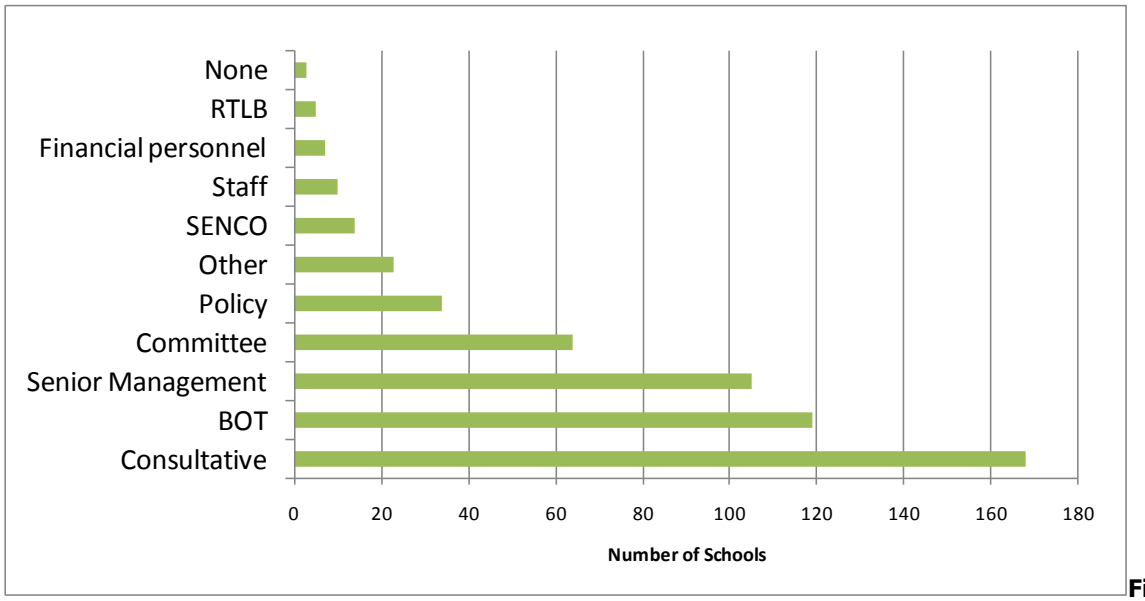


Figure 4.25: Processes and personnel involved in budgetary decisions.

> School Reported Adequacy and Effectiveness of Resourcing.

A series of questions around the adequacy and effectiveness of special needs resourcing within the schools were also asked. The key contact, who was the principal and/or the SENCO, was asked to rate both the adequacy and effectiveness of resourcing separately on a five point scale (1= lowest through to 5= highest).

The mean rating for the adequacy of resourcing was 2.2 (SD=.9) which indicates a level of dissatisfaction with the amount of special needs resourcing available in schools. Two-thirds of the schools (n=161, 67.1%) gave a rating of 1 or 2 (Figure 4.26). Twenty-two schools (9.2%) gave a rating of 4 or 5. Almost one quarter of the ratings were neutral (n=57, 23.8%).

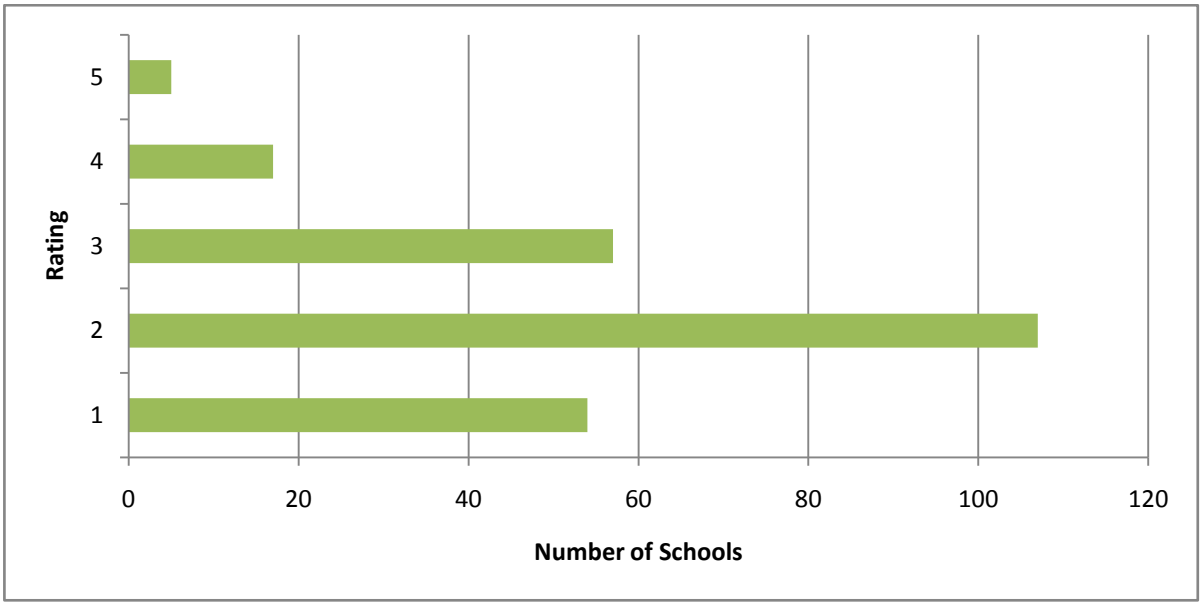


Figure 4.26: School key person ratings of adequacy of resourcing.

In contrast, when asked how well these schools thought they were using the resources they were currently provided with (i.e. effectiveness), the mean rating was 4.5 (SD=.7). This indicates a high level of satisfaction with the way they believed they were utilising the resourcing. Over half of all schools gave the highest rating (n=137, 57.1%), and ninety percent of the schools rated themselves 4 or 5 (Figure 4.27). Three schools gave themselves a rating of 1 or 2.

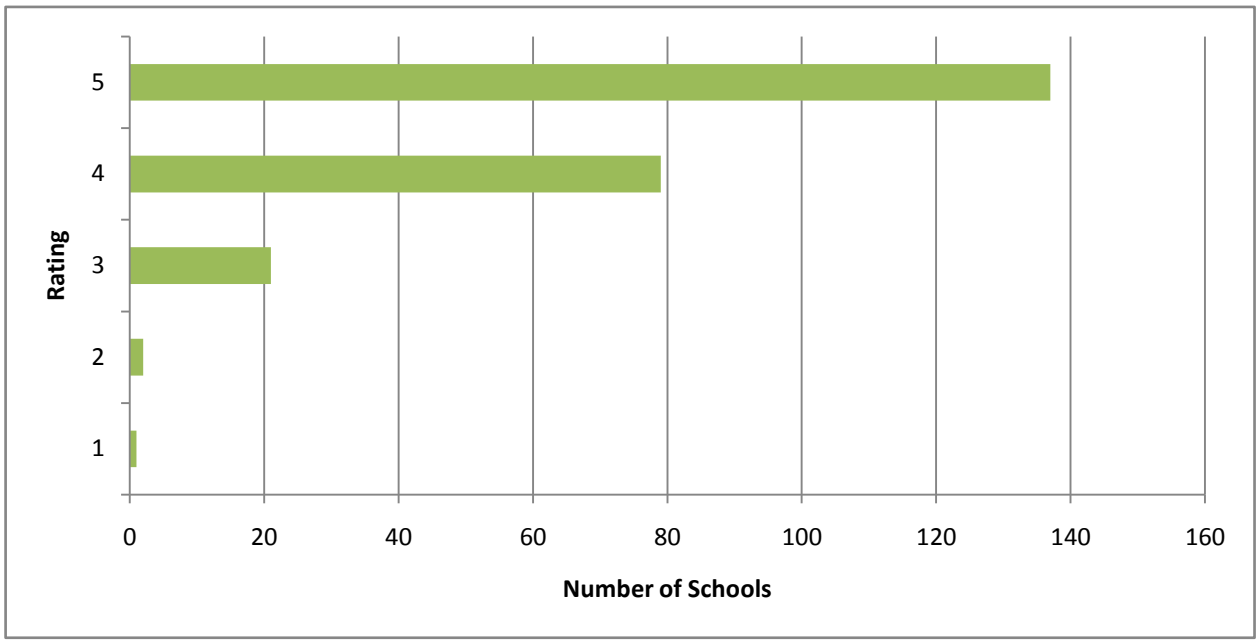


Figure 4.27: Rating of how well resources are used.

Schools provided a variety of reasons to support their designated levels of effectiveness. A number of them reported a combination of several reasons as contributing to their rating. Innovative programmes were referred to by just over three-quarters of the schools (n=190, 77.6%). In addition, 110 schools (44.9%) mentioned the way in which they were able to re-allocate resources, and 72 schools (29.4%) mentioned the pooling of resources.

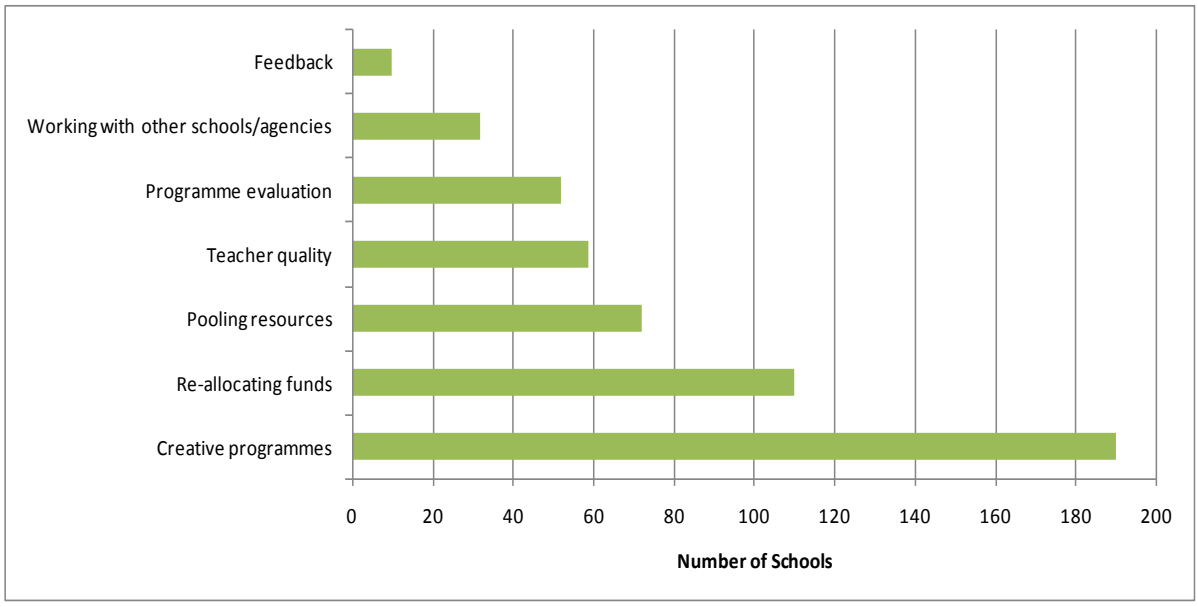


Figure 4.28: Reasons for rating about usage of resourcing.

> Priorities for Additional Special Needs Resourcing.

To explore school priorities for additional special needs resourcing, the key contact was asked to rank three resourcing types – more internal school staffing, more money, or more external specialist support – in order of priority from 3=Most Important to 1=Least Important (Table 4.43). More internal school staffing was the highest priority (M=2.4, SD=.7), followed by more money (M=2.2, SD=.7). More external specialist expertise was the lowest priority (M=1.5, SD=.7).

There were no statistically significant differences in responses to these priorities amongst participant schools according to decile, geographical location (Ministry regional office, GSE districts, area type, or isolation index groups), roll size, or school type.

Table 4.43: Priorities for additional special needs resourcing.

Rating	More Internal School Staffing	More Money	More External Specialist Expertise
Most Important	121	88	31
Second Most Important	85	105	46
Least Important	32	44	161

The key contacts were also asked how they would utilise each of these types of additional resourcing if they were available (Table 4.44). They responded that they would use any additional staffing to provide more teacher aide hours (n=189, 77.1% of the schools), more mainstream (i.e., classroom) teachers (n=114, 46.5%), and/or more on-site specialist teachers (n=102, 42.6%). The other forms of staffing that were mentioned were special

education coordination (12.7%) and 'other', which included buying additional trained special needs teacher time and purchasing expertise (15.9%). Almost one half of the schools (n=112, 45.7%) indicated a preference for two of these forms of additional staffing, a further 50 schools (21.2%) had a preference for three additional forms of staffing, and fifteen schools (6.1%) would prefer to have four of the five additional staffing options.

If more money was made available, schools would most commonly prefer to use it to purchase curriculum resources (n=115, 46.9% of schools), or to buy professional development for teachers (n=99, 40.4%) and teacher aides (n=77, 31.4%). Extra money would also be used to purchase more staffing (19.6%), external programmes and activities (17.1%), capital development (16.7%), further expertise (14.3%), and special education coordination (12.2%). Almost one half of the respondents (n=112, 45.7%) reported they would use any additional money to purchase two additional types of resource, and just over one fifth (n=52, 21.2%) would purchase three additional types. Only 39 of the schools (15.9%) would purchase just one additional type of resource. The purchase of curriculum resources was the most frequent type of resource preferred by these 39 schools.

Finally, for external specialist support, schools indicated that they would like to source more specialist services generally (n=150, 61.2%), followed by 'more service from GSE' (n=87, 35.5%), and counsellors (n=24, 9.8%). Educational psychologists and speech language therapists were each favoured by 9.0% of the schools, while more access to RTLBs was preferred by 7.3% of schools. Over one half of the schools (n=139, 56.7%) reported preferring a single additional form of external specialist support. Some schools indicated a preference for multiple forms of external specialist support – 59 schools (24.1%) would prefer two additional forms of external specialist support, 19 schools (7.8%) wanted three forms of external specialist support, and a further nine schools (3.7%) wanted more than three forms of external specialist support.

Table 4.44: Ways in which additional resourcing would be used (n=245).[44]

	Additional resource	Number of Schools	Percent of Schools
More staffing	Teacher aides	189	77.1
	Mainstream teachers	114	46.5
	Specialist teachers	102	41.6
	Other	39	15.9
	Special Education coordination	31	12.7
More money	Curriculum resources	115	46.9
	PD for teachers	99	40.4
	PD for teacher aides	77	31.4
	Staffing	48	19.6
	External programmes	42	17.1
	Capital development	41	16.7
	Expertise	35	14.3
	Special Education coordination	30	12.2
	Other	12	4.9
Other external specialist expertise	More specialist support generally	150	61.2
	More service from GSE	87	35.5
	Counselors	24	9.8
	Educational psychologist	22	9.0
	SLT	22	9.0
	Access to RTLB	18	7.3
	Other	16	6.5
	OT	7	2.9
	Public health nurse	5	2.0
	RT Literacy	4	1.6
	Māori education specialist	3	1.2
	Vision	2	0.8

[44] Schools could nominate more than one additional resource in each section.Therefore, the totals in each section (more staffing, more money, or more specialist support) do not add to 245.

> Case Study Students.

Case study information was available for 653 students, representing 34.0% of the selected student sample of 1921. These students were nominated from each school's list of selected students to illustrate a range of special needs in the school.

It was intended that data would be collected concerning three case study students per school, for a maximum of 735 students. However, in some instances, schools could not provide data concerning three students because of the roll size, or the unavailability of parents. In addition, there were a few instances where schools were not prepared to discuss personal information about their special needs students. The 653 students reported on represent 88.8% of the target number of case study students.

Information was obtained for 633 (96.9%) of these students from their teachers, for 528 (80.9%) from their parent/caregiver, and for 509 (77.9%) from both the teacher and the parent/caregiver. For most questions, participants could provide more than one response. Their responses were coded into categories.

Data were provided for 593 of the 653 case study students (90.8%) regarding their category of need. This is shown in the following table:

Table 4.45: Category of need for case study students

Category of Need	No of case study students	Percent
1	194	32.7
2	157	26.5
3	92	15.5
4	150	25.3

Case Study Student Information Obtained from Teacher Interviews

The teachers were asked to describe their level of involvement in the assessment of each case study student's special needs. Almost half of the teachers (n=313, 49.4%) reported that they had had extensive involvement (Table 4.46). A further 133 (21.0%) reported some degree of involvement. Almost a quarter (n=146, 23.1%) reported that they had had no input. In many instances, this was because the assessment had occurred prior to their involvement with the student.

Table 4.46: Level of teacher involvement in assessing case study students special needs.

	Number of Case Study Teachers	Percent
No Input	146	23.1
Some Input	133	21.0
Extensive input	313	49.4
Not Reported	41	6.5

Where teachers reported being involved (n=446, 70.5%), some also described the nature of their involvement (Table 4.47). This included working with the SENCO (n=139, 31.2%), and talking to parents of the case study student (n=168, 37.7%). A very small number of these teachers (n=2, 0.4%) reported 'other' (for example talking to the previous teacher, talking to a specialist). A number of teachers reported being involved but did not mention the nature of their involvement (n=137, 30.7%).

Table 4.47: Nature of teacher involvement in assessing case study students special needs.

	Number of Case Study Teachers	Percent
Working with SENCO	139	31.2
Talking to Parents	168	37.7
Other	2	0.4
Not mentioned	137	30.7

Teachers were also asked to describe their involvement in acquiring support for each case study student's special needs. Approximately a third reported that they had requested some sort of support from the SENCO for the case study student (n=240, 37.9%) (Table 4.48). Nearly the same number of teachers reported that they had filled in application forms (n=224, 35.4%). A quarter of the teachers reported that they had located and contacted support groups to assist the case study student (n=162, 25.6%). A further third (n=237, 37.4%) reported that they had no involvement in acquiring support for the case study student. Many teachers reported that this was because support was already in place or had been sought by another party such as the SENCO or RTLB.

Table 4.48: Teacher involvement in acquiring support for case study student (n=633).

	Number of Case Study Teachers	Percent
Requested support from SENCO	240	37.9
Filled in application forms	224	35.4
Located and contacted support groups	162	25.6
None	237	37.4
Other	22	3.5

Just over one half of the teachers (n=327, 51.7%) reported that they had provided support to the SENCO in the development of an education plan[45] for the case study student (Table 4.49). One third (n=213, 33.6%) reported that they had had total responsibility for the education plan. One in five of the teachers (n=129, 20.4%) indicated that they had had no responsibility at all for this task. In these instances teachers reported that GSE, health professionals or other experts developed the plan. A smaller number (n=24, 3.8%) reported that they had had some 'other' involvement in this process, such as working on the education plan with GSE or contact with the student's family.

Table 4.49: Teacher involvement in developing education plan for case study student (n=633).

	Number of Case Study Teachers	Percent
Supported SENCO	327	51.7
Total responsibility	213	33.6
No involvement	129	20.4
Other	24	3.8

Teachers were provided with eight goal types on which to report the goals set for each case study student. These were: learning, behaviour, social communication, vision, hearing, mobility, personal care, and communication. They were asked to nominate up to four of the specific goal types for each of the case study students.[46] A total of 1877 goals were nominated across 618 students.

Approximately fifty percent of the reported goal types were related to student learning (n=927, 49.4%) such as 1:1 matching in mathematics, increasing vocabulary, or identifying letters of the alphabet (Table 4.50). Social communication (n=329, 17.5%) and behaviour (n=283, 15.1%) were the next most frequent goal types nominated by the teachers.

[45] In this context, 'education plan' could mean an IEP or some other form of documented educational goals that meet the special educational needs of the student.

[46] Note that it is possible for an individual student to have a number of learning goal types, and for the count of learning goal types to exceed the number of case study students.

Table 4.50: Nominated goal types by teachers for case study students.

Goal Types	Number of Nominations	Percent of Nominations
Learning	927	49.4
Social communication	329	17.5
Behaviour	283	15.1
Communication	121	6.5
Personal care	118	6.3
Mobility	77	4.1
Vision	12	0.6
Hearing	8	0.4
Unspecified	2	0.1
Total	**1877**	**100**

For each of the reported goal types, the teachers were also asked to indicate the degree to which they believed those goals had been met. There were five response options – too early to tell, not sure, largely unmet, partially met, and fully met. Table 4.5 shows the degree to which teachers reported that the goals had been attained at the time of reporting[47]. Goals were partially met for half of the cases, and fully met for a further 28.4% of cases. This means that teachers reported full or partial goal attainment for almost 80% of all goals described in the survey.

Table 4.51: Level of goal attainment.[48]

Level of goal attainment	Total	
	n	*%*
Too early to tell	63	3.4
Not sure	16	0.9
Goal being largely unmet	318	17.4
Goal being partially met	912	49.9
Goal being fully met	518	28.4
Total	**1827**	100

There was a fairly consistent pattern in the levels of reported success across the eight goal types with partially and fully met being the most frequently reported levels (Table 4.52). Goals were fully met for three-quarters of the hearing goals (n=6, 75.0%), over a third of all personal care goals (n=40, 35.1%), and over a quarter of behaviour (n=70, 25.1%), learning (n=269, 29.8%), mobility (n=23, 31.9%), and social communication (n=87, 27.2%) goals.

[47] Goals are continuously reviewed during the year, and could be at various stages along a continuum of progress at the time of reporting.

[48] Goal attainment data were not available for 50 of the goals addressed

Table 4.52: Degree of goal attainment by type of goal.

Type of Goal	Level of goal attainment					
	Too early to tell	*Not sure*	*Largely unmet*	*Partially met*	*Fully met*	***Total***
Behaviour	11	3	65	130	70	**279**
Communication	6	0	20	71	21	**118**
Hearing	0	0	1	1	6	**8**
Learning	33	11	148	443	269	**904**
Mobility	1	0	10	38	23	**72**
Personal care	4	0	21	49	40	**114**
Social communication	8	2	51	172	87	**320**
Vision	0	0	2	8	2	**12**
Total	**63**	**16**	**318**	**912**	**518**	**1827**

Teachers reported using multiple sources of information to assess whether goals were met or not (Figure 4.29). They reported most frequently using feedback from other teachers (n=464, 73.3% of case studies), and formal school assessment (n=449, 70.9%). IEP reviews (n=366, 57.8%) and parent feedback (n=307, 48.5%) were also reported as being commonly used. Experts were used by about a third of the teachers (n=208, 32.9%), and student feedback was also obtained in 193 (30.5%) cases. Teachers used two or more of these assessment methods in 562 cases (88.8%) and three or more in 420 cases (66.4%). Thirty-six teachers (5.7%) used at least six different assessment methods.

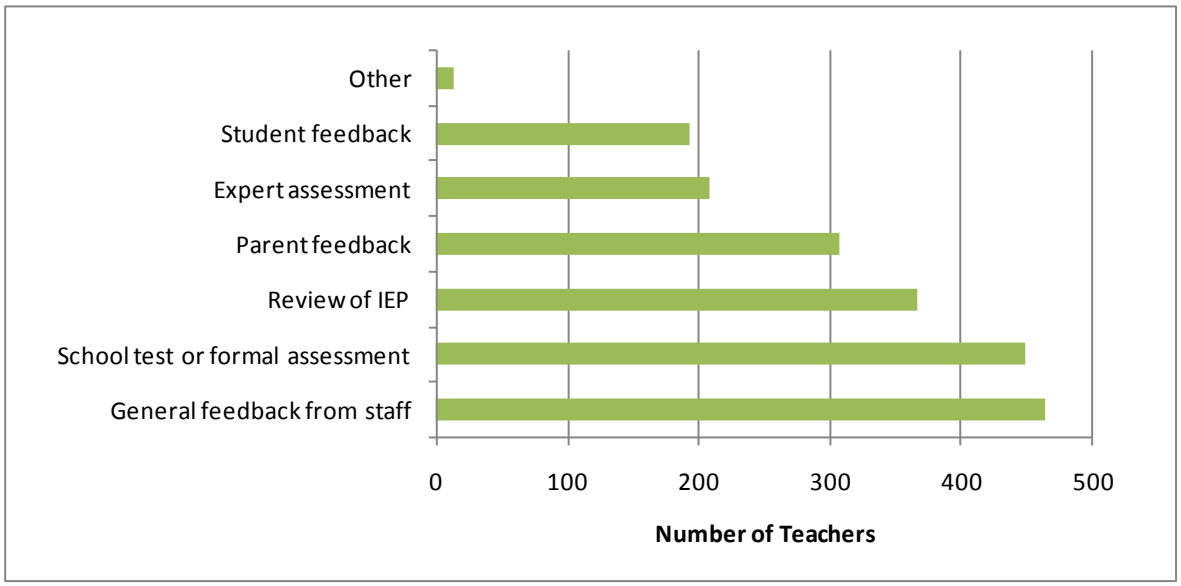


Figure 4.29: Methods Used for Assessing Goal Attainment.

The teachers were then asked to rate the overall progress of the case study students as a result of the current programme of support. These data were available for 620 case study

students. Using a five point scale (1=lowest to 5=highest), the mean rating of these students' overall progress was 3.2 (SD=1.1). For most students, the teacher ratings were either 3 (n=198, 31.9%) or 4 (n=216, 34.8%) (Figure 4.30). For just under 150 students, the ratings were 2 (n=119, 19.2%) or 1 (n=30, 4.8%).

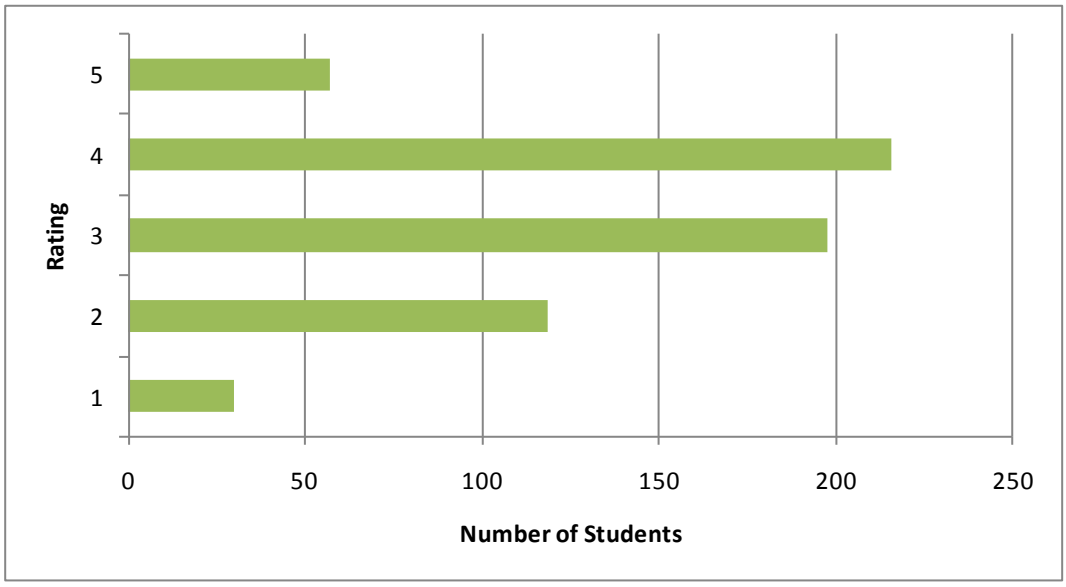


Figure 4.30: Teacher ratings of overall progress for case study students.

There were no statistically significant differences in the teachers' ratings of overall progress by category of special needs (that is whether they were a category 1, 2, 3 or 4 student).

Teachers were also asked to rate the effectiveness of the current support in place to address the special needs of the case study students. Again, a 5 point scale (1=lowest to 5=highest) was used. Of the 620 teachers who responded to this question the mean level of effectiveness was 3.6 (SD=1.2). Over half of the ratings were 4 (n=230, 37.0%) or 5 (n=153, 24.6%) indicating that teachers believed that the support programme for the case study students was more than effective (Figure 4.31).

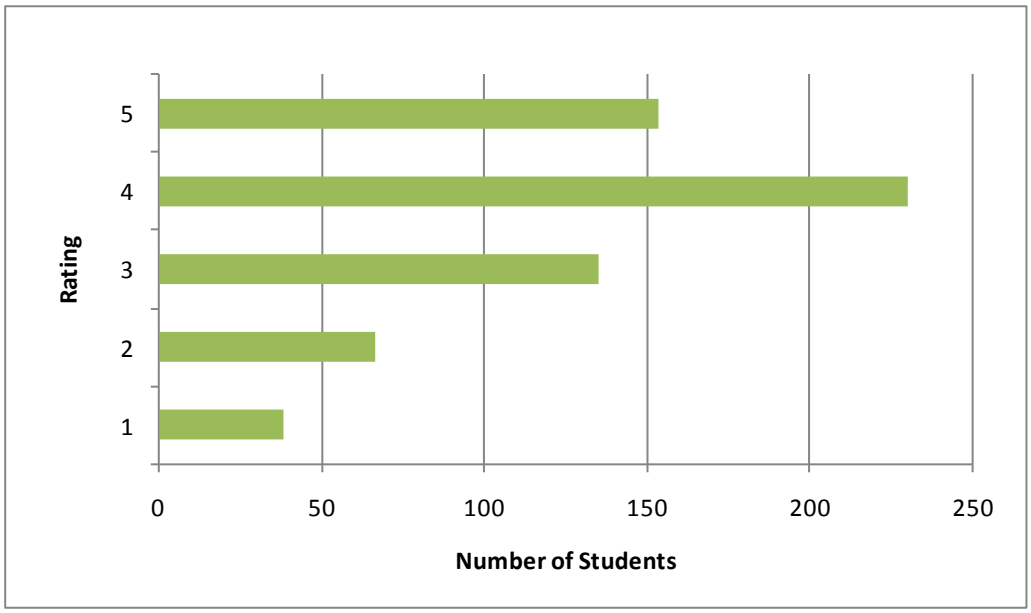


Figure 4.31: Teacher ratings of effectiveness of support for case study students.

There were no statistically significant differences in the teachers' ratings of effectiveness of current support by category of special needs (1, 2, 3 or 4) of the case study students.

Teachers were also asked to comment on the reasons[49] for their effectiveness rating. Their comments were coded into a number of categories, using an indication of whether the comment was positive, negative, neutral or contained both a positive and a negative value.

For instance, if a teacher was commenting on the quality of teaching and they said "J has had a really good teacher this term, and he has exceeded our wildest expectations", this would have been coded as a positive teacher quality comment. On the other hand, a comment such as "it takes a lot of work having a teacher aide" would have been a negative comment in the teacher aide category. "The programme that we undertook is still under review" is a neutral comment on adequacy of a resource. "It was great to have the TA in the class, but it took a lot of extra work" was coded as both positive and negative.

The results show that the teachers were largely positive in their comments about the effectiveness of resourcing (Table 4.53). Of the 2241 comments made, 1685 (75.2%) were positive, compared with 496 (22.1%) that were negative. Teachers reported that the high level of effectiveness of the current support programme was due to quality teacher aides (n=409, 66.0% of respondent teachers) and quality teaching (n=364, 58.7%). The teachers' comments were evenly split on one category - the adequacy of resourcing. Of the 428

[49] Multiple reasons could be given by teachers.

comments in this category, 202 were positive and 203 negative with 23 neutral. Overall, there was also some ambivalence concerning the timeliness of resourcing.

Table 4.53: Coding of reasons about effectiveness of current support for special education students.

Reason	Nature of comment				
	Positive	*Negative*	*Neutral*	*Both*	***Total***
Quality teacher aides	409	62	4	3	**478**
Quality teaching	364	35	4	1	**404**
Specialist support	233	65	11	2	**311**
School leadership	213	7	4	1	**225**
Adequacy of resourcing	202	203	23	0	**428**
Liaison with support services	135	27	4	1	**167**
Timeliness of resourcing	116	95	2	0	**213**
Other	13	2	0	0	**15**
Total	**1685**	**496**	**52**	**8**	**2241**

Teachers were asked to indicate how they believed the current level of resourcing had affected the case study student's experiences in their classroom, also using a five point scale (1 = lowest to 5 = highest). Data were available for 602 case study students. The mean rating was 3.5 (SD=1.3). Over 60% of these teachers gave a rating of 4 (n=225, 37.4%) or 5 (n=142, 23.6%), with a further 126 teachers (20.9%) giving a rating of 3 (Figure 4.32).

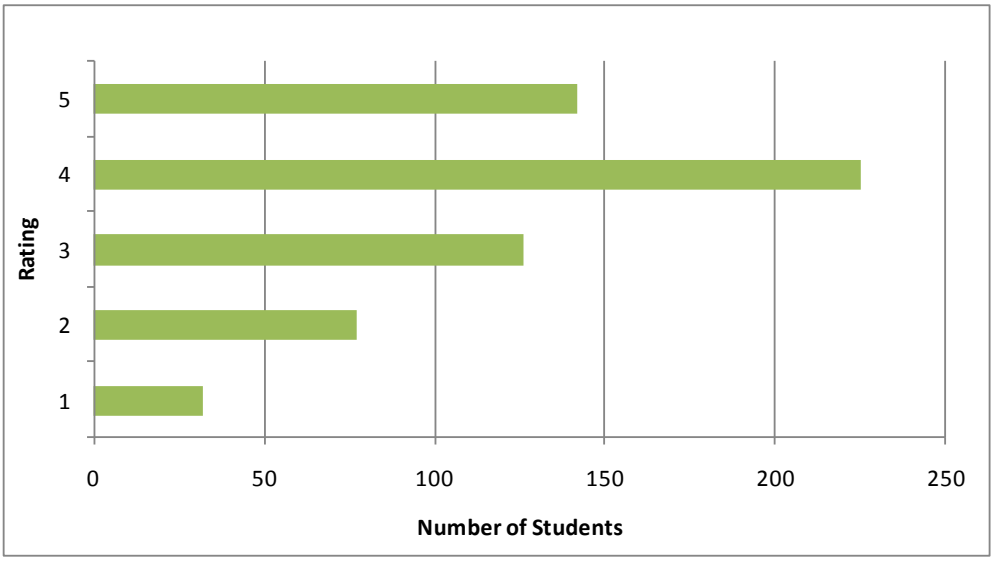


Figure 4.32: Teacher ratings of the affect of resourcing on case study student classroom experience (n=602).

The reasons given for the reported effect of resourcing on the student classroom experience (Table 4.54) suggest a positive view of resourcing is held by the 602 respondent teachers. Of the 1661 comments coded, 1355 (81.6%) were positive and only 278 (16.7%) were negative. The teachers reported that the current level of resourcing increased learning opportunities (n=324, 53.8% of respondent teachers), had a positive impact on learning (e.g., through greater communication in the class or working inclusively) (n=319, 53.0%),

and had a positive impact on the teaching experience (e.g., being able to work with students in groups, or by having high quality teacher aides) (n=277, 46.0%). In each category, there were at least twice as many positive comments as there were negative comments. The highest number of negative comments (n=91) concerning the reported effect on the students classroom experiences was in the area of the provision of appropriate resources, this represented 32.5% of the comments in this category.

Table 4.54: Coding of reasons for affect of current level of resourcing on student classroom experiences.

Reason	Nature of comment				
	Positive	*Negative*	*Neutral*	*Both*	***Total***
Increased learning opportunities	324	44	6	1	**375**
Learning	319	59	4	1	**383**
Teaching	277	53	5	1	**336**
Activities	188	26	6	0	**220**
Appropriate resources	185	91	4	0	**280**
Impacts behaviour	37	4	0	0	**41**
Impacts self development	22	1	0	0	**23**
Other	3	0	0	0	**3**
Total	**1355**	**278**	**25**	**3**	**1661**

The mean rating for the extent to which the current level of resourcing, for the special needs of the student, affects student experiences in the respondent teacher's classroom was 3.6 (SD=1.4). This was based upon 601 teacher responses and used a five point scale (1 = lowest, 5 = highest). Figure 4.33 shows that over sixty percent of the respondent teachers gave a rating of 4 (n=199, 33.1%) or 5 (n=178, 29.6%) indicating a high level of satisfaction with the way in which the level of resourcing impacted on student experiences. Twenty percent of these teachers (n=120) gave a rating of 3, with smaller numbers responding with a rating of 2 (n=60, 10.0%) and 1 (n=44, 7.3%).

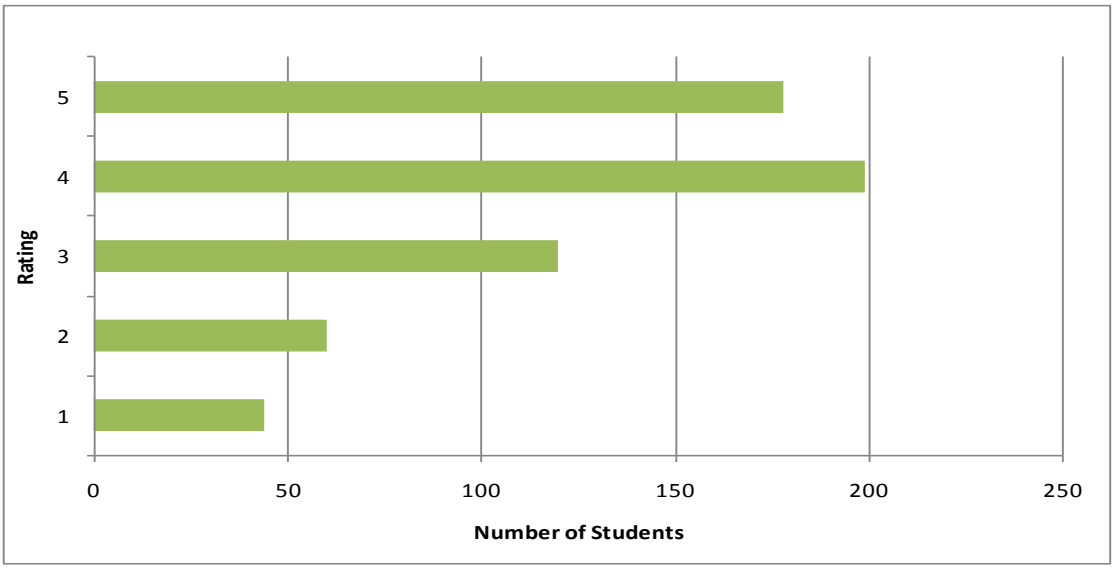


Figure 4.33: Teacher ratings of how case study student's resourcing affected classroom experiences.

The teachers were asked to explain the rating they gave. All teachers (n=633) responded to this question, even though some did not provide a rating. Of the 1163 coded comments 942 were positive (81.0%) and 193 were (16.6%) negative (Table 4.55). The most common, positive reason given was that the resourcing made it easier for them to focus on the other students in the class (n=413, 65.2% of respondent teachers). This reason also had the highest frequency of negative comments (n=81, 12.8%). For example, there was an increase in programme planning time to ensure the best use of the resource was made.

The next most frequent, positive comments concerned the ability to provide additional physical support in the class (n=313, 49.4%), with 47 teachers (7.4%) making negative comments on this matter. For example, the physical presence may not have been available for the full school day or on specified days only. One in five teachers (n=137) commented positively on the increased level of student safety in the classroom that this additional resourcing afforded.

Table 4.55: Coding of reason about current level of resourcing and its effect on case study student classroom experiences.

Reason	Nature of comment				
	Positive	*Negative*	*Neutral*	*Both*	***Total***
Easier to focus on other students	413	81	8	4	**506**
Provided more physical support in classroom	313	47	5	6	**371**
Improved students safety	134	31	2	0	**167**
Extra equipment	73	32	1	0	**106**
Increased professional understanding/development	9	2	1	1	**13**
Total	**942**	**193**	**17**	**11**	**1163**

Case study student information obtained from parent/caregivers interviews

A total of 528 parents/caregivers were interviewed about the programme of support provided for their child at the school. They were, firstly, asked to describe the extent of their level of involvement in its development. Two thirds of these parents (n=355, 67.2%) reported working with the school to develop the programme of support for their child (Table 4.56). A further 124 (23.5%) parents reported that they were advised about the programme of support. A small number of parents/caregivers (n=44, 8.3%) indicated that they had had no involvement at all.

Table 4.56: Parent/Caregiver level of involvement in development of programme of support.

Level of Involvement	Number of Case Study Parents/Caregiver	Percent
No Involvement	44	8.3
Advised about the programme of support	124	23.5
Worked with the school to develop programme of support	355	67.2
Not Reported	5	0.9
Total	**528**	**100**

Parents/caregivers were also asked how much involvement they had had in monitoring and adjusting their child's programme of support (Table 4.57). Just over half of the parents/caregivers (n=293, 55.5%) reported that they were closely involved. A further 136 (25.8%) reported they were informed about their child's progress and asked for feedback. Fifty-five parent/caregivers (10.4%) were kept informed, but took no further part in monitoring and adjusting the programme. A smaller number (n=36, 6.8%) took no part at all.

Table 4.57: Parent/Caregiver level of involvement in monitoring and adjustment of programme of support.

Level of Involvement	Number of Parents/Caregivers	Percent
No involvement	36	6.8
Informed about progress of child	55	10.4
Informed about progress of child and asked for feedback	136	25.8
Closely involved with the school in monitoring and adjusting the programme	293	55.5
Not reported	8	1.5
Total	**528**	**100**

Parents/caregivers were also asked to rate the overall progress they believed their child was making. Data were available for 411 case study students. Using the same five point scale used in the teacher interviews (1=lowest to 5=highest), the mean rating was 3.6 (SD=1.1), with most parents/caregivers giving a rating of 4 (n=157, 38.2%) or 3 (n=109, 26.5%), and a high number of parents/caregivers giving the highest rating of 5 (n=88, 21.4%) (Figure 4.34). This indicates that most were positive about the progress their child was making. There were no statistically significant differences in the parents/caregivers' ratings of overall progress by category of special needs of their child (that is 1, 2, 3 or 4).

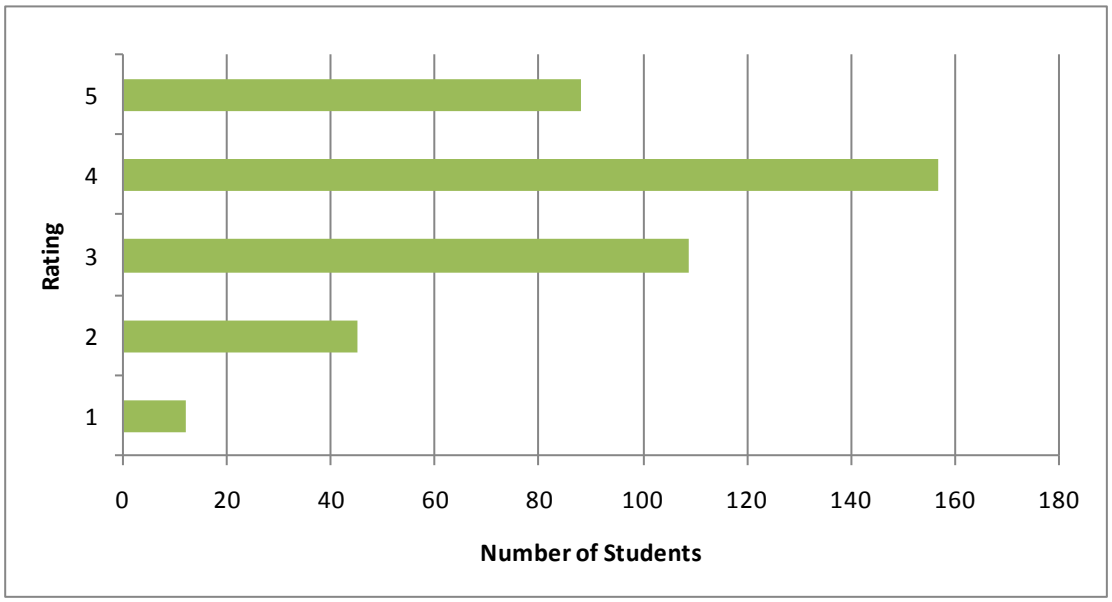


Figure 4.34: Parent/Caregivers ratings of overall progress.

Parents provided a range of reasons as to why they had rated their child's overall progress the way they did. All parents responded to this question whether they had provided a rating or not. For most categories, there were at least twice as many positive comments as negative ones, with the ratio of positive to negative comments being as high as 12 to 1 for the school leadership category. Overall, there were 1541 (71.7%) positive comments and only 488 (22.7%) negative.

Their reasons are shown in Table 4.58, and indicate that the most common positive reasons were the quality of teaching (n=375, 71.0%), and the quality of teacher aides (n=310, 58.7%). School leadership was also given as a positive reason for their rating (n=237, 44.9%). The comments of a smaller number of parents/caregivers were coded as negative reasons. These were regarding the quality of teaching (n=41, 7.8%), the quality of teacher aides (n=41, 7.8%), and the school leadership (n=19, 3.6%).

Parents were almost equally split over two aspects of the resourcing – its adequacy and timeliness. These were the only two categories where a large number of negative comments were made, although the quality of specialist support also had a number of negative responses. In all three instances, however, there were still more positive comments than negative ones.

Table 4.58: Frequency of positive, negative, neutral and combined reasons given by parents/caregivers for overall progress rating.

Reason	Positive	Negative	Neutral	Both	Total
Quality of teaching	375	41	18	2	**436**
Quality of teacher aides	310	41	18	4	**373**
School leadership	237	19	15	3	**274**
Adequacy of resourcing	184	175	24	0	**383**
Quality of specialist support	174	71	18	1	**264**
Liaison between support services	137	40	7	1	**185**
Timeliness of resourcing	113	101	7	1	**222**
Other	11	0	1	0	**12**
Total	**1541**	**488**	**108**	**12**	**2149**

The ratings provided by the teachers and the parents/caregivers, regarding the overall progress that individual case study students had made, were compared for 467 case study students. There is a positive, weak but significant correlation between the teacher and parent/caregiver rating of overall progress for these students[50]. For Category 2 students, there is a weak, non-significant correlation between the teacher and parent ratings[51], but there was statistically significant agreement between the teachers and parents of students in each of the other three categories of special needs about the progress that the child is making under the current plan of support[52].

The reasons given for the ratings of overall progress were also very similar for both teachers and parents/caregivers, including the two reasons on which the nature of responses were the most evenly divided – the adequacy and timeliness of the resourcing available.

Parents were also asked whether their child attended the local school or not. Of the 519 parents/caregivers who responded to this question, 318 (61.3%) indicated that their child

[50] For all students (n=467), r=.249, p<.001

[51] For Category 2 students (n=126), r=.162, p=.071

[52] For Category 1 students (n=162), r=.299, p<.001
For Category 3 students (n=67), r=.312, p=.010
For Category 4 students (n=112), r=.235, p=.012

was at the nearest school, and 201 (38.7%) indicated that their child was not. There was no statistically significant difference between the responses of parents/caregivers in the three decile groups regarding their decision concerning enrolment at the local school. Nor were there any statistically significant differences according to school location or other demographic variables.

If their child was not at the local school, parents/caregivers were asked the reason(s) for this choice (Table 4.59). Of the 201 parents/caregivers whose child was not attending the local school, 27 (5.2% of the total case study sample) said that their child was not welcome there and 65 (12.5% of the sample) said that the local school could not cater for their child. Regarding the school that their child was currently enrolled in, 125 parents/caregivers (62.2%) indicated that it had appropriate programmes. The same number stated that they preferred the quality of education offered there (n=125, 62.2%) while 81 (40.3%) said that their child was happier at their current school (n=81, 40.3%). Twelve (6.0%) parents/caregivers said that they had other reasons for their choice.

Table 4.59: Reasons given by parents/caregivers for child not attending local school (n=519).

Reason for Not Attending Local School	Total	
	n	*%*
Not welcome at local school	27	5.2%
Local school cannot cater for my child	65	12.5
Current school has appropriate programmes and expertise	125	24.1
Prefer general quality of current school	125	24.1
Child happier at current school	81	15.6
Other	12	2.3

There were no statistically significant differences in the reasons given for not attending the local school for any of the school location or demographic variables. With reference to the earlier rating that parents/caregivers gave regarding overall progress of their child, there were no statistically significant differences in the parental ratings whether the child attended the local school or not[53].

Parents/caregivers (n=528) were asked if there were any other programmes or sources of support external to the school that their child accessed. A total of 213 (40.3%) reported that there were (Table 4.60). The most commonly reported programmes or sources of external support, from these parents, were community programmes (n=125, 58.7% of the 213 parents) (for example, CCS, Autism Support Group, Riding for Disabled), followed by

[53] χ^2 (5)=5.120, p=.401, ns

therapies (including physical, occupational, behavioural optometry) for 61 students (28.6%), and learning programmes (for example, Brain Gym, Kip McGrath, NumberWorks) for 50 students (23.5%). Socialising programmes, medical treatments, and other non-specified resources were also purchased or accessed for a further 47 students (22.1%). The parents of 59 students (27.7%) reported that they purchased or accessed more than one of these resources, with 50 accessing two additional resources, seven accessing three resources, and two accessing four additional resources for their child.

Table 4.60: External programmes and sources of support accessed by case study students (n=213).

Type of Programme or Support	Number of Students	Percent
Community programmes	125	58.7
Physical or occupational therapy, behavioral optometry	61	28.6
Learning programmes	50	23.5
Socialising programmes	35	16.4
Medical treatment or support	7	3.3
Other	5	2.3

Information was obtained on whether the case study students (n=633) had one-to-one access to teachers and teacher aides, or whether these resources were shared with several other students at a time. For teachers, the data collected indicated the FTTE that was accessed one-to-one or shared, and for the teacher aides it was given in hours per week. There was no indication of how many other students were involved in shared sessions with the teacher or teacher aide.

A total of nine of the case study students had one-to-one access to an additional teacher for a total of 23 hours per week or about 2.5 hours per week per student. The maximum amount of time that any of one these students spent with the teacher individually was reported as 4 hours in any given week. There were five Category 1 students who had the one-to-one attention of an additional teacher for 2.2 hours per week, one Category 2 student who had 3 hours of one-to-one attention, and three Category 4 students who had an average of 3 hours of individual attention each week.

A total of 97 shared teacher hours per week were reported as accessed by 15 of the case study students. This means that they shared, with other students, about 6.5 hours per week with an additional teacher. The maximum amount of shared time was reported as 16 hours in a week. The eight Category 1 case study students, who shared a teacher, did so for an average of 8.2 hours per week. Two Category 2 students shared the teacher for one and a half hours per week. The two Category 3 students had an average of 5.0 shared hours per

week, and the three Category 4 students shared an average of 5.5 hours of additional teacher time per week.

One-to-one contact with a teacher aide was experienced by 369 of the case study students, for a total of 4398 hours per week. This equates to an average of 11.9 hours per week. The number of hours spent with the teacher aide ranged from a full week with a teacher aide to a minimum of one hour per week. There were 55 Category 4 case study students, who averaged 6.2 hours per week with the teacher aide, 58 Category 3 case study students who averaged 9.3 hours per week with the Teacher Aide, 91 Category 2 case study students who averaged 8.8 hours per week, and 164 Category 1 case study students who averaged 16.5 teacher aide hours per week.

A total of 164 of the case study students shared teacher aide time, for a total shared time of 1610 hours per week. The average shared time that these case study students spent with a teacher aide was just under ten hours per week. The number of hours ranged from a full week spent with a teacher aide to as little as one hour per week. Of the Category 1 case study students (n=52), the average amount of teacher aide time they shared each week was 13.2 hours, while for Category 2 case study students (n=48), the average shared Teacher Aide time was 7.8 hours per week. For Category 3 case study students, (n=14) the average shared time per week was 8.4 hours, and for Category 4 case study students (n=50), an average of 8.7 teacher aide hours per week was shared with other students.

Twenty-two case study students were enrolled in a special school. Of these, three received individual attention from a teacher for 3 hours per week each, and for those who shared teacher time (n=5), the average was 12.4 hours per week, with a maximum of 16 and a minimum of 1 hour per week. With regard to teacher aide time, ten case study students in special schools received an average of 10.1 hours of individual teacher aide time per week, and a further ten were in a shared teacher aide situation for the full week.

> Chapter 5: The Utilisation and Distribution of Resources and Services

In this chapter the school level data reported in the previous chapter is further analysed in order to describe and compare the distribution and use of the various resources and services. Distribution across schools and the four categories of special need are considered using a range of school demographic factors. We also describe how the various services are accessed from across the special needs resourcing available to schools.

> The Utilisation of Resources by Services

Support for students with special needs is provided through a number of services. The main services are teacher aide hours, specialist support, additional FTTE, curriculum delivery and the SENCO. In this section, we summarize what proportion of each of these main services is provided by each of the resources available to schools and students as reported by the participant schools (Table 5.1).

Table 5.1: Quantity and percentage of service by resource.

	Teacher Aide		Specialist Support		Teacher FTTE		Resources for Delivering Curriculum		SENCO	
	Hours	*%*	*Hours*	*%*	*FTTE*	*%*	*$*	*%*	*FTTE*	*%*
School-Managed Resources										
EPF	4722	0.9	264	1.1	12	4.7	71198	3.7	2	9.5
LSF	12744	2.4	615	2.5	2.3	0.9	31715	1.6	-	-
RTLB	4960	1.0	80	0.3	3	1.2	152208	7.9	0.37	1.8
SEG	118414	22.6	591	2.4	25	9.7	169143	8.7	2	9.5
Tracked Individual Resources										
ACC	14125	2.7	368	1.5	-	-	-	-	-	-
School High Health	7038	1.3	1675	6.9	-	-	-	-	-	-
Moderate Health			226	0.9						
ORRS	174497	33.3	10194	41.8	101.9	39.7	190066.4	9.8	4.9	23.3
SBI	16239	3.1	610	2.5	-	-	3535	0.2	-	-
Speech	-	-	1283	5.3	-	-	-	-	-	-
SLS	-	-	3303.5	13.6	-	-	-	-	-	-
Other										
Ops	89914	17.2	1299	5.3	89.5	34.9	880255	45.5	8.7	41.4
TFEA	52478	10.0	2303	9.5	14	5.5	255304	13.2	1	4.8
Other MoE	17355	3.3	605	2.5	7	2.7	44679	2.3	2	9.5
Community	8161	1.6	153	0.6	2	0.8	130121	6.7	-	-
Parent	3627	0.7	800	3.3	-	-	5825	0.3	-	-
Total	524274	100	24369.5	100	256.7	100	1934049	100	21.0	100

Teacher Aides

A total of 524,274 teacher aide hours were reported as being utilised in the participant schools during Terms 1 and 2, 2007. Figure 5.1 displays the resources used to provide these.

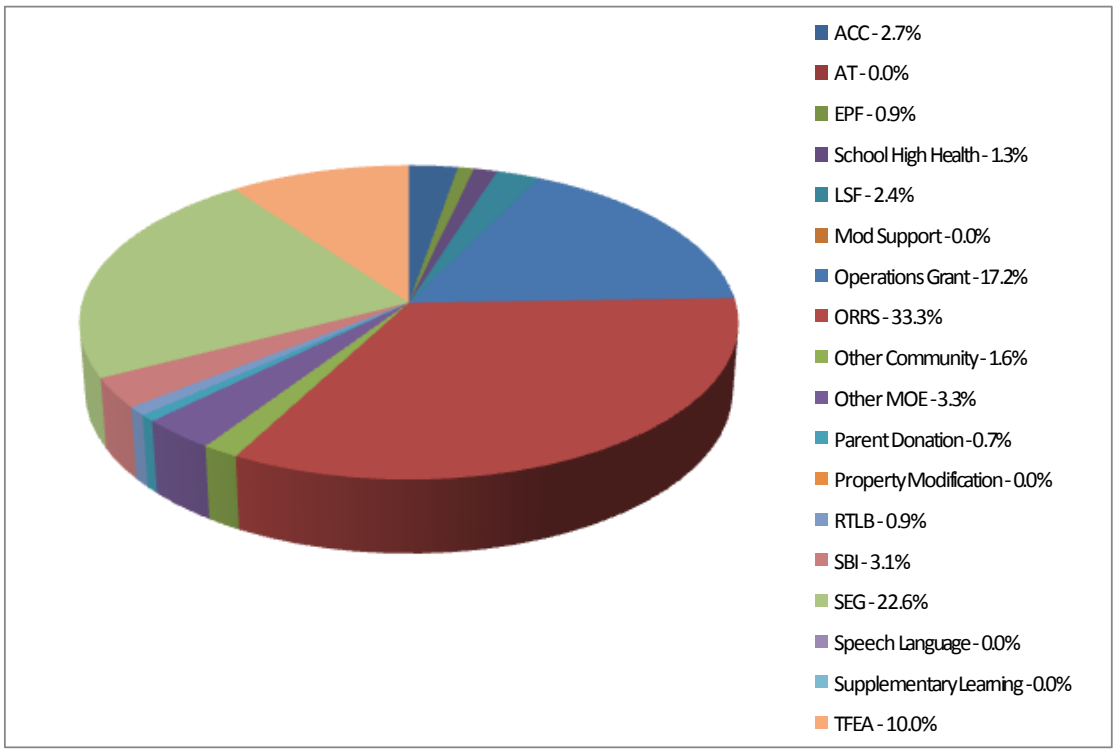


Figure 5.1: Source of Teacher Aide hours.

One third of the total number of teacher aide hours, utilised for students in the participant schools, were provided from ORRS (33.3%), and 22.6% from SEG. Relatively large portions of the teacher aide hours also came from the Operations Grant (17.2%) and TFEA (10.0%).

Specialist Support

Figure 5.2 shows how the reported 24,369.5 hours of specialist support were sourced for students in Terms 1 and 2.

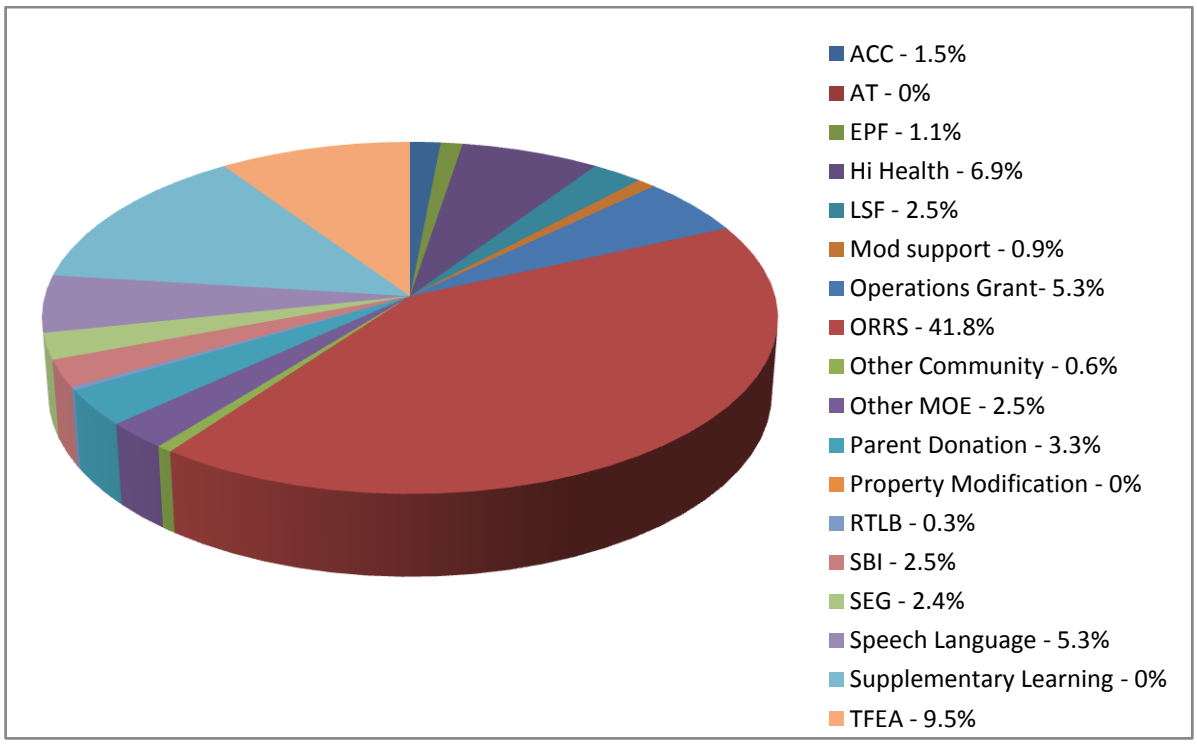


Figure 5.2: Source of Specialist Support hours[54].

Again, ORRS resourcing is the major contributor to this service, with 41.8% of the number of specialist support hours utilised being provided by this resource. Lesser amounts of specialist support were provided through TFEA (9.5%), School High Health (6.9%), Operations Grant and Speech Language Initiative (5.3%). Each of the other resource streams account for less than 5% of the specialist support provided to students in the participant schools.

[54] Specialist Support in the context of this survey is much broader than that generally used. It means any external support that schools deem to be specialist (e.g., specialist teachers or physiotherapists).

FTTE

Special needs resourcing provides an additional 257 FTTE to the staffing pool of the schools in this study. Figure 5.3 shows how what resources these schools have utilised to provide these additional FTTE.

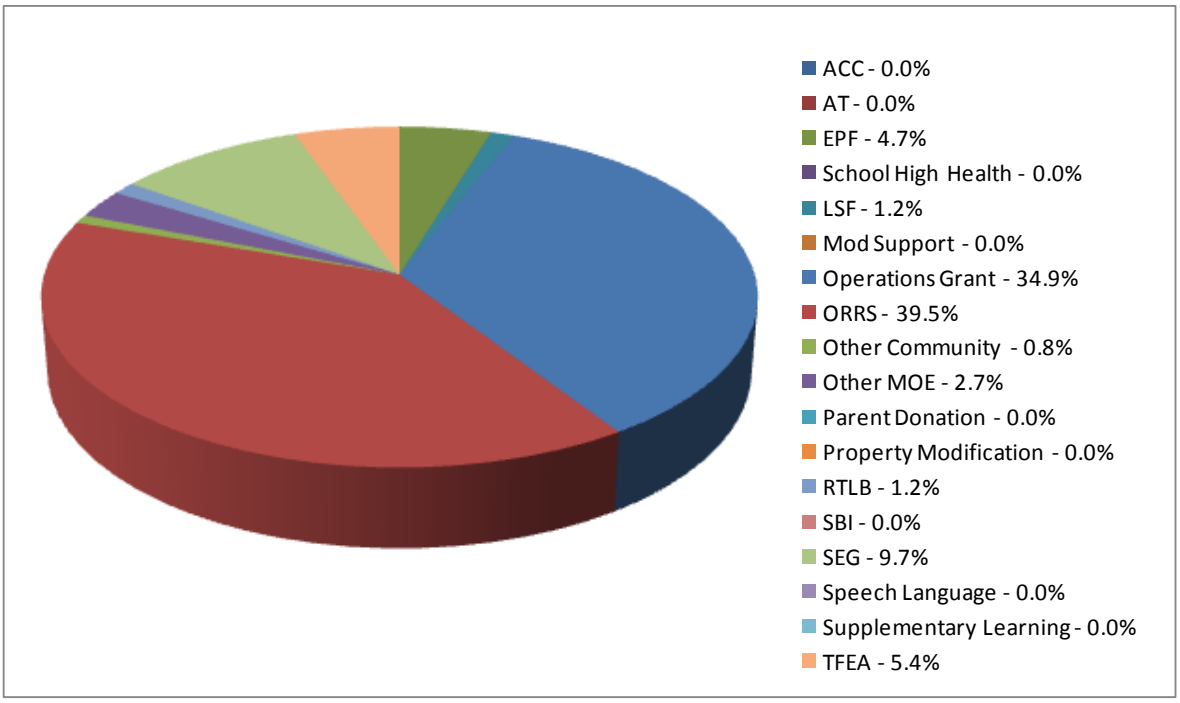


Figure 5.3: Source of additional Full Time Teacher Equivalent (FTTE).

Almost 40% of the additional teachers are provided through ORRS resourcing, with another third being provided through the Operations Grant. SEG (9.7%) and TFEA (5.5%) are the other relatively large contributors to the additional staffing of schools to cater for students with special needs.

Resources for delivering curriculum

Schools are able to provide a range of resources for curriculum delivery utilising special needs resources (Figure 5.4). The major source of these materials is from the Operations Grant (45.5%). TFEA (13.2%), ORRS (9.8%), SEG (8.8%), RTLB (7.9%), and Other Community resources (6.7%) also support the provision of curriculum materials to a reasonably large extent.

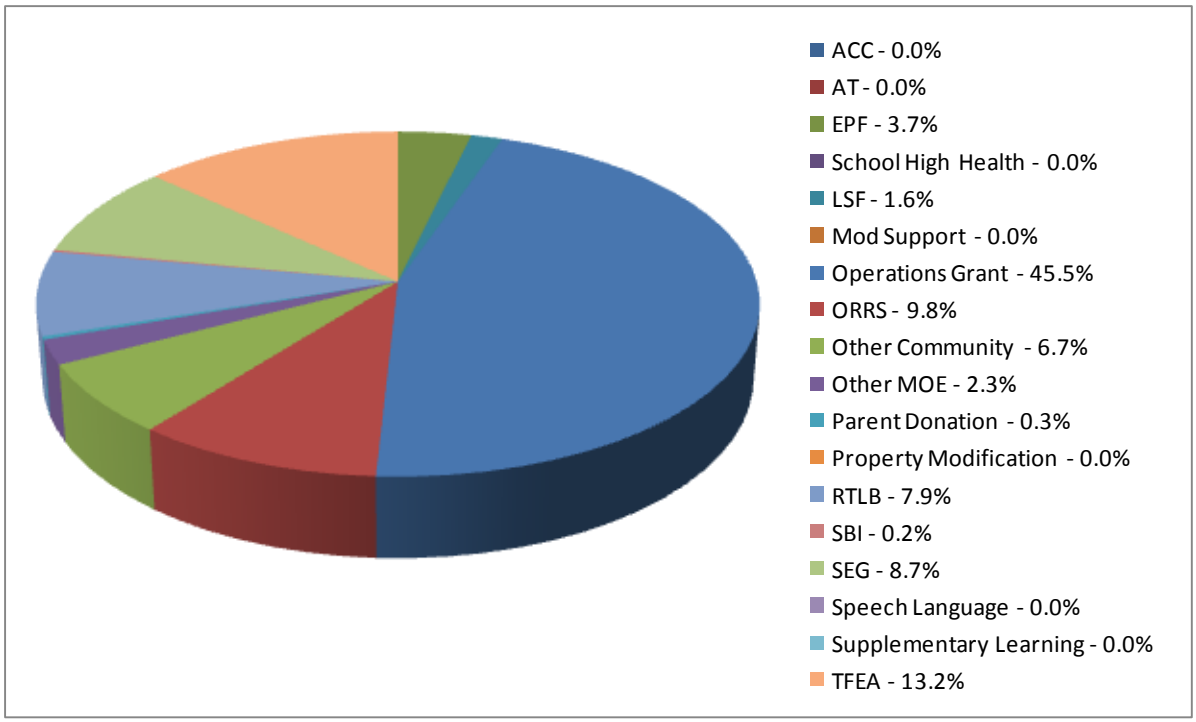


Figure 5.4: Source of Curriculum Delivery.

SENCO

The equivalent of 21 FTTE are utilised in these schools for SENCO services (Figure 5.5). Operations Grant (41.5%) and ORRS (23.4%) together provide two-thirds of the SENCO resourcing, with EPF, SEG, and Other MOE contributing approximately equal amounts towards the SENCO (9.5% in all cases).

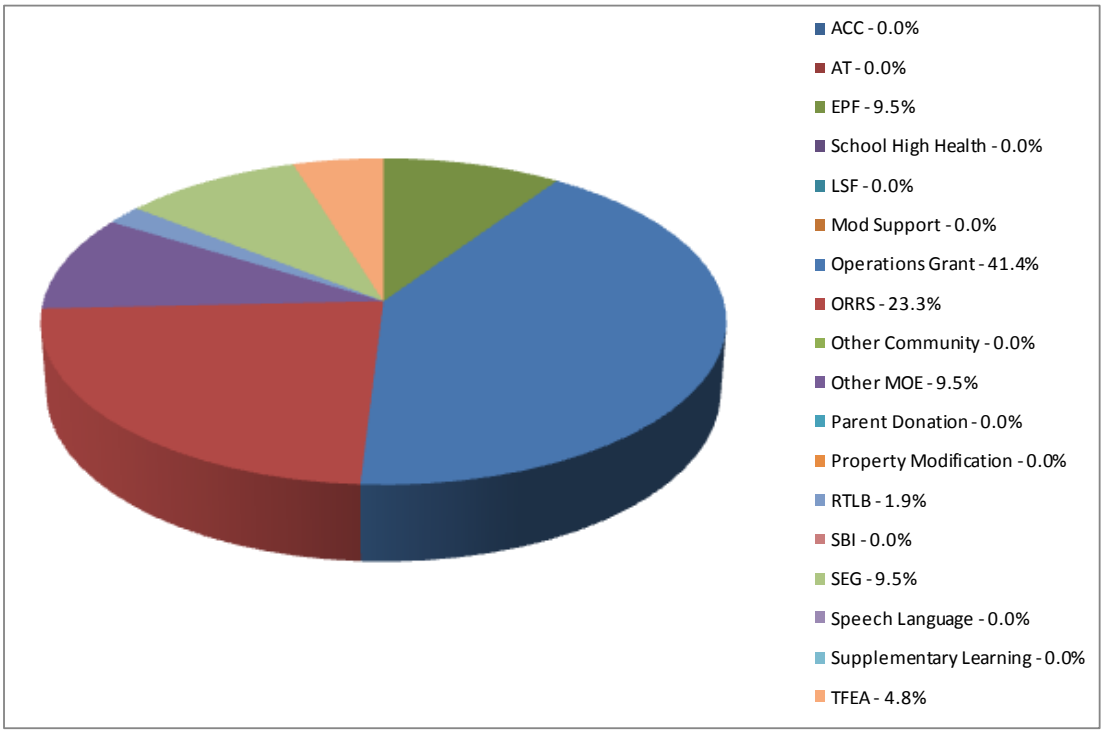


Figure 5.5: Source of SENCO hours.

Total services provided through special needs resourcing

Table 5.2 summarises how all the available resources are converted into services for students with special needs. This is in monetised terms as outlined in the methodology section[55].

Table 5.2: Summary of services provided to students.

Reported use	Value ($)	% of total
Working with students	513860	2.3
Teacher Aide	7241752	32.9
Specialist Support	915870	4.2
Teacher	7443169	33.9
Resources for Delivering Curriculum	1934049	8.8
External Programmes and Activities	121100	0.6
SENCO	608014	2.8
PD for Teachers	234156	1.1
PD for Teacher Aides	79529	0.4
Other	1,037,630	4.7
Physical	1850719	8.4
Total	**21979848**	**100**

Figure 5.6 shows the proportion of each dollar of available resourcing that is spent on each type of service across all the participant schools.

[55] The monetised value for services is based on the contact that the schools "see". As indicated earlier there are other costs to the provision of the service.

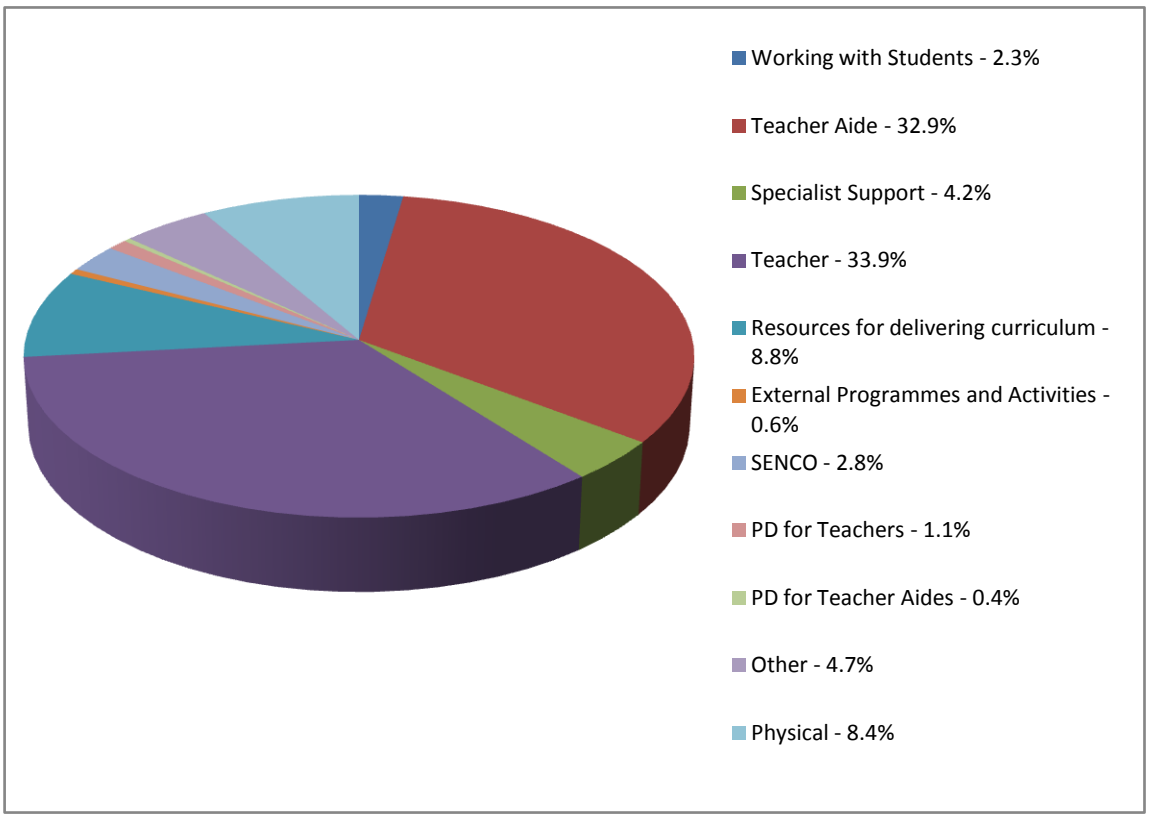


Figure 5.6: Reported Use of the Special Needs Resources.

For each dollar spent, the major proportions are used as follows: 34 cents is spent on providing additional teacher time to support the students, 33 cents is spent on teacher aide time, 9 cents is spent on curriculum delivery, and 4 cents is spent on specialist support.

The monetised value of this support is almost equal in terms of teachers and teacher aides. However, in terms of the number of hours spent with students, all of the resource streams provided about 520,000 teacher aide hours, and 128,000 teacher hours during terms 1 and 2, 2007. For every hour of teacher time provided to students with special needs, they will, on average, experience about four hours of teacher aide time. Thus, the majority of the time that students have personal support is with a teacher aide.

> The Distribution of Resources across Schools

In previous sections, both the allocation to and the utilisation of the various special needs resources in schools over Terms 1 and 2 of 2007 were described. In this section, how this allocation and utilisation varied around a range of school demographic factors is investigated, including whether or not a school was a resource/fund holding school or a mainstream/special school. Also considered is the impact of the proportion of special needs students in a school on the way resources are allocated and used.

In all instances, statistical significance at the 5% level has been reported – where a reported result is statistically significant, this means that there is less than a 5% chance that this

outcome would have occurred by chance and we can infer that the outcome is probably an effect of the variable of interest.

An analysis of covariance (ANCOVA) was conducted on the estimated value of each resource (as supplied to schools by the Ministry of Education, and the monetised value of services reported by schools) to control for the number of students on the roll. In this way the effect of school size on the value of the resources analysed was eliminated. Special schools were not included in this analysis, as all students in those schools are classified as special needs students.

When considering the results reported in this section, the small numbers of schools in some of the categories needs to be acknowledged. For example, there are only 4 schools with over 75% of their student population categorised as special needs.

Effects of Decile Group

With the exception of the EPF, the Ministry allocates school-managed resources to schools according to a formula that includes the school decile rating as well as the school roll. After controlling for school roll, we found statistically significant differences in the mean estimated value for each of the school-managed resources supplied by the Ministry of Education, by decile, exactly as would be expected.

In the case of tracked individual resources, once the number of students receiving the resource has been controlled for, we would expect there to be no statistically significant differences in the amount of resourcing received from the Ministry based on the decile group of the school. An analysis of covariance indicated that there were no statistically significant differences in the per head estimated value of the individually allocated resources supplied by the Ministry of Education to schools in the three decile groups. This is because the amount of the resource provided to the school was based on the verified needs of the individual student, and not on any school characteristic.

Statistically significant differences were found in the reported school use of the EPF, and TFEA according to decile grouping after controlling for school roll. For the EPF[56], the amount spent in low decile schools (M=$5791.25, SD=$13681.55) was statistically significantly more

[56] $F(2,232)=7.655$, $p=.001$, $\eta^2=0.062$

The effect size shown is partial eta-squared (η^2), and is equivalent to the amount of variance in the resourcing data explained by the grouping variable - decile group, in this case. To interpret these effect sizes, $\eta^2 > 0.25$ is regarded as large, $\eta^2 > 0.1$ as medium, and $\eta^2 > .05$ as small.

than that spent in medium decile schools (M=$1990.45, SD=$7611.39) and high decile schools (M=$498.22, SD=$3904.46) (Figure 5.7).

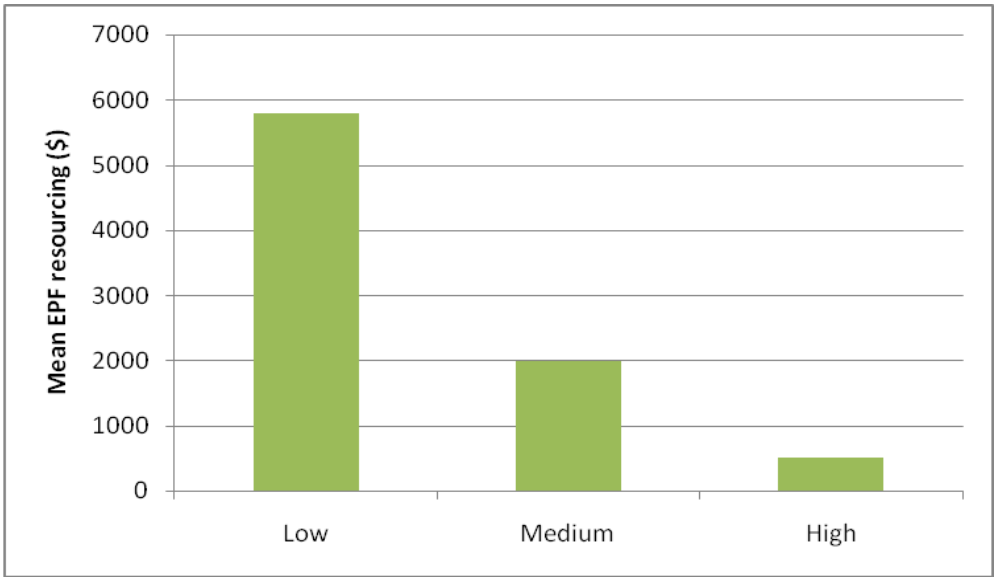


Figure 5.7: Mean spending on EPF by schools according to decile.

For TFEA[57], the amount reported as utilised in low decile schools (M=$12937.93, SD=$18679.92) was also statistically significantly more than the amount spent in medium decile schools (M=$6156.70, SD=$14044.90) or high decile schools (M=$2176.73, SD=$5518.77) (Figure 5.8).

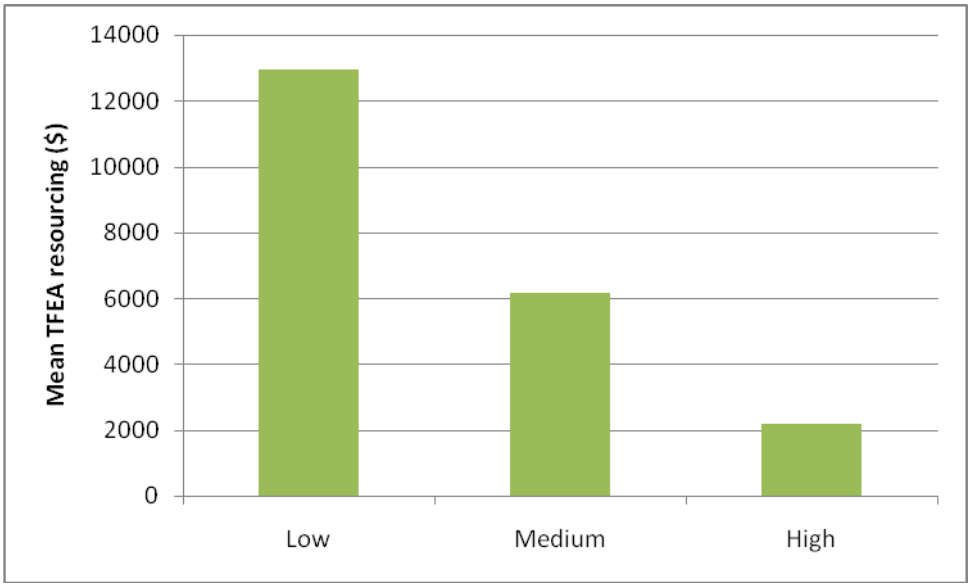


Figure 5.8: Mean spending of TFEA by schools according to decile.

[57] $F(2,232)=13.447$, $p<.001$, $\eta^2=.104$

Effects of School Location (Area Type and Isolation Index)

Area Type

There were statistically significant differences in the estimated value of the Ministry supplied resourcing for LSF[58] according to area type status. The supply of resources to major urban schools (M=$2006.34, SD=$1221.24) was greater than that to minor urban schools (M=$1713.05, SD=$688.53), and to secondary urban schools (M=$1607.44, SD=$983.95). Rural schools (M=$488.17, SD=$398.36) received statistically significantly less than the other area type schools once roll size was controlled (Figure 5.9).

Figure 5.9: Mean LSF received by schools according to Area Type.

No statistically significant differences were found in the estimated value of the other resources supplied to schools, or in the school reported utilisation data after the school roll was controlled for.

Isolation Index

There were no statistically significant differences in the estimated value of resourcing supplied to schools by the Ministry according to isolation index status, once roll size was accounted for.

Statistically significant differences were found in the reported use (i.e., estimated value) by schools for Assistive Technology[59] based on their isolation index status. The least remote schools (that is, schools in towns and cities) reported statistically significantly less use of this

[58] $F(3,230)=7.669$, $p<.001$, $\eta^2 =.091$

[59] $F(3,224)=8.368$, $p<.001$, $\eta^2=.101$

resource (M=$326.23, SD=$1197.34) than isolated schools (M=$1379.43, SD=$4173.85) and remote schools (M=$4759.00, SD=$13893.09) (Figure 5.10).

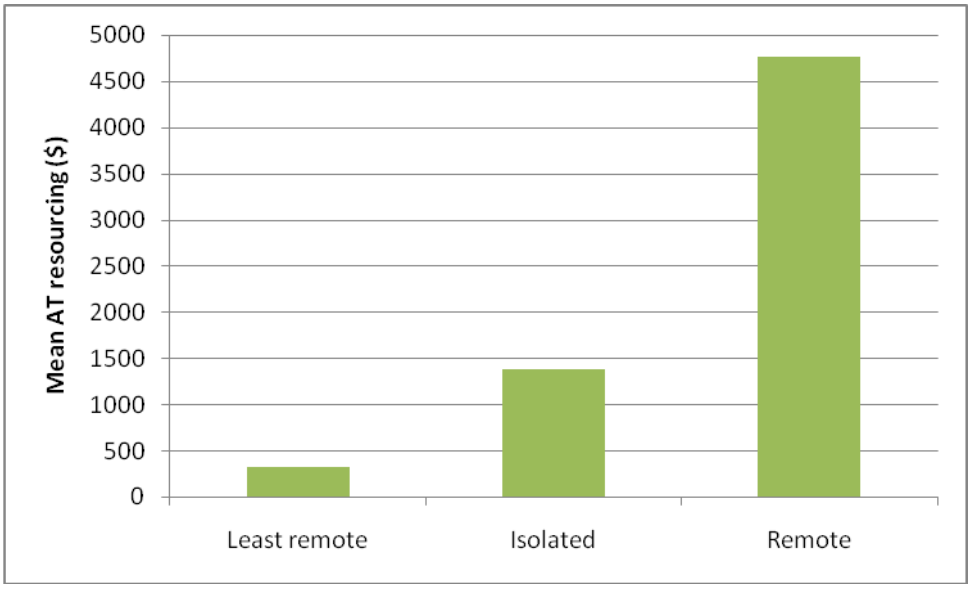


Figure 5.10: Mean spending on Assistive Technologies by schools according to Isolation Index.

School Size

In the study, schools were classified in three groups to indicate their relative size - small, medium or large[60]. For school-managed resources, we would expect there to be no effect on the ministry supplied per head estimated value according to school size, as this will have already been controlled in the analysis.

For the tracked individual resources, there were also no statistically significant differences found. Neither were any found for the school reported usage data.

Effect of the Proportion of Category 1 to 4 Students within a School Population

It is reported in some of the literature that mainstream schools with a high proportion of special needs children are disadvantaged by roll-related formulae which allocate the same amount of a resource to schools of similar size and decile without regard to the number of special needs children in the school (Bourke & O'Neil, 2001; Massey University College of Education, 2002).

An analysis of covariance (controlling for school roll) was conducted on the estimated value of each resource (as supplied to schools by the Ministry of Education), and the monetised

[60] Refer to Appendix 2 which explains these groupings.

value of services reported by schools to assess these claims. Special schools were not included in this analysis, as all students in those schools are classified as special needs.

Four schools reported over 75% of their roll as being classified in one of the four categories. These four schools were all co-educational, small with a total school roll less than 100, and were in rural or minor urban areas. They were low or mid decile (that is, they had a decile rating less than 8). As a result of the small number of schools reporting this level of students with special needs the following findings should be read with some caution.

Statistically significant differences were found in the school reported utilised value of the EPF, and TFEA, and in the Ministry reported allocated value of the SEG, and LSF, by the proportion of students in one of the categories within a school roll.

For the school reported EPF resourcing[61], schools with less than 25% of the roll classified as being in one of the four special needs categories (M=$1597.04, SD=$6851.65) spent significantly less than schools with 25% to 49% of the roll (M=$5383.56, SD=$13707.21) and schools with between 50% and 74% of the roll (M=$6728.18, SD=$13883.64) in one of these special needs categories (Figure 5.11). There were no EPF data reported by schools with more than 75% of the roll in the four special needs categories.

It should be noted that the nature of EPF funding means in some instances schools may have already accessed this fund and, at the time of the interview, have completed their three years entitlement. This could explain why schools with 75% of their students categorised as special needs did not report utilisation of EPF. It may also be that they had applied but had not yet accessed any of the resource.

[61] $F(3,220)=3.568$, $p=.015$, $\eta^2=.046$

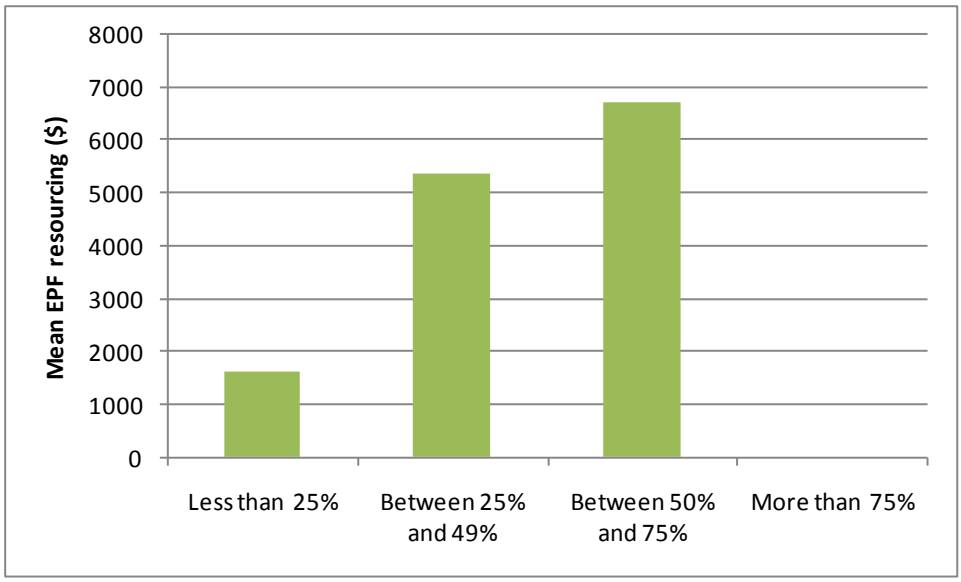


Figure 5.11: School use of EPF by proportion of students with special needs.

For the school reported TFEA resourcing[62], schools with less than 25% of the roll (M=$5349.78, SD=$12890.82) and schools with more than 75% of the roll (M=$2561.00, SD=$3108.67) classified as being in one of the four special needs categories spent significantly less than schools with 25%-49% of the roll classified in one of the four categories (M=$11443.22, SD=$18255.05) and schools with between and 50% and 75% of the roll (M=$13141.82, SD=$13994.59) in these special needs categories (Figure 5.12).

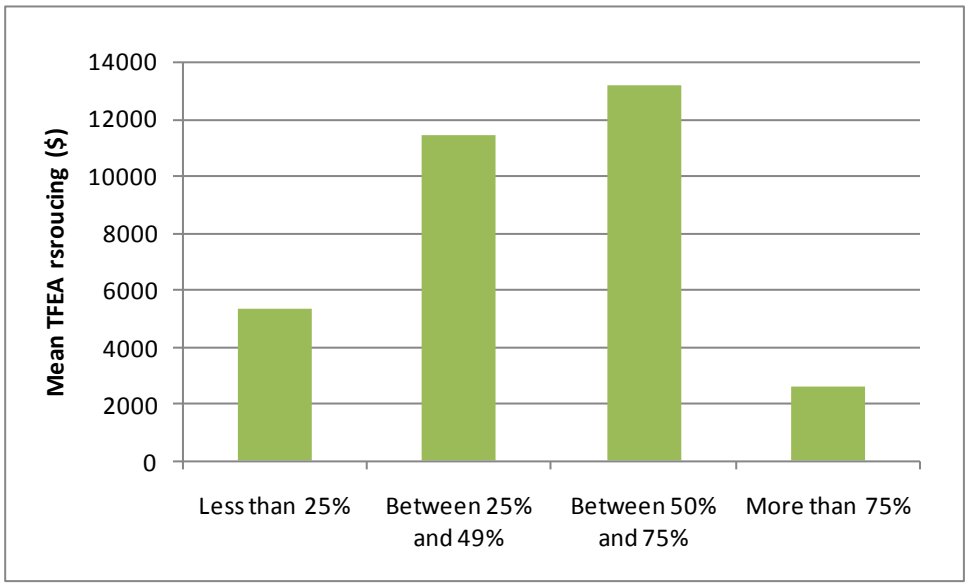


Figure 5.12: School use of TFEA by proportion of students with special needs.

[62] F(3,220)=3.568, p=.015, η^2=.046

For the Ministry supplied SEG resourcing[63], schools with over 75% of the roll (M=$1958.35, SD=$664.61) classified as being in one of the four special needs categories received statistically significantly less than schools with between 50% and 75% of the roll in one of these four categories (M=$10199.53, SD=$8802.69), schools with between a 25% and 49% of the roll in one of the four categories (M=$8097.76, SD=$4848.09), and schools with less than 25% of the roll in one of the four categories (M=$9298.74, SD=$8066.64) (Figure 5.13).

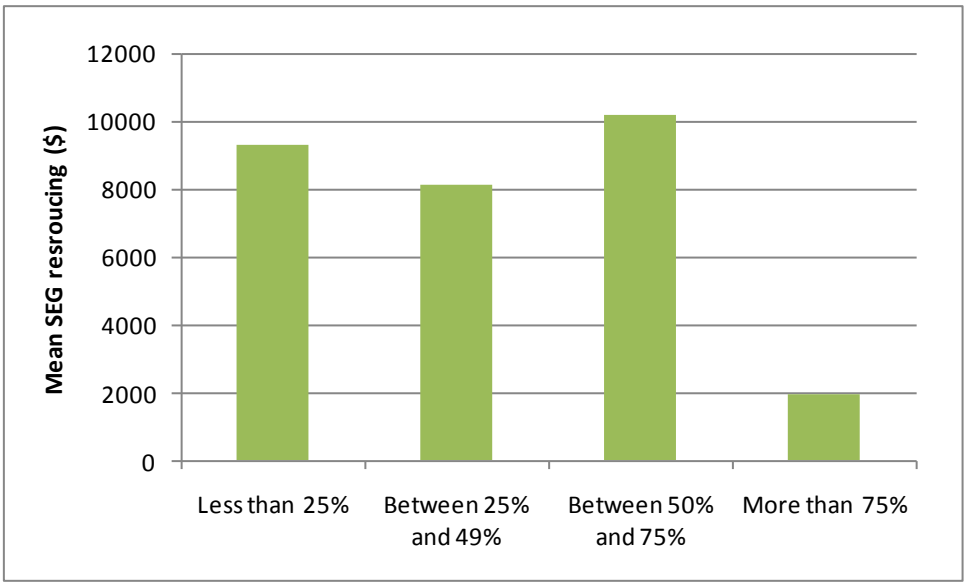


Figure 5.13: Ministry supply of SEG by proportion of students with special needs.

The Ministry provision of LSF[64] to schools with more than 75% of the roll classified as being in one of the four categories (M=$359.26, SD=$148.06) was statistically significantly less than all other schools – that is, schools with less than 25% of their students in one of the four categories (M=$1636.19, SD=$1161.20); schools with between 25% and 49% of their students in one of these categories (M=$1724.53, SDF=$1046.53); and, schools with between 50% and 75% of their students in one of the four categories (M=$1965.17, SD=$1780.08) (Figure 5.14).

[63] $F(3,219)=7.734$, $p<.001$, $\eta^2=.096$

[64] $F(3,219)=5.762$, $p=.001$, $\eta^2=.073$

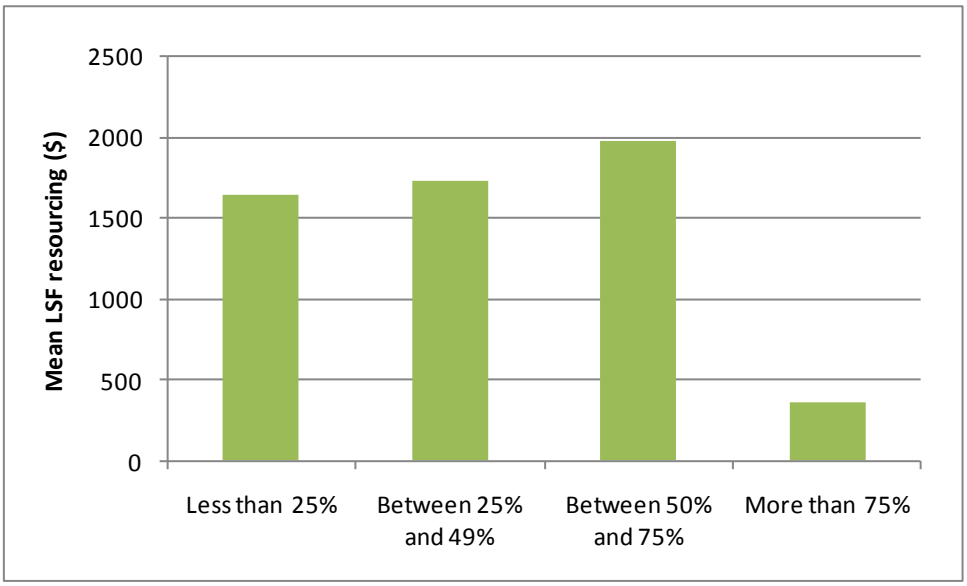


Figure 5.14: Ministry supply of LSF by proportion of students with special needs.

School Type

Mainstream School Type

Six school types – contributing, full primary, intermediate, composite, Y7-15, and Y9-15 schools – were identified in this study amongst the mainstream schools.

Statistically significant differences were found in the Ministry supplied estimated value for LSF[65] based on mainstream school type. Composite schools (M=$759.94, SD=$507.12) received statistically significantly less than contributing schools (M=$1695.13, SD=$1104.47), intermediate schools (M=$2988.15, SD=$1450.02), Year 7-15 schools (M=$2143.42, SD=$1322.07), and Year 9-15 schools (M=$2548.32, SD=$951.59) (Figure 5.15).

[65] $F(5,228)=31.105$, $p<.001$, $\eta^2=.406$

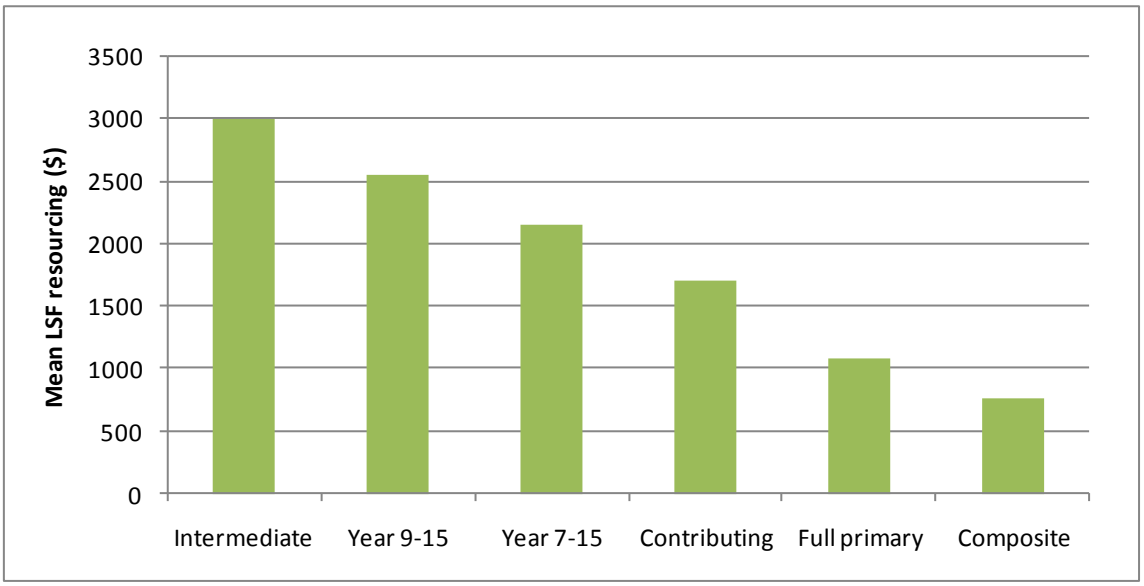


Figure 5.15: Mean LSF received by schools according to Mainstream School type status.

There were no statistically significant differences in any of the other Ministry supplied resources or in any of the school reported utilisation.

Resource/Fund Holding & Management status

Most resources/funds are allocated directly to and managed by an individual school, but ORRS, RTLB and LSF are managed through different mechanisms. Schools receive ORRS services in a variety of ways. In the majority of schools it is through GSE. The remaining schools act either as resource holders on their own behalf or they are part of a cluster whose services are managed by a resource holding school.

The LSF and RTLB resources are managed through cluster arrangements, whereby a resource/fund holding school distributes services to a number of schools in a cluster, based on the decisions of the cluster management group. In this section, we explore whether there are statistically significant differences in RTLB and LSF reported usage by schools according to the type of resource/fund holder arrangement.

RTLB Host School Status[66]

It is not possible to determine whether there are any differences in the amount of the RTLB service that an individual school receives from the Ministry of Education, as all of the RTLB resource is allocated to clusters of schools. Individual schools then receive RTLB hours and services from the decisions that are made at cluster level. Within a cluster, one school (and

[66] A host school is one where an RTLB is based.

for some larger clusters, more than one school) acts as a host school, and it is possible to determine whether there is an equitable distribution of services to host and non-host schools within the cluster through school level reported utilisation of the resource.

After taking into account the school roll, there was a statistically significant difference between the number of hours an RTLB was reported as actually working with students in the school, depending on whether that school was a host school or not[67]. The time that an RTLB was reported as spending in a host school (M=139.1 hours, SD=256.9 hours) was statistically significantly more than the reported time for non-host schools (M=41.0 hours, SD=76.7 hours) (Figure 5.16). It should be noted that time spent at the host school is likely to include administrative or other work that supports their delivery elsewhere and as such they could be expected to spend more hours in the host school.

Figure 5.16: Mean time spent by RTLB working with students reported by schools according to Host School status.

Host schools were over three times more likely to report utilising RTLB hours than non-host schools (Table 5.3). In clusters where RTLB hours were planned and allocated, host schools reported that they were allocated almost twice as many hours as non-host schools.

[67] $F(1,223)=19.113$, $p<.001$, $\eta^2=.079$.

Table 5.3: Mean number of planned and received RTLB hours in Fund Holding and Non-Fund Holding schools.

RTLB Host School Status	RTLB Hours Received from Cluster		Planned RTLB Allocation by Cluster (hours)	
	Mean	*SD*	*Mean*	*SD*[68]
Host school	139.1	256.9	60.2	166.4
Not a host school	40.9	76.7	35.7	77.4

Learning Support Fund

For LSF clusters, there were no statistically significant differences in any of the ways in which this resource was reported as being utilised by schools.

> The Utilisation of Services across Schools

In this section the distribution of services across school demographics are considered. Again, there is evidence in the literature to suggest that some schools cannot access certain services such as specialist support.

Differences between schools in the total monetary value or quantity of services such as teacher FTTE, teacher aide hours, and resources for delivering curriculum across all resources were analysed. Differences were analysed according to MoE region, GSE district, school decile, school area type, level of isolation of the school, the size of the school roll, and the type of school were explored. The results of these analyses are discussed below. In all instances a p=.05 criterion was used to denote statistical significance.

Ministry region

The only statistically significant differences between the use of services[69] according to MoE region were in the aggregated value of resourcing used for professional development for teachers[70]. It was found that the estimated dollar amount spent on professional development was greater in the Northern region (M=$2248.46, SD=$4183.36) than in Central-North (M=$1040.64, SD=$2015.51), Central-South (M=$692.85, SD=$1360.39), or Southern (M=$289.67, SD=$446.14) (Figure 5.17).

[68] The large standard deviations are a result of large variation in the number of reported hours of RTLB time, for both planned and received hours.

[69] These figures were not controlled for population

[70] $F(3,221)=7.130$, $p<.001$, $\eta^2=.088$

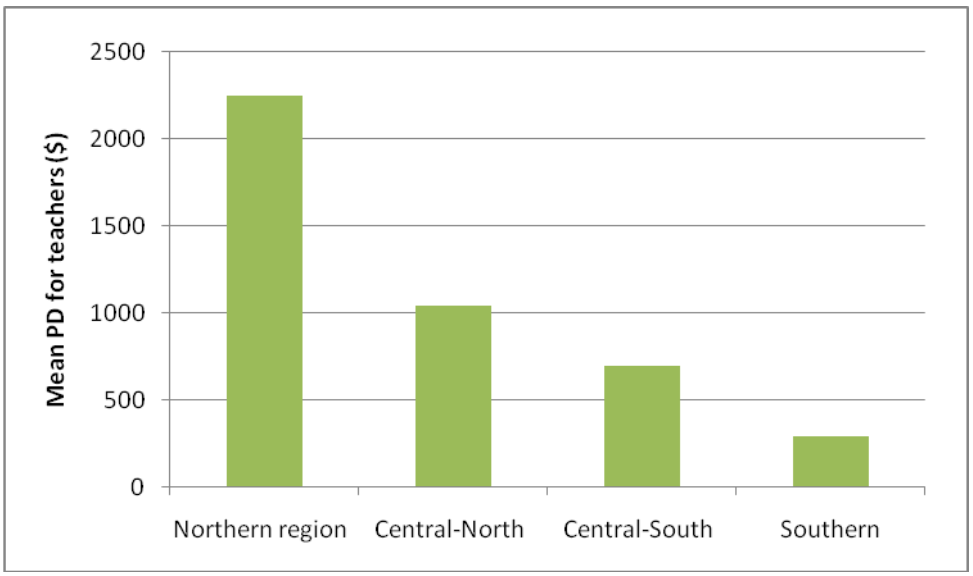


Figure 5.17: Mean spending on professional development for teachers by schools according to Ministry region.

GSE district

The only statistically significant difference in the use of services according to GSE district was in the level of resourcing used for professional development for teachers[71]. It was found that the amount spent was greater in Manukau (M=$3327.63, SD=$5106.35), than in Greater Wellington (M=$342.84, SD=$603.56), Nelson/Marlborough (M=$258.40, SD=$463.01), or Canterbury (M=$280.35, SD=$522.26) (Figure 5.18).

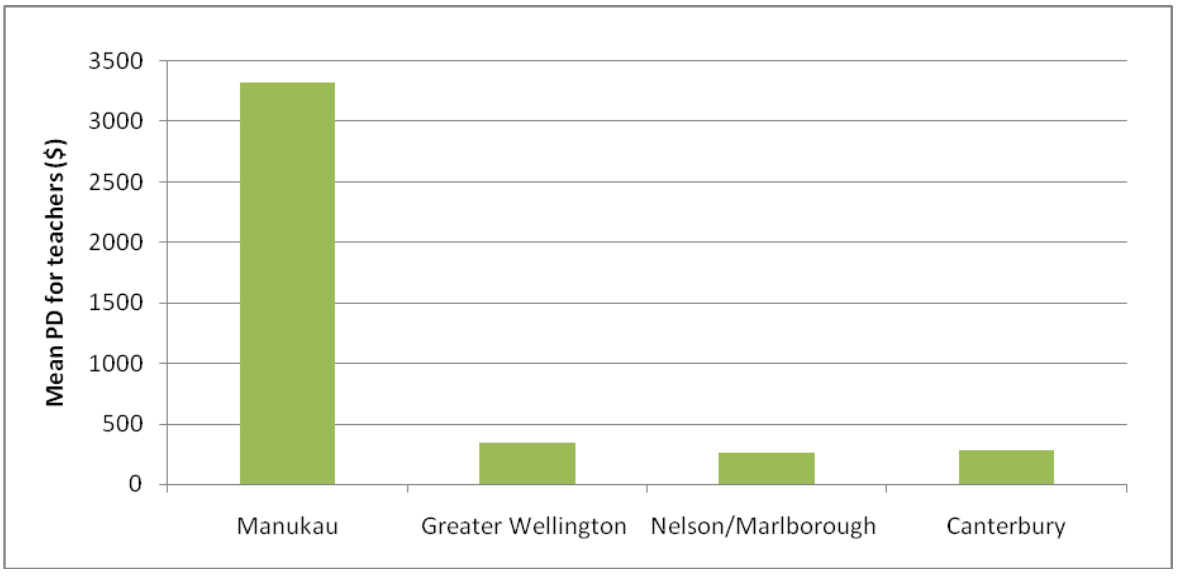


Figure 5.18: Mean spending on professional development for teachers by schools according to GSE district.

[71] $F(15,209)=1.903$, $p=.024$, $\eta^2=.120$

School decile

Statistically significant differences were found for three services when comparing deciles. Firstly, a statistically significant difference was found in the extent of use of FTTE according to school decile[72]. It was found that this difference was attributable to schools from low deciles reporting using a greater amount of FTTE (M=2.3 FTTE, SD=7.2 FTTE) than schools from high deciles (M=0.5 FTTE, SD=1.56 FTTE) (Figure 5.2).

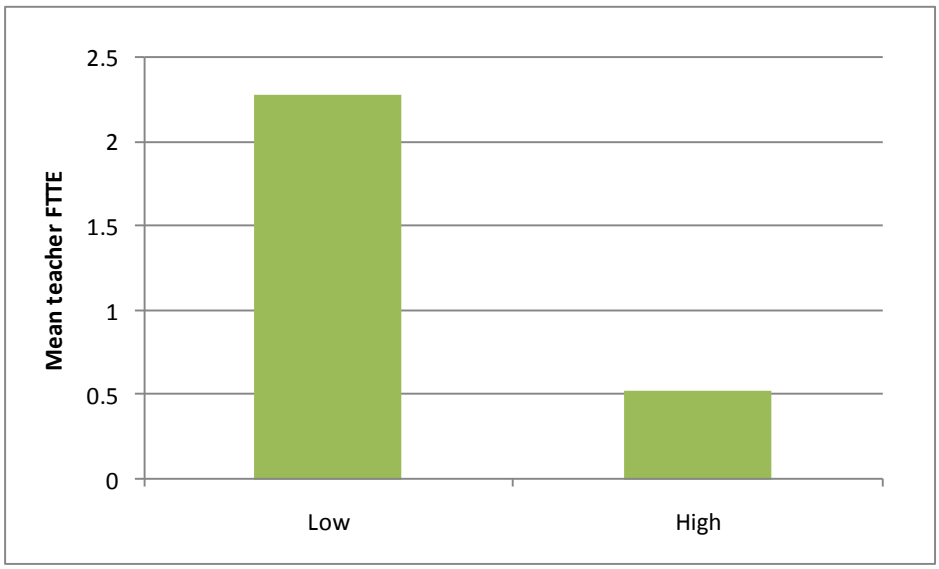


Figure 5.19: Mean teacher FTTE used by schools according to decile.

Secondly, a statistically significant difference was also found in the levels of the provision of resources for delivering curriculum reported according to school decile[73]. As for teacher FTTE, this difference was found to be attributable to a greater amount of resources for curriculum delivery being reported by low decile schools (M=$6987.74, SD=$16856.27) than by high decile schools (M=$2363.50, SD=$5788.05) (Figure 5.20).

[72] $F(2,217)=3.478$, $p=.033$, $\eta^2=.031$

[73] $F(2,222)=3.558$, $p=.030$, $\eta^2=.031$

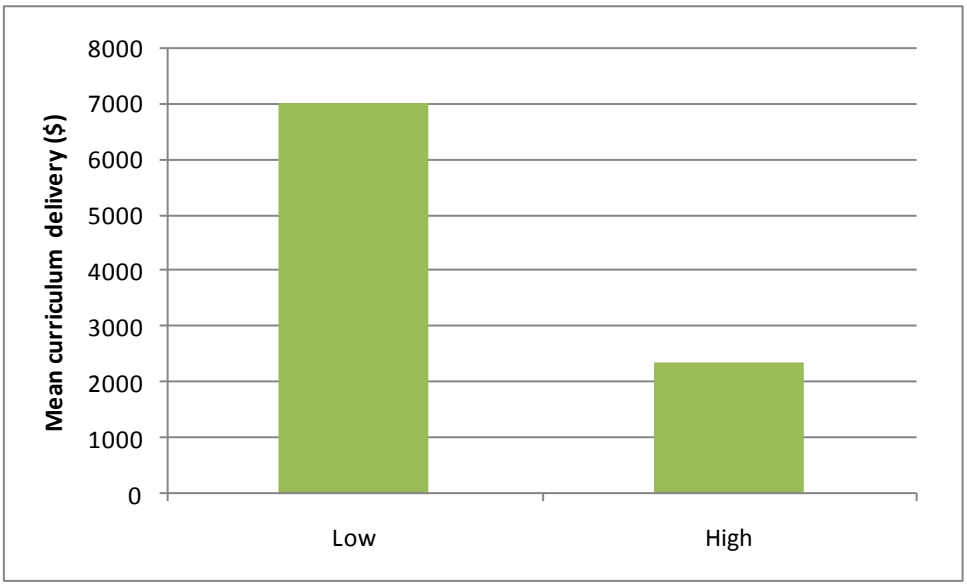


Figure 5.20: Mean spending on resources for curriculum delivery by schools according to decile.

Thirdly, a statistically significant difference was found between the amount of professional development provided for teachers according to school decile[74]. This difference was found to be attributable to more professional development being provided by low decile schools (M=$2205.16, SD=$3711.36) than medium (M=$574.18, SD=$1406.85) or high decile schools (M=$647.03, SD=$1925.65) (Figure 5.21).

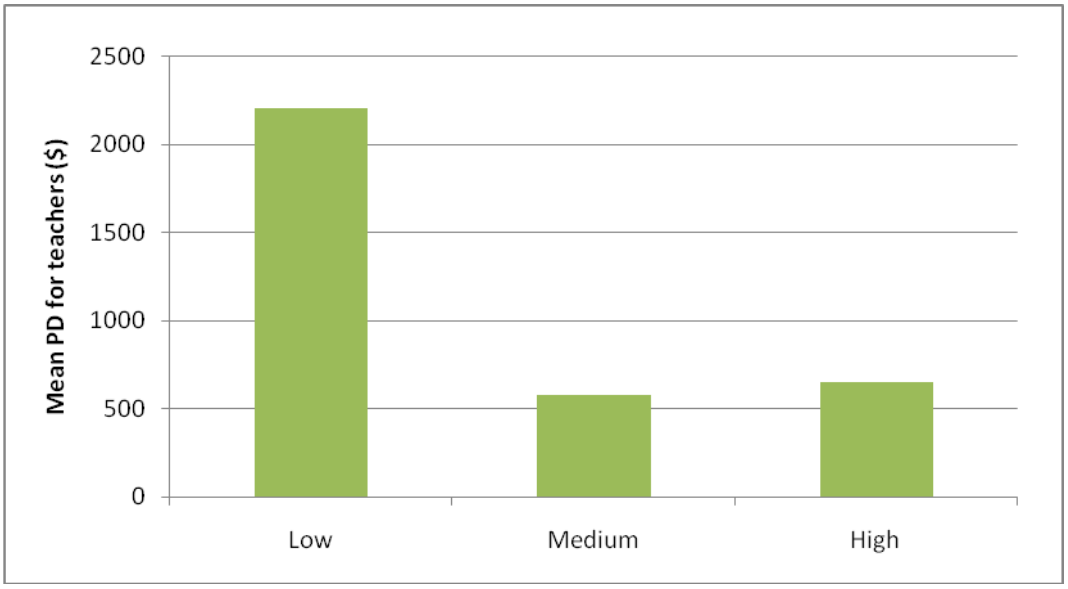


Figure 5.21: Mean spending on professional development for teachers by schools according to school decile.

[74] $F(2,221)=9.946$, $p<.001$, $\eta^2=.083$

School area type

A statistically significant difference was found between the aggregated numbers of teacher aide hours reported according to area type[75]. This was found to be attributable to rural schools (M=603.4 hours, SD=577.6 hours) reporting a lesser number of teacher aide hours than main urban schools (M=2313.0 hours, SD=2592.3 hours), minor urban schools (M=2196.2 hours, SD=1148.4 hours), and secondary urban schools (M=3027.3 hours, SD=2654.5 hours) (Figure 5.22).

Figure 5.22: Mean number of teacher aide hours used by schools according to area type.

Isolation of school

No statistically significant differences were found according to the degree of isolation of the school.

School size

A statistically significant difference was found between the aggregated numbers of teacher aide hours reported according to school size[76]. This was found to be attributable to large schools (M=2772.9 hours, SD=2610.6 hours) reporting more teacher aide hours than medium schools (M=1838.6 hours, SD=1808.2 hours) or small sized schools (M=996.8 hours, SD=2270.1) hours (Figure 5.23).

[75] $F(4,215)=6.098$, $p<.001$, $\eta^2=.102$

[76] $F(2,216)=10.513$, $p<.001$, $\eta^2=.089$

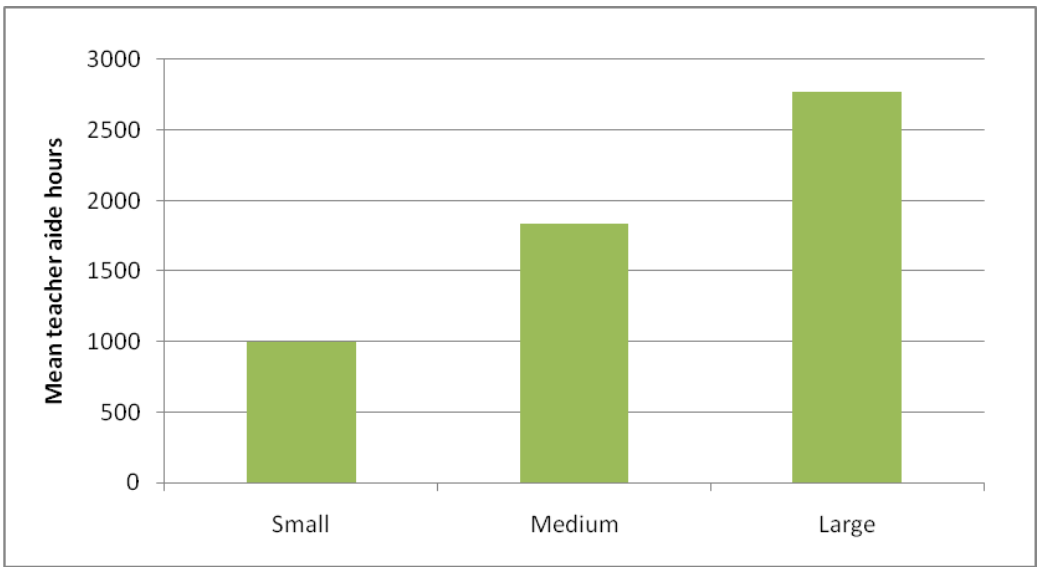


Figure 5.23: Mean number of teacher aide hours used by schools according to school size.

A statistically significant difference was also found between the aggregated amounts of external programmes being reported according to school size[77]. This was found to be attributable to small schools (M=$1142.50, SD=$3591.74) reporting more use of external programmes than large schools (M=$230.64, SD=$1292.32).

Type of school

A statistically significant difference was found between the aggregated amounts of teacher aide hours used according to school type[78]. This was found to be attributable to a larger number of hours being reported by Year 9-15 schools (M=4294.9 hours, SD=4084.9 hours) than composite schools (M=592.0 hours, SD=419.9 hours), contributing schools (M=1796.0 hours, SD=1568.5 hours, full primary schools (M=1431.6 hours, SD=1812.4 hours), and intermediate schools (M=2001.5 hours, SD=869.5 hours) (Figure 5.24).

[77] $F(2,225)=3.121$, $p=.046$, $\eta^2=.027$

[78] $F(5,205)=7.663$, $p<.001$, $\eta^2=.157$

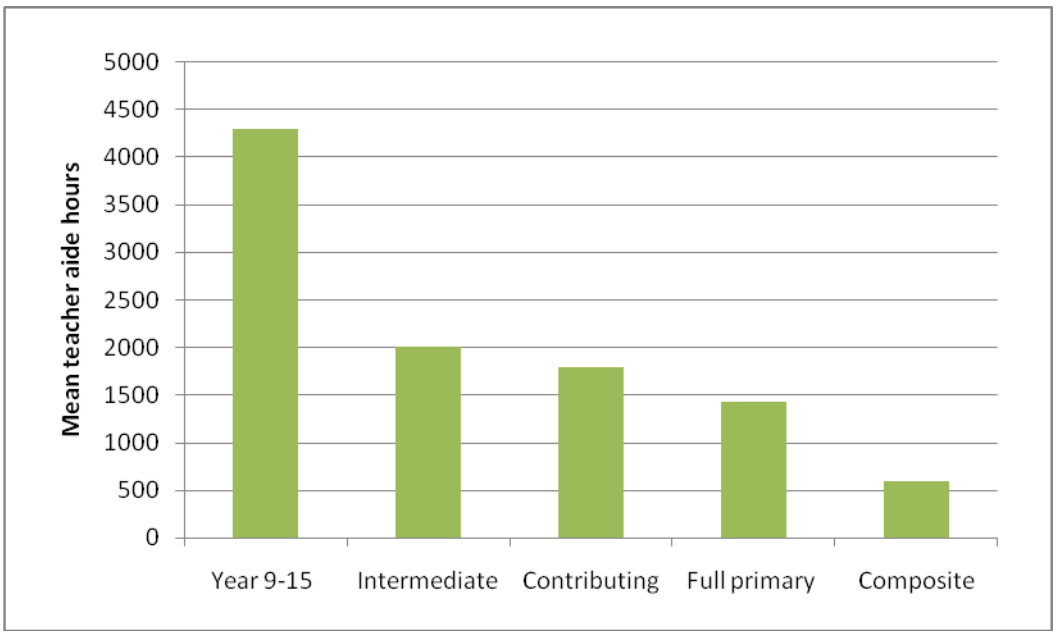


Figure 5.24: Mean number of teacher aide hours used by schools according to type of school.

A statistically significant difference was found between the aggregated amounts of specialist support hours used according to school type[79]. This was found to be attributable to a larger number of hours being reported by Year 9-15 schools (M=207.9 hours, SD=288.8 hours) than by contributing schools (M=76.8 hours, SD=169.3 hours), full primary schools (M=42.0 hours, SD=109.8 hours), and Year 7-15 schools (M=10.5 hours, SD=21.0 hours) (Figure 5.25).

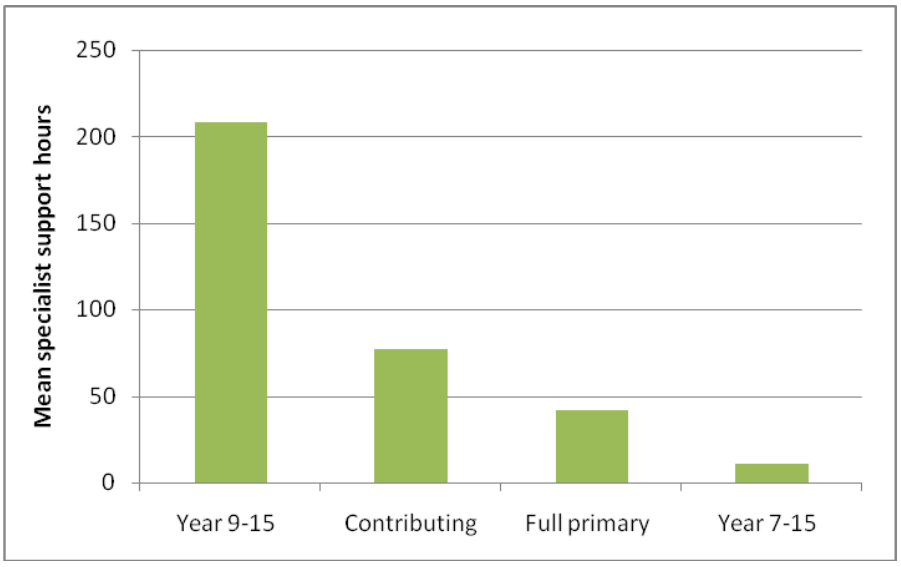


Figure 5.25: Mean number of specialist support hours used by schools according to type of school.

[79] $F(5,203)=4.253$, $p=.001$, $\eta^2=.095$

A statistically significant difference was found between the aggregated amounts of teacher FTTE provided according to school type[80]. This was found to be attributable to a larger amount of teacher FTTE being used by Year 9-15 schools (M=1.9 FTTE SD=2.1 FTTE) than by contributing schools (M=.5 FTTE, SD=0.9 FTTE), full primary schools (M=0.5 FTTE, SD=1.8 FTTE), and intermediate schools (M=0.2 FTTE, SD=0.6 FTTE) (Figure 5.26).

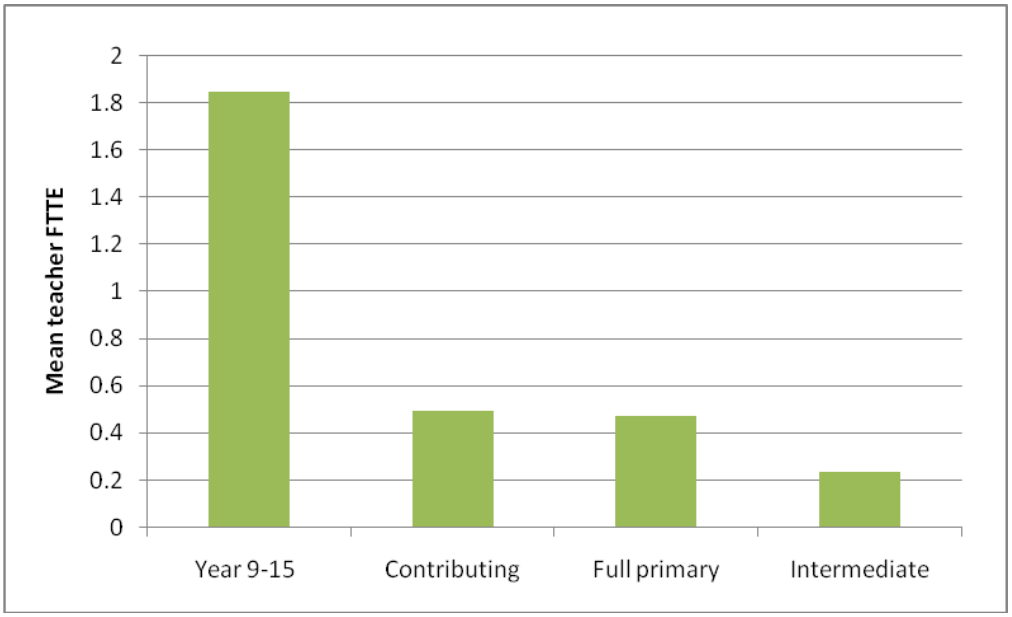


Figure 5.26: Mean teacher FTTE used by schools according to type of school.

A statistically significant difference was found between the amounts spent on the provision of resources for curriculum delivery according to school type[81]. This was found to be attributable to intermediate schools (M=$10967.86, SD=$13644.85) reporting having spent more on resources for curriculum delivery than contributing schools (M=$2147.80, SD=$6863.43) and full primary schools (M=$1455.04, SD=$4260.26), and Year 9-15 schools (M=$7306.20, SD=$10724.90) reporting having spent more than full primary schools (Figure 5.27).

[80] $F(5,206)=4.305$, $p=.001$, $\eta^2=.095$

[81] $F(5,211)=5.326$, $p<.001$, $\eta^2=.112$

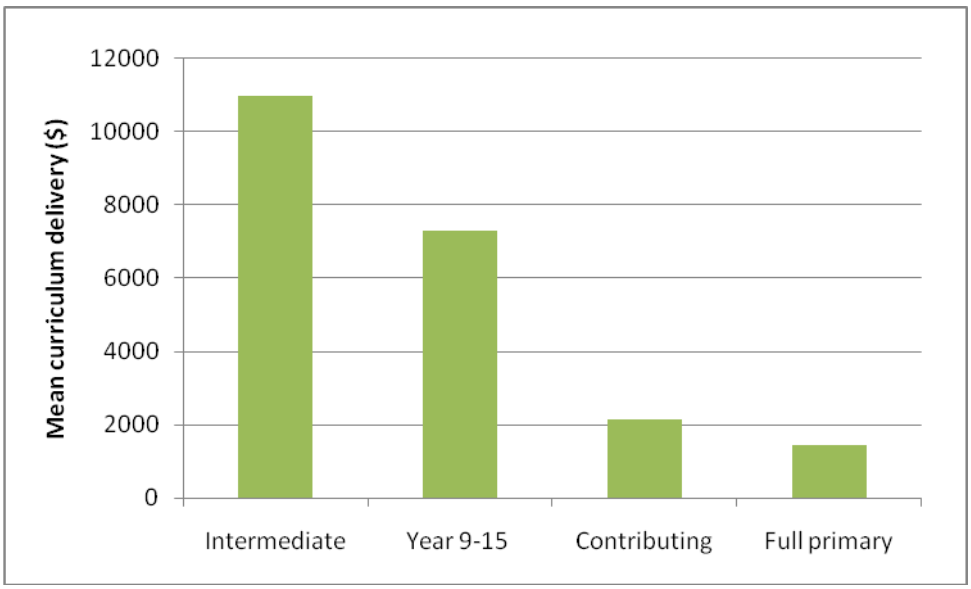


Figure 5.27: Mean spending on resources for curriculum delivery by schools according to school type.

> The Utilisation of Resources by Student Category of Special Need (1-4)

In this section, how the different resources are accessed by the four categories of student special need is firstly considered. what the total resourcing package for each category looks like is then described.

How are resources distributed across categories of students?

Table 5.4 summarizes the percentage of each resource accessed by each category of student. In general, the majority of school-managed resources are being used by Category 4 students (Table 5.4). For example, 75.1% of the use of SEG was by students in Category 4, while only a little over 3% of this resource was accessed by Category 1 students. Over all the school-managed resources, about two-thirds of the usage is by Category 4 students. Smaller proportions of these resources are accessed by students in Categories 1 to 3, with the exception of the EPF with just over a fifth of this resource being accessed by Category 3 students (21.7%).

For the tracked individual resources, Category 1 students were accessing more than 80% of ORRS resources, 76.4% of Assistive Technology, and 71.7% of Moderate Support. Category 3 students used the SBI the most (60.0%) and Category 4 students were the largest users of Property Modification (62.1%). Significant amounts of the School High Health (34.0%), Property modification (33.3%) and the Supplementary Learning Support (40.6%) resources were also used by Category 1 students. Other high usage included Supplementary Learning

Support (32.1%) by Category 2 students, School High Health (36.0%) and Speech Language (40.8%) by Category 3 students, and Speech Language (35.6%) by Category 4 students.

The majority of "Other" resources were used by Category 2 (37.5%) and Category 4 students (34.4%). Of the total funding from parental donations, over 70% was being used by Category 4 students. Category 2 and 4 students were the largest users of the provision from Community sources (30.9% and 37.7% respectively). Category 2 students were the predominant users of ACC (70.4%).

Table 5.4: Percentage of resource accessed by each category of student, and the total value of the resource.

Resource	Category 1 (%)	Category 2 (%)	Category 3 (%)	Category 4 (%)	Amount ($)
School-managed resources					
SEG	3.1	9.0	12.8	75.1	2,720,181
EPF	3.16	6.2	21.7	68.9	583,568
LSF	2.8	7.1	13.6	76.5	319,190
RTLB	1.5	11.4	7.8	79.3	849,140
Operations Grant	11.9	9.4	12.9	65.8	5,391,595
TFEA	10.0	8.9	12.3	68.8	1,631,944
Tracked individual resources					
ORRS	84.2	13.2	0.9	1.7	6,410,153
SBI	7.9	27.2	60.0	5.3	257,878
Property Modification	33.3	1.8	2.7	62.1	1,922,790
AT	76.4	23.6	0.0	0.0	134,328
School High Health	34.0	18.0	36.0	12.0	159,552
Mod Support	73.3	17.2	5.0	4.5	25,960
Speech Language	8.0	15.5	40.8	35.6	51,320
Supplementary Learning	40.6	32.1	22.5	4.8	130,750
Other MoE	21.0	8.2	7.1	63.7	947,342
Other sources					
Parent Donations	16.0	3.9	7.8	72.2	159,220
Other Community	14.7	30.8	16.8	37.7	376,345
ACC	19.0	70.4	6.6	4.0	238,902

Aggregating the monetised value of all resources and controlling for the number of students in each category (that is, determining mean resourcing per student in a category), on average Category 1 students used the largest proportion (62.5%) of the total special needs resourcing that flow into schools (Figure 5.28). Smaller amounts of the total resourcing were being used on average by Category 2, 3 and 4 students in that order. The total resourcing package surrounding a Category 1 student is about six times that being accessed by

Category 3 and Category 4 students, and about three times the amount being accessed by Category 2 students.

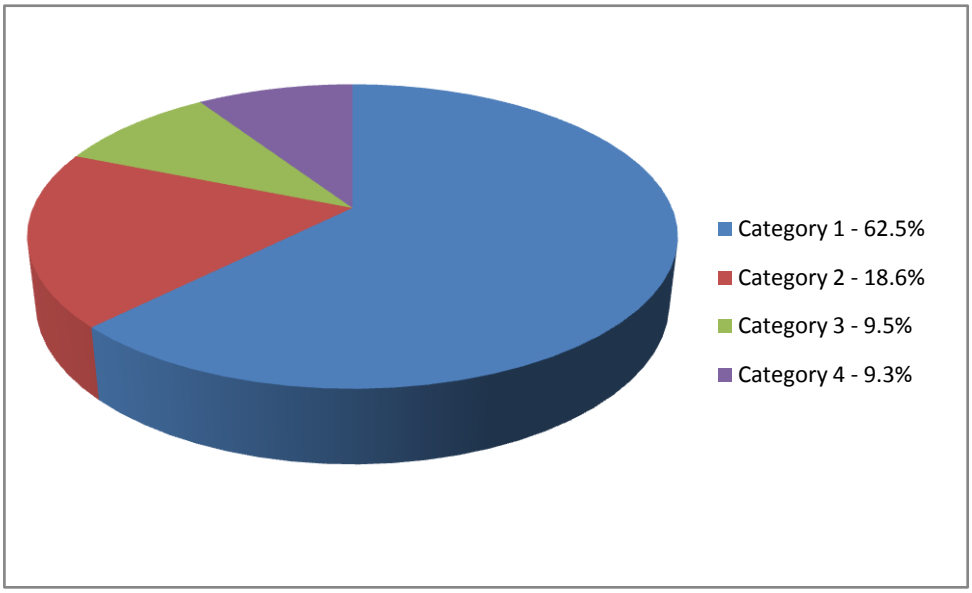


Figure 5.28: Proportion of Total Resources Utilised per student by each Category of Special Need.

When all the resources are aggregated, the largest proportion (45.6%) of the total special needs package (Figure 5.29) is spent on the 9345 Category 4 students, and the next largest proportion (33.9%) on Category 1 students (n=1034). The proportion spent on Category 2 students (n=1171, 11.4%) and on Category 3 students (n=1799, 9%.) was similar.

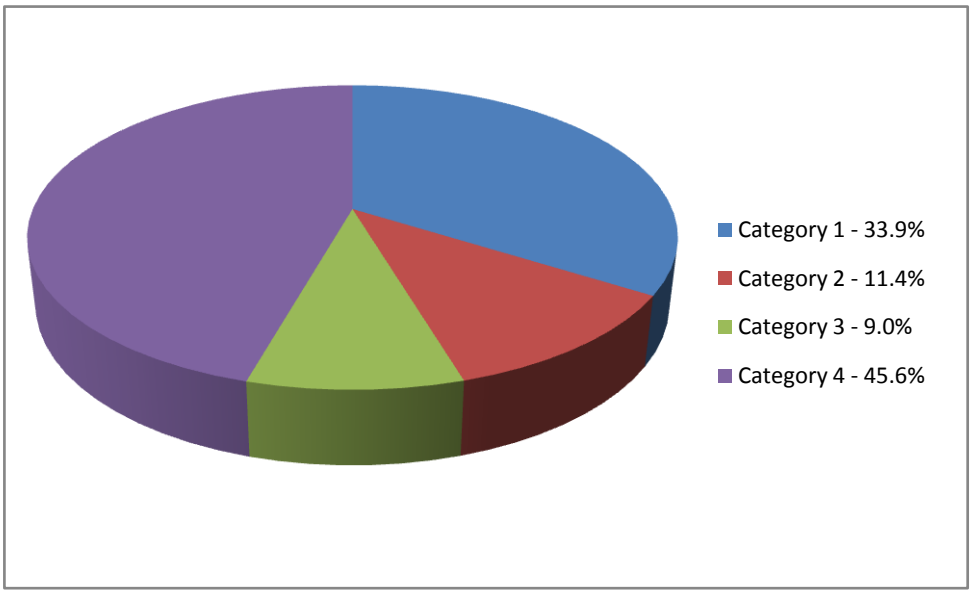


Figure 5.29. Proportion of total Special Needs Resourcing spent by Category.

What does the package of resourcing look like for each category of student?

Figures 5.30 - 5.33 present the proportion of total support for each category of student that originates from each source.

The majority of the resourcing that a Category 1 student accesses comes from ORRS (71.3%) with a lesser amount coming from the Operations Grant (8.6%) (Figure 5.30).

The largest contribution to Category 2 student resourcing also comes from ORRS (36.2%), with smaller proportions coming from Operations Grant (20.1%) and SEG (9.7) (Figure 5.31).

More than a third of resourcing for Category 3 students comes from Operations Grant (35.1%), with lesser, but nevertheless substantial, amounts from coming from SEG (17.6%), and TFEA (10.1%). (Figure 5.32).

Similarly, the largest proportion of resourcing for Category 4 students came from the Operations Grant (35.4%), with lesser but substantial amounts coming from SEG (20.4%), Property Modification (11.9%) and TFEA (11.2%). (Figure 5.33).

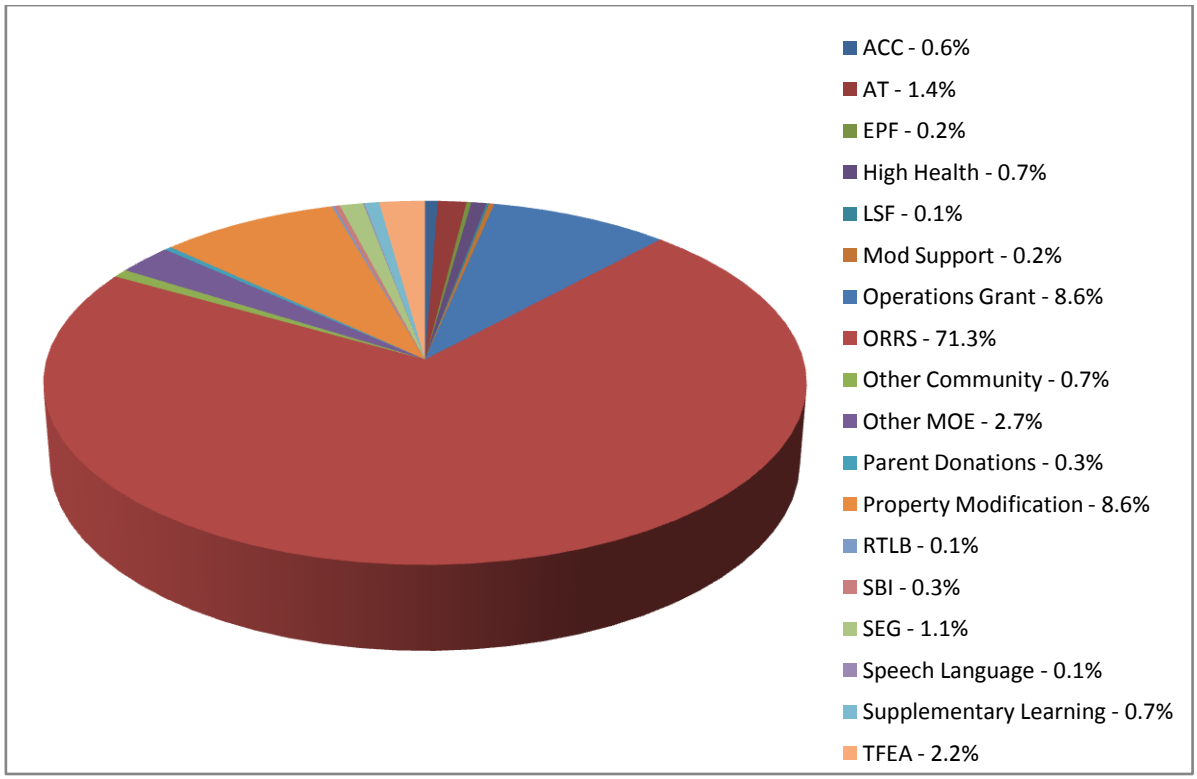


Figure 5.30: Category 1 students resourcing according to the source of the resource.

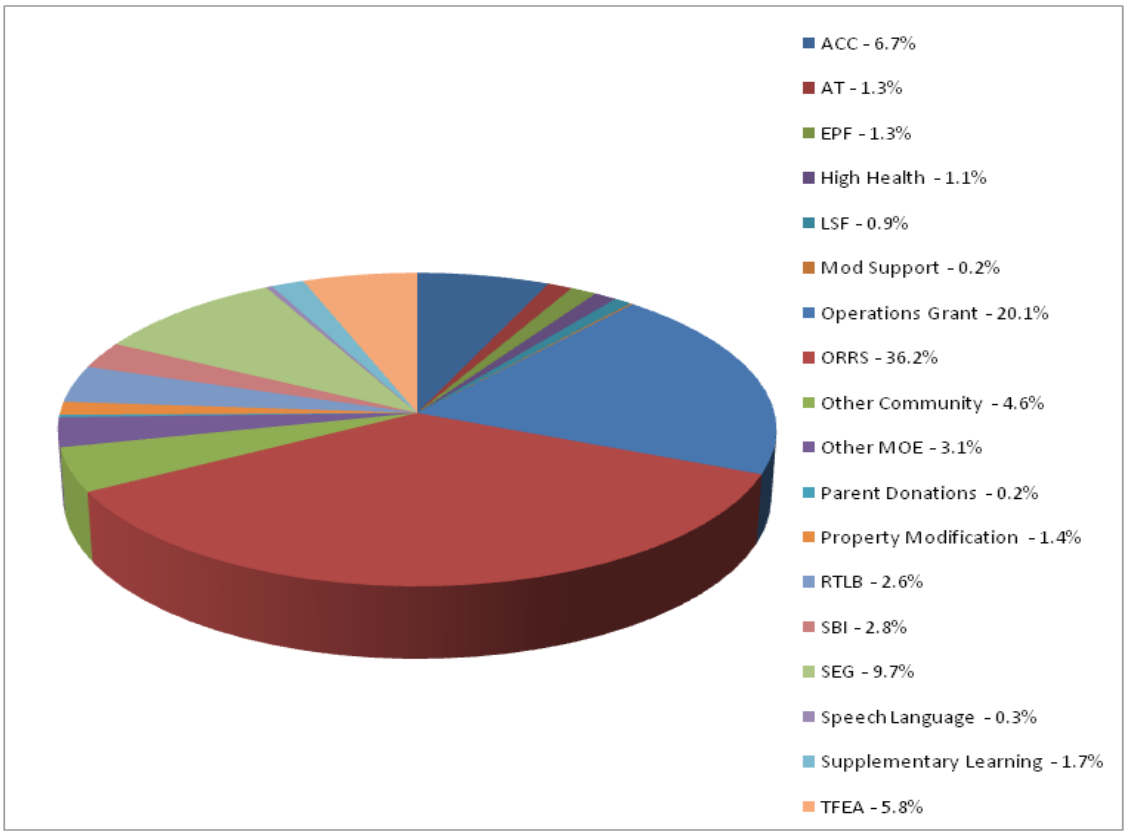


Figure 5.31: Category 2 students resourcing according to the source of the resource.

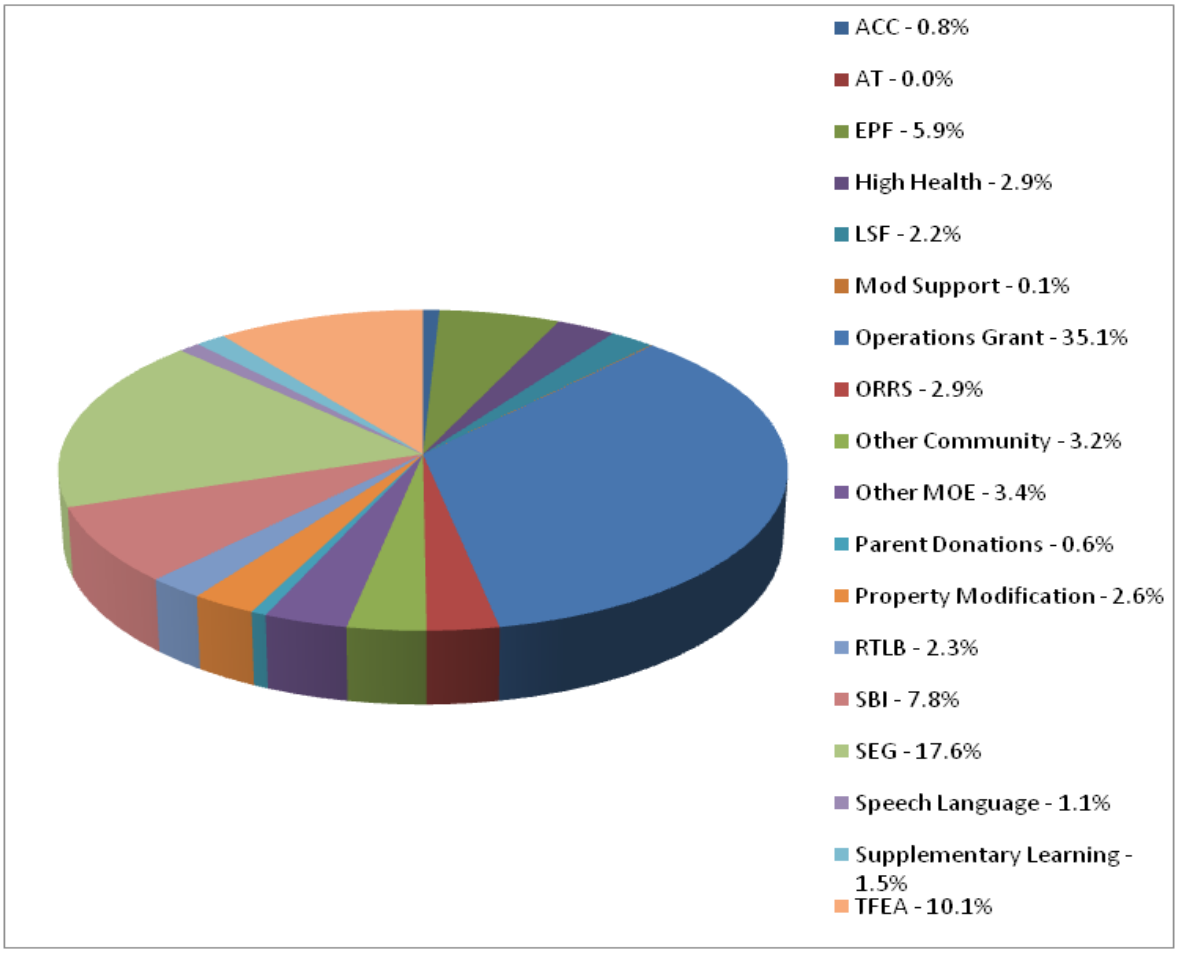


Figure 5.32: Category 3 students resourcing according to the source of the resource.

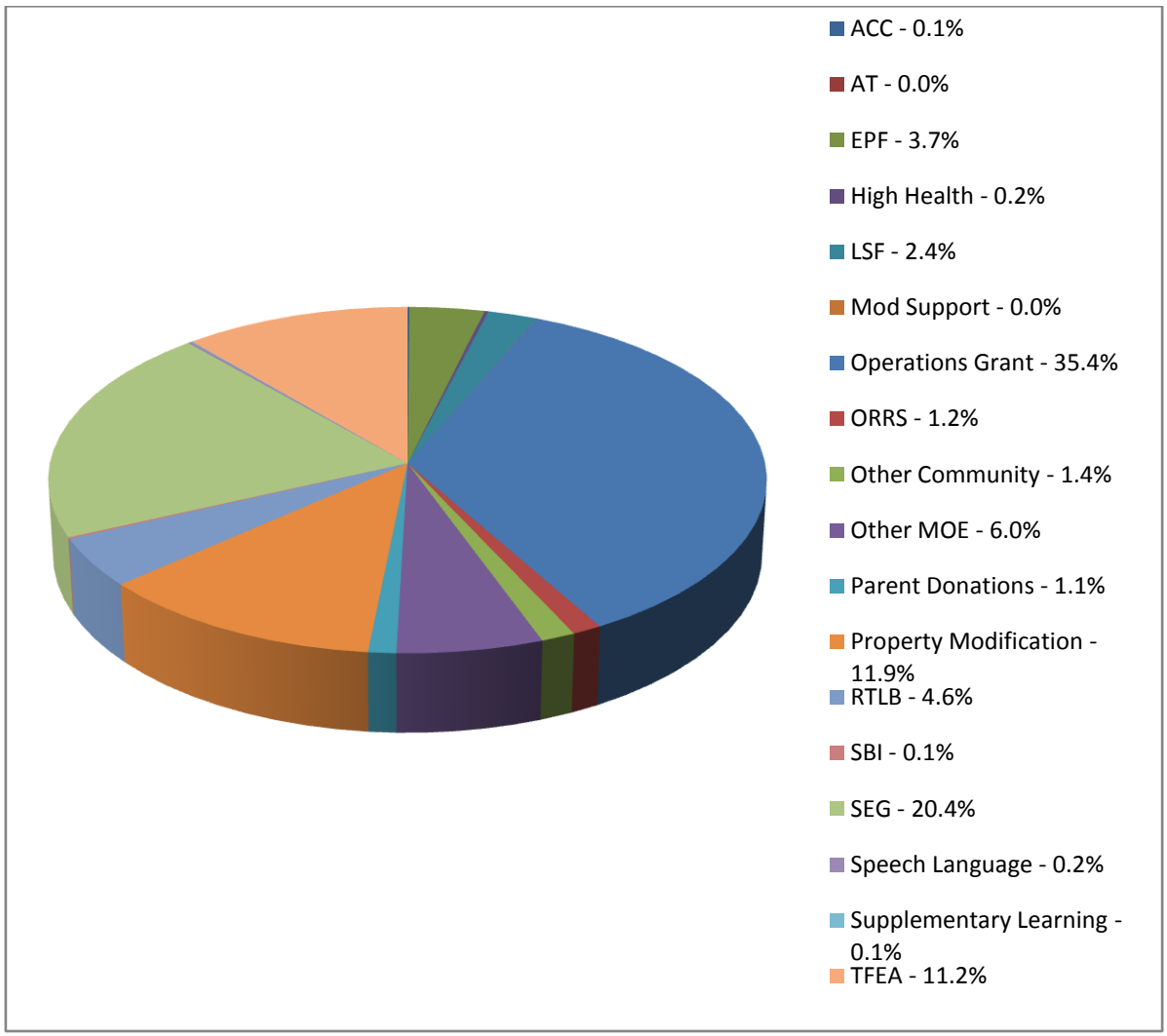


Figure 5.33: Category 4 Students Resourcing According to the Source of the Resource.

In effect, for every dollar spent on special needs resources for a Category 1 student, 71 cents comes from ORRS, 9 cents from Operations Grant, 9 cents from Property Modifications, 3 cents from Other Ministry sources, 2 cents from TFEA, and 1 cent from each of ACC, Assistive Technologies, School High Health, Other Community, and Supplementary Learning Support.

By way of contrast, for every dollar spent on a Category 4 student, 35 cents was from the Operations Grant, 20 cents from SEG, 12 cents from Property Modification, 11 cents from TFEA, 5 cents from RTLB resources, 6 cents from Other Ministry resources, 4 cents from EPF, 2 cents from LSF, and 1 cent from each of ORRS, Parent Donations and Other Community Resources.

> Resourcing across Student Category by School

One area of interest is potential differences in how the resourcing is utilised across the four categories of special need according to school factors such as decile. A mean expenditure per student was estimated according to the category of special need for each school. This provided an estimate of how much a school spent, on average, on an individual student within any category.

Descriptive statistics across schools are presented in Table 5.5. It can be seen that the mean expenditure per student across schools is greatest for Category 1 and then for Category 2, with the lowest levels of expenditure found for Categories 3 and 4. As shown by the standard deviation, the variance is also greatest in Category 1.

It can also be seen that the median levels of expenditure are substantially lower than the means for each category, demonstrating the extremely skewed nature of the data. For each category, most schools have estimates at the lower end of the distribution, with fewer schools having estimates at the higher values (Figure 5.34-5.37).

The large standard deviations reported in Table 5.5 indicate substantial variation across the schools.

Table 5.5: Descriptive statistics for mean and median expenditure per student according to the special needs category the student is from, across schools.

	Category 1 ($)	Category 2 ($)	Category 3 ($)	Category 4 ($)
n[82]	167	182	168	228
Median	1750.65	1082.89	941.94	793.55
Mean	5477.50	3064.53	1868.98	1576.65
SD	10096.29	5382.29	3418.19	2502.47

The distribution of mean estimated resourcing per student for each school is presented for Category 1 (Figure 5.33), Category 2 (Figure 5.34), Category 3 (Figure 5.35), and Category 4 (Figure 5.36). As was apparent in the descriptive statistics presented in Table 5.5, the data are extremely skewed, resulting in quite different mean and median values of resourcing. While most schools have relatively lower valued estimates, some schools' estimates are extreme outliers, and thereby pull the mean up and away from the median value.

[82] Note that not all schools reported having students in each category hence the variation in school numbers

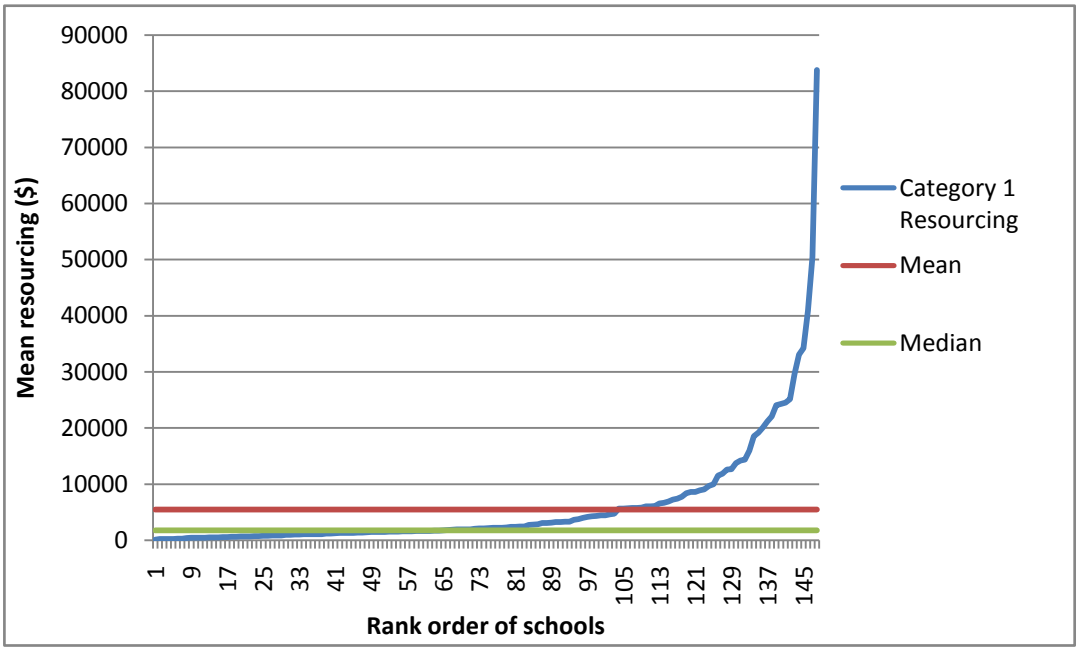


Figure 5.34: Mean estimated resourcing per Category 1 student in each school. Note that schools have been ranked from the lowest to the highest mean resourcing

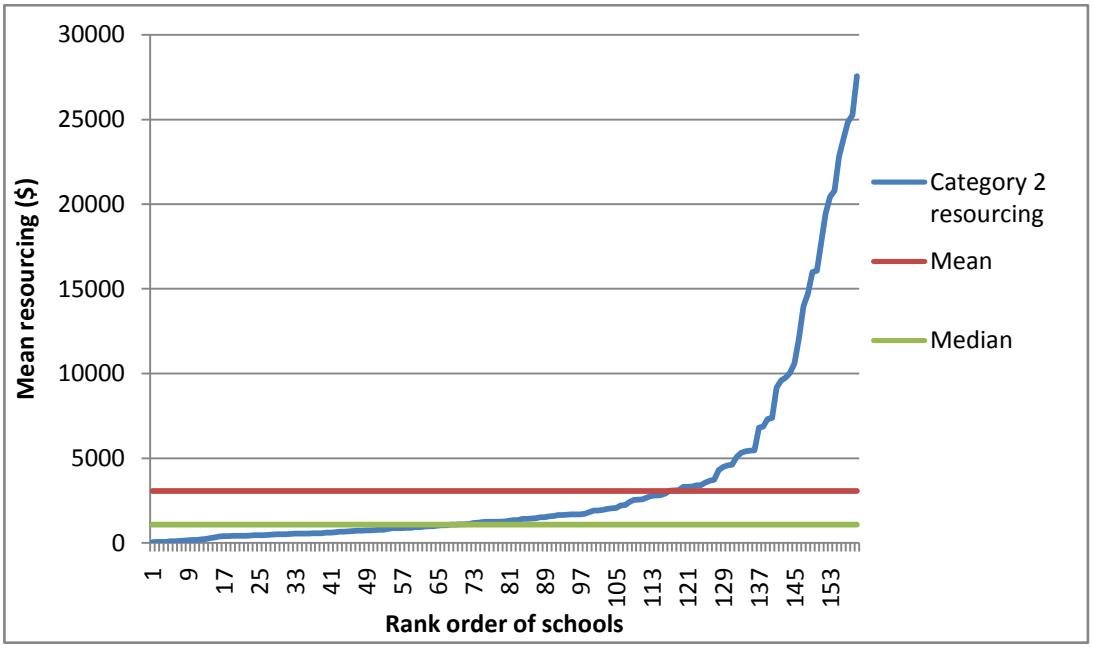


Figure 5.35: Mean estimated resourcing per Category 2 student in each school. Note that schools have been ranked from the lowest to the highest mean resourcing

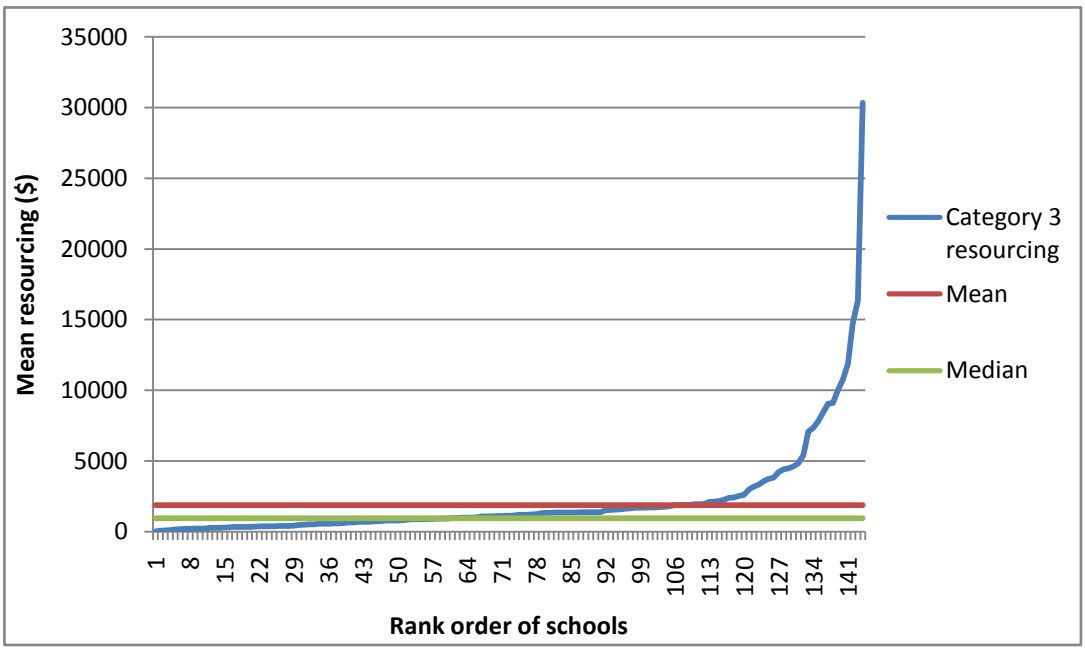


Figure 5.36: Mean estimated resourcing per Category 3 student in each school. Note that schools have been ranked from the lowest to the highest mean resourcing

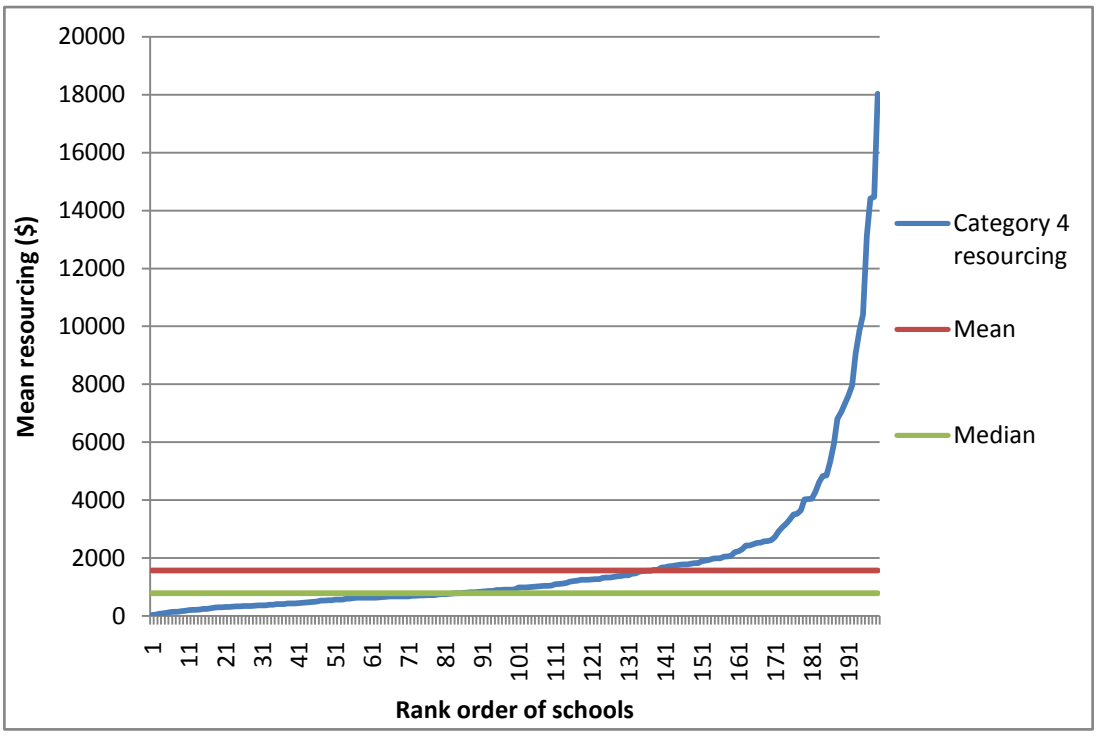


Figure 5.37: Mean estimated resourcing per Category 4 student in each school. Note that schools have been ranked from the lowest to the highest mean resourcing

One-way ANOVA were used to determine whether there were statistically significant differences by school decile, area type, isolation factor and roll size which could help explain this variation. A significance criterion of p=0.5 was used for all factors. No statistically

significant differences were found for decile, area type, isolation or roll size for any of the categories of special need.

Potential differences between the mean levels of resources utilised per student according to the status of the school (special compared with mainstream) were also investigated using one-way ANOVA. No statistically significant difference was found for the mean expenditure spent on Category 1 students between special and mainstream schools[83].

However, there were statistically significant differences found between the mean expenditure spent on Category 2[84], Category 3[85], and Category 4 students[86].These differences are presented in Figure 5.38 (and Table 5.6), and demonstrate that a greater mean expenditure was spent on students in the special schools than in the mainstream schools for Category 2, 3, and 4 students[87].

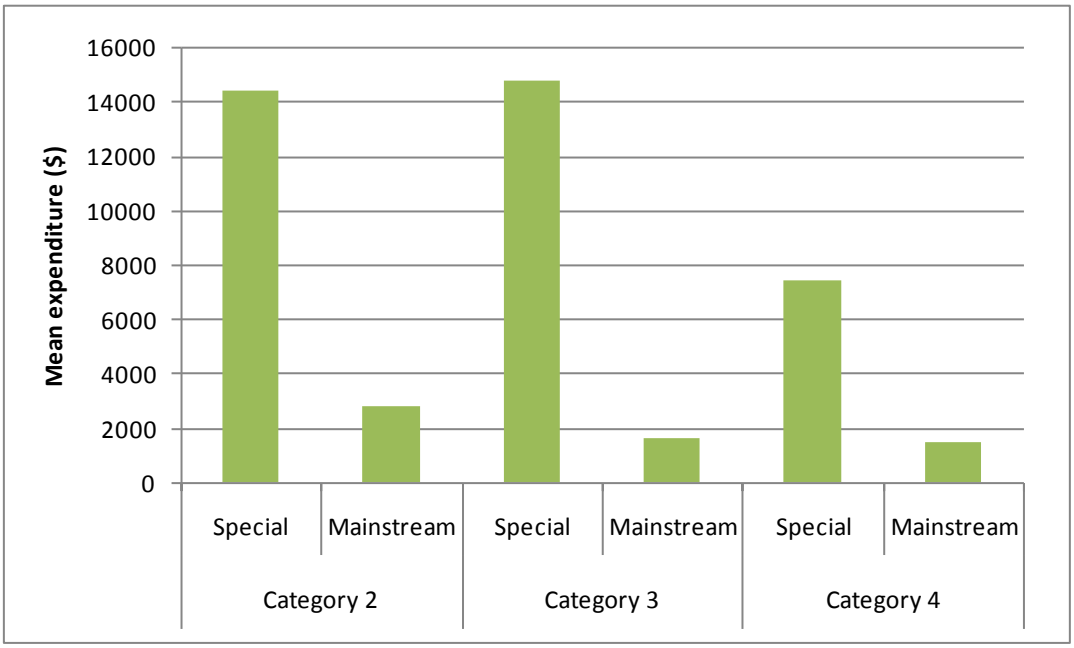


Figure 5.38: Bar graph presenting mean resourcing ($) per student within special needs and mainstream schools, according to special needs category.

[83] F(1,164)=1.392, p=.240

[84] F(1,180)=19.886, p<.001, η^2=.099

[85] F(1,165)=57.664, p<.001, η^2=.259

[86] F(1,225)=11.755, p=.001 η^2=.050

[87] Note that it is unusual for Category 3 students to be in a special school

Table 5.6: Descriptive statistics for mean and median expenditure per student according to the special needs category the student is from, across special and mainstream schools.

		N	Mean ($)	SD ($)
Category 2	*Special*	4	14358.23	8132.66
	Mainstream	178	2810.74	5055.25
Category 3	*Special*	3	14726.16	13611.82
	Mainstream	164	1630.57	2568.26
Category 4	*Special*	2	7388.24	813.59
	Mainstream	225	1498.24	2423.62

Schools were classified into four groups depending upon the overall proportion of students who were in one of the four categories of special need: 0-24% (n=166), 25-49% (n=46), 50-74% (n=11), and 75-100% (n=11[88]). Eleven schools were not able to be allocated to any of these groups. There was no statistically significant difference found between the mean values of resourcing provided by schools for Category 1 students according to the proportion of special needs students in the school[89]. Significant differences were found between the mean value of resourcing provided by schools for Category 2[90], Category 3[91], and Category 4 students[92].

[88] Note that this figure includes Special Schools

[89] $F(3,152)=1.263$, $p=.289$

[90] $F(3,168)=7.300$, $p<.001$, $\eta^2=.115$

[91] $F(3,153)=20.287$, $p<.001$, $\eta^2=.285$

[92] $F(3,213)=3.960$, $p=.009$, $\eta^2=.053$

Table 5.7: Descriptive statistics showing mean resourcing per student within schools, according to special needs category and the percentage of the school population that is classified as having a special need.

		0-24%	25-49%	50-74%	75-100%
Category 1	*n*	111	32	7	6
	Mean ($)	6385.74	4338.95	773.91	10277.05
	SD ($)	9193.54	14656.91	417.01	6435.94
Category 2	*N*	121	37	9	5
	Mean ($)	3736.12	1025.75	1130.24	11509.99
	SD ($)	5844.81	1393.78	1612.66	9495.65
Category 3	*N*	105	41	8	3
	Mean ($)	2131.85	988.11	681.68	14726.16
	SD ($)	3030.71	976.19	608.37	13611.82
Category 4 ($)	*N*	154	46	11	6
	Mean ($)	1954.11	771.42	509.09	2909.52
	SD ($)	2831.44	789.17	342.09	3561.93
	Mean ($)	1917.25	771.42	509.09	670.15
	SD ($)	2803.44	789.17	342.09	930.55

Further investigation found that for Category 2 students, this difference was attributable to schools with 75-100% of students in one of the four categories on average having a statistically significantly higher[93] estimated value of resourcing for Category 2 students than for any of the other three groups (Table 5.7).

Schools with 25-49% of special needs students also had a statistically significantly higher estimated value of resourcing for Category 2 students than schools with 0-24% of students in one of the categories.

For Category 3 students, the difference found was attributable to schools with 75-100% having statistically significantly higher estimated resourcing per student than each of the other groupings of schools.

The statistically significant difference amongst mean estimated resourcing for Category 4 students was found to be attributable to schools with 0-24% of students in one of the four categories having a statistically significantly greater estimated mean resourcing than schools with 25-49% of special needs students.

[93] As determined by post-hoc Tukey tests, with p=.05 criterion

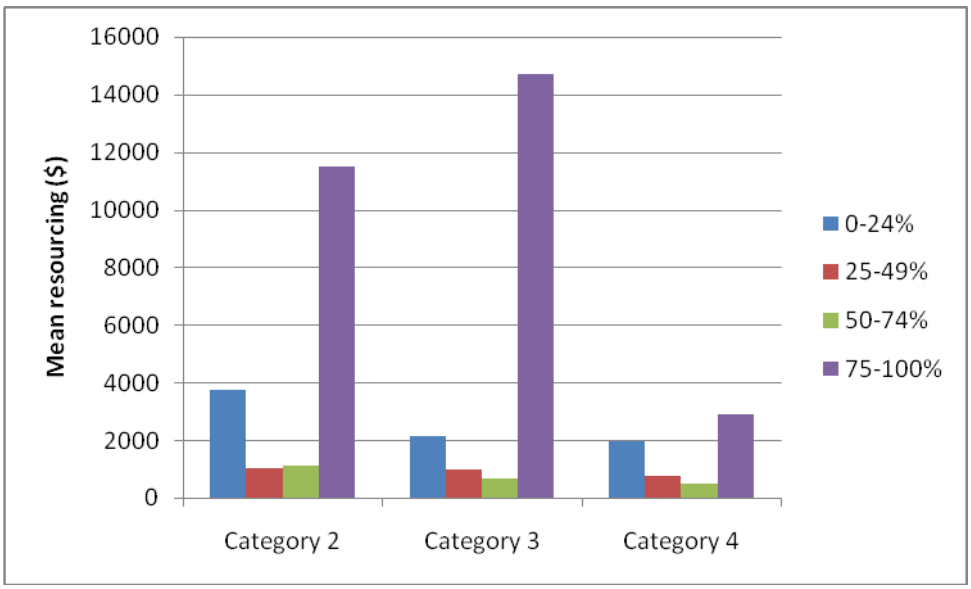


Figure 5.39: Bar graph presenting mean resourcing ($) per student within a school, according to special needs category and the percentage of the school population that is classified as special needs.

> Chapter Six: Key Findings

In this chapter we summarise the key findings from this report. The purpose of this chapter is to draw together the complex data described in the previous two chapters. It is not to present conclusions or to provide recommendations for the Ministry of Education.

Profile of students

The data reported in this study showed that 13,349 students were reported to have special education needs, as defined in the four categories provided. This equated to 14.3% of the total roll of the 245 schools involved in the review. Of these students, the majority (n=9345) were from Category 4 (moderate to high needs, short term). Category 4 students accounted for 10.0% of the overall student population of these schools but 70.0% of those categorised with special needs. Only 1.1% (n=1034) of the overall student population or 7.7% of those with special needs were reported to be in Category 1 (very high needs that are ongoing).

The most commonly reported need for the selected group of students was related to learning. This was reported for just over three quarters of the students. The next most common need was behaviour/social reported for 41.7% of the sample. Multiple needs were reported for 44.7% of the sample of selected students; 29.9% of the students were reported as having two needs. This might have been expected to be greater but it is likely that Category 4 students have only one need, and they are the majority of this sample.

In terms of gender, the sample of selected students was heavily over represented by boys (69.4%). For all four categories of special need, the difference in numbers between boys and girls was statistically significant, with more boys being reported in each category.

Proportion of students in one of the four categories in schools

Four of the 245 schools reported that more than 75% of their school population was in one of the special needs categories used in this study. Two of the four schools were low decile schools and the other two were mid decile schools. All had rolls less than 50. A further 11 schools (two mid decile and nine low decile) reported that between 50 and 74% of their students had special needs.

Over 90% of the high decile schools reported that less than 25% of their students had special needs. This was compared with 72.2% of mid decile and 50.9% of low decile schools reporting that less than 25% of their students had special needs.

These data do suggest that lower decile schools are more likely to have greater proportions of students with special needs, thereby supporting the need for a decile factor to be included in the overall formula for allocating school-wide special needs resources.

Allocation of resources from the Ministry.

Excluding the Operations Grant and TFEA (which are not specifically provided for special needs resourcing), the Ministry-supplied data showed that the majority of special needs funding is provided through tracked individual resources rather than the school-managed resources. Schools are limited in the extent to which they can control how these resources are utilised.

Over $13 million dollars of supplied resources (65.5% of all resources) are tracked individual resources based on the verified needs of individual students. Nearly $7 million (34.5%) is provided through school-managed resourcing such as SEG and RTLB.

ORRS students are allocated the equivalent of over $11 million (54.6%) of the total resources. ORRS students constitute approximately 1% of the total school population and this level of funding equates to approximately $9000 per student, based on Ministry allocations.

RTLB is the second largest resource (in monetary value), with a Ministry reported resourcing value of nearly $3.5 million across Terms 1 and 2 in 2007. SEG is the third largest resource in terms of monetary value. The Ministry reported providing schools with over $2 million of SEG funding across Terms 1 and 2 of 2007.

Utilisation of resources by schools

In total, schools reported utilising approximately $4.5 million of services provided by school-managed resources and $9 million from tracked individual resources. Reported total resourcing from Operations Grant, TFEA and other Ministry resources was $8 million. Thus, the total amount reported as being used by schools for special needs students was $21.5 million.

School-managed resources were reported as providing an average of $335 to each student identified in one of the four categories of special need (n=13,349). This would not include other, more generic, services these students would receive not related to their identified special need.

From the literature included in Chapter 2, it was evident that there were concerns that SEG was being used for students with higher needs than it should have been. However, this would not seem to be the case in this study. The data gathered from the participant schools

showed that SEG was predominantly used to support Category 4 students, with over 75% of the access of this resource. Category 1 students accessed SEG relatively rarely (3.1% of times). The predominant use of SEG was for the provision of teacher aide hours, which accounted for 60.9% of its total estimated monetary value, as reported by schools. The next largest use was for the provision of FTTE (26.7%).

The participant schools reported spending over $5 million of their Operations Grant on support for students with special needs. This is 9.0% of the total Operations Grant provided to these schools by the Ministry. As with SEG, the Operations Grant is predominantly used to support Category 4 students when allocated for special needs[94]. The major use of this grant is to provide extra teachers (48.1% of its monetary value), followed by teacher aides (23.3%).

As already discussed, the largest single special education resource provided by the Ministry is ORRS. Schools reported using ORRS to provide for 174,497 hours of teacher aide time and 10,194 hours of specialist support amongst other things. It also provided for 102 FTTE which accounted for 46.1% of its monetary value. As is to be expected, ORRS was predominantly accessed by Category 1 students (84.2% of times).

Only 53 schools reported receiving parental donations specifically to support special needs education. The estimated value of this resource over Terms 1 and 2 of 2007 was $159,220. Parental donations were predominantly to support Category 4 students, who accounted for 72.2% of the total number of accesses. Most of the value of this resource was provided as over 6000 voluntary hours.

The management of special needs resourcing

The most common means of identifying students with special needs was through the use of student achievement data, with 225 of the 245 schools reporting this method. Multiple methods were used by 224 of the schools suggesting there is both triangulation and some likelihood of rigour.

Several criteria were reported as being used to make decisions regarding resource allocation. The most common was an identified student need in 195 of the schools. Geographic location was a factor in employing staff and the provision of services for 11 schools only suggesting some of the concerns around the ability of schools in certain areas to deliver programmes of support due to a lack of local services may be largely unfounded.

[94] On average, Category 1 students received services valued at $620.50 from the Operations Grant, Category 2 students $432.80, Category 3 students $386.61 and Category 4 students $379.63

A wide range of responses was provided by schools to the question regarding the reporting processes and/or systems in place to inform decision-making about the allocation and use of special needs resources. The most commonly mentioned processes related to Board meetings, IEP processes/meetings, parent meetings/interviews, and special education committees. Also frequently mentioned was the SENCO register. Most schools reported using more than one process or system.

The data concerning the management of special needs resourcing suggests that in most schools there are robust systems in place for determining need and for managing the resourcing of that need. Close to half (49.0%) of the schools said their processes were collaborative, and 68.6% said they used a consultative process to make budgetary decisions. Many schools used more than one source of evidence and most of them reported making their decisions based on student need.

The adequacy and effectiveness of resourcing

Key contacts (the Principal and/or SENCO) were asked to rate (on scales of 1-5) both the adequacy and effectiveness of the special needs resourcing in their schools. While adequacy had a mean rating of 2.2 the effectiveness mean rating was 4.5. This suggests that most schools are somewhat dissatisfied overall with the adequacy of resourcing but they believe they are doing a very good job with what they have. Comments from parents and teachers in response to a different question suggest they are slightly more satisfied with the adequacy of the resourcing with about 50% of them reporting that resourcing was an enabler of achievement and the same that it was a negative factor.

Key reasons for the reported high levels of effectiveness included working with other agencies and schools, the quality of their teachers and the fact that they evaluated their special needs programmes. These reasons were reported by all schools in the study.

Priorities for additional resourcing

The key contact in each school was asked to prioritise whether they would prefer more school staffing, more money or more external specialist support. The highest priority was for more school staffing with 121 of the schools making this their first priority and only 32 seeing it as the lowest priority. This was followed by more money and then more external specialist support. No statistically significant difference was found in the way schools prioritised these three options across any demographical factors, thereby suggesting any differences are at a school choice level.

Schools reported that any additional available school staffing would be primarily used to provide more teacher aide hours, more classroom teachers, and more on-site specialist teachers. Teacher aide hours were mentioned by 189 of the schools and were the most common response. More money would be primarily used to fund curriculum resources and provide professional development for teachers and teacher aides. Neither of these are amongst the key services provided through current special education resource streams. External specialist support was a low priority for many schools. This may be a reflection of their desire to manage resources themselves or it may be that they believe there is currently sufficient external support and that other areas need to be developed.

Case study student experiences

Half of the teachers interviewed, about case study students, reported that they had had extensive involvement in the assessment of the relevant student's needs. This involvement predominantly included talking to the SENCO and parents of the students.

The goals reported by the teachers for these students were predominantly related to learning, followed by social communication and behaviour. There were 1877 goals reported as being set for 618 students highlighting the extent to which there are multiple goals for many students. The teachers reported that nearly 80% of the goals they described had been at least partially met. At the time of the data collection, approximately 30% of learning goals; 25.1% of behaviour goals, and 27.2% of social communication goals were reported as having been fully met. Multiple methods were reported as being used to determine whether the goals had been met or not. These included feedback from other teachers and formal school assessments.

The reported mean level of overall progress of the case study students was 3.2 (on a scale of 1-5). For most students, teachers reported a rating of either 3 or 4. For 24.0% of the students, the rating was either 1 or 2.

The mean level of effectiveness of the current support in place for case study students was reported as being 3.6 (on a scale of 1-5). The reasons given for this level of effectiveness were largely positive in nature (75.2% of all comments). The most common reason given was the quality of the teacher aides (24.3% of all positive comments). This was followed by the quality of teachers (21.6% of all positive comments).

Teachers reported that the current level of support had had a positive impact on the case study students' experiences in the classroom overall. The mean rating for this was 3.5 (on a scale of 1-5) with over 60% of the teachers giving a rating of 4 or 5. The most common reason for the positive rating was that the current level of resourcing increased learning

opportunities (23.9% of all positive comments). This was closely followed by the impact of resourcing on learning (23.5% of all positive comments), and on the teaching the students experienced (20.4% of all positive comments).

Parents were also asked about the extent of their involvement in the development of their child's programme. Only 8.3% indicated they had had no involvement at all. Similarly, only 6.8% said they had had no involvement in monitoring and adjusting the programme. By comparison 67.2% of parents reported working with the school to develop their child's programme. This suggests there is a relatively high level of parental involvement in the education of students with special needs.

As with the teachers the parents were also largely positive about the overall progress their child was making with a mean rating of 3.6 (on a five-point scale). The most common reasons for their rating related to the quality of teachers (24.3% of all positive comments) and teacher aides (20.1% of all positive comments).

The majority of parents (61.3%) said that their child did attend the school nearest to their home. There were no statistically significant differences in whether a child attended the nearest school or not by any school wide demographics such as decile or location, nor by the category of special needs for each child. For 13.4% of the students who were at other schools the reason given was that they were not welcome at the local school (this is 5% of the total case study student sample) while for 32.3% it was believed that the local school could not meet their needs. More parents provided positive reasons for their child attending their current school rather than negative reasons related to their local school. Positive reasons related to the availability of programmes and expertise (62.2%) and the general quality of education offered (62.2%).

The utilisation of resources by services

Teacher aide hours are the most commonly reported service provided for students with special needs in the study schools. Over 524,000 hours were reported as being utilised over Terms 1 and 2 of 2007 for the 13,349 school level students. ORRS provided for 33.3% of these hours, SEG 22.6% and the Operations Grant 17.2%. TFEA provided a further 10%. All other available resources provided the remaining hours to varying extents ranging from 3.3% from other Ministry resources to 0.7% from parental donation.

A total of 24,144 hours of specialist support were also provided over the same time period. As with teacher aide hours ORRS was the main resource providing this service accounting for 42.2%. SEG did not provide many specialist support hours (2.4%). This suggests that concerns about SEG being used for high needs rather than moderate as mentioned in some

of the literature may be largely unfounded. Other relatively significant numbers of specialist support hours were from SLS (13.7%), TFEA (9.5%) and School High Health (6.9%). The Operations Grant also provided 5.4% of the total hours of specialist support.

Another major service provided to students with special needs is FTTE. An additional 257 FTTE were provided to the students in this study. The three main resources contributing to these were ORRS (39.7%), the Operations Grant (34.9%) and SEG (9.7%).

Aggregating the monetised value of all special needs resources, discussed in this review, the proportion of each dollar that is spent on the different services or types of support can be calculated. The two services on which the majority of resourcing is spent are FTTE (33.9%) and teacher aide hours (32.9%). Specialist support accounts for only 4.2% of the total expenditure reported by schools.

The distribution of resources across schools

Analyses of covariance (controlling for school roll size) were undertaken to determine whether there were statistically significant differences in the way in which resources were distributed across schools both in terms of what the Ministry allocated and what schools reported utilising. The results were mixed and probably reflect the self-managing context of New Zealand schools and the wide variation possible, even between schools with similar characteristics. In the case of the school-managed resources, they will also reflect a decile effect as this funding is both roll and decile related.

Statistically significant differences were found in the allocation of the following resources as reported by the Ministry:

- Rural schools received statistically significantly less than any type of urban schools from LSF.
- The value of both SEG and LSF showed statistically significant differences according to the proportion of students in one of the four categories of special need. For both resources, schools with over 75% of their students in Categories 1 to 4 were allocated significantly less than schools with fewer students in Categories 1 to 4.
- The value of LSF as supplied to different types of schools also showed statistically significant differences with composite schools receiving less than other types of schools.

Statistically significant differences were found in the utilization of the following resources as reported by the schools:

- There were statistically significant differences in the mean amount of TFEA and EPF utilised by schools depending on their school decile level. Low decile schools spent statistically significantly more than mid or high decile schools.
- Isolated schools reported statistically significantly more use of Assistive Technologies than other schools.
- The value of EPF varied according to the proportion of special needs students in a school in one of the four categories of special need. Schools with less than 25% of their students categorised in this way spent statistically significantly less than other schools. None of the schools (n=4) with over 75% of their students categorised as special needs accessed EPF in the two terms of the study.
- The proportion of students in the school in one of the four categories also impacted on the use of TFEA. Schools with less than 25% and more than 75% of their students reported using statistically significantly less TFEA than other schools.

Statistical tests were also undertaken to see whether there were statistically significant differences in the utilisation of resources by schools dependent on their status as a host school or not for RTLB and LSF funding. Host schools reported using the RTLB in their schools statistically significantly more than non-host schools. There were no differences found for LSF.

The utilisation of services across schools

Differences in the way services were utilised across schools were also considered by school demographics. The statistically significant differences that were found are summarised below.

- Spending by schools on professional development for teachers differed according to Ministry region, GSE district and decile. In terms of region, the Northern region spent statistically significantly more while Manukau was the highest spending GSE district. Low decile schools also spent statistically significantly more on professional development than other schools.
- Low decile schools reported utilising statistically significantly more FTTE than high decile schools. Year 9-15 schools also reported using statistically significantly more teacher FTTE than other schools.
- The amount of teacher aide hours used by schools differed according to area type, school size, and school type. Rural, small, and Year 9-15 schools reported using

statistically significantly less teacher aide hours than other schools. Large schools reported using more teacher aide hours than other schools.

- A statistically significantly greater amount was spent on curriculum delivery in low decile schools than in high decile. There was also a statistically significant difference in spending on curriculum delivery according to school type. Intermediates reported spending more than contributing and full-primary schools, and Year 9-15 schools reported spending more than full-primaries.
- Spending by schools on external programmes differed according to school size with small schools reporting spending statistically significantly more than large schools. This is perhaps a reflection of limited capacity in smaller schools to meet a wide range of needs internally.

It is also worth noting that no differences were found in any sort of resource usage according to the degree of isolation of the school. Nor was any difference found in the way specialist hours were utilised. These are particularly relevant given some of the concerns expressed in the literature review around the availability of services for rural and isolated schools.

The utilisation of special needs resources by category of need

The majority of school-managed resources, such as SEG and TFEA, are being used for Category 4 students. These students are the largest category of users of all school-managed resources utilising between 65.8% (Operations Grant) and 79.3% (RTLB). Category 1 students are the largest users of ORRS (84.2%), and Moderate Support (73.3%) amongst the tracked individual resources.

Across all allocated resourcing in this study, 61.7% of the monetised value is allocated to Category 1 students with Category 4 students receiving 9.5%. The total resourcing package surrounding a Category 1 student is about seven times that being accessed by Category 3 and 4 students and three times that being accessed by Category 2 students.

The majority of the services Category 1 students receive are provided through ORRS (71.3%) with a lesser amount coming from the Operations Grant and Property Modification (8.6% each).

The largest contributing resource to support for Category 2 students is also ORRS (35.8%). Smaller amounts are sourced from the Operations Grant (19.9%) and SEG (9.6%).

The Operations Grant is the largest contributor to support for Category 3 students accounting for 28.5% of the services provided. SEG provides a further 16.2%. EPF, TFEA, and ORRS also supply reasonable amounts to these students (all around 9%).

For Category 4 students the largest amount of resourcing comes from the Operations Grant (30.7%) followed by SEG (19.9%). ORRS and School High Health account for only 2.6% of the services provided.

Resourcing across student category by school

The mean level of expenditure per student was estimated according to the category of special need for each school. The mean level of expenditure across all schools was greatest for Category 1 followed by Categories 2, 3 and 4 in that order.

The median levels of expenditure were much lower than the corresponding means. This is due to most schools reporting mean levels of expenditure at the lower end of the distribution rather than the higher end.

The standard deviations for each category showed that there was substantial variation in the mean level of expenditure reported across schools within each category. Analyses of variance were undertaken to determine the extent to which this could be explained by school demographics. No statistically significant differences were found for decile, area or isolation index suggesting individual school policies may be the cause of variation rather than school characteristics.

However, statistically significant differences in the mean level of expenditure were found for the proportion of students within Categories 2, 3 and 4 students. For Category 2 and 3 students, this was due to schools with over 75% of their students categorised as special needs spending statistically significantly more than other schools on the students in these categories. For Category 4 students, this was found to be due to the higher level of expenditure for schools with less than 25% special needs students compared to schools with between 25 and 49% of special needs students.

Summary

Some key themes can be drawn from these findings. Amongst them is the predominance of teacher aide hours and FTTEs regarding the support provided to students with special education needs. When one considers the total value that schools reported utilising from special needs resourcing, 66.8% of this was on either teacher aides or FTTE. Both of these are school-managed and on-site resources which were also the key priorities for schools in

terms of additional resourcing if it were available. They were also the main reasons given by case study teachers for the effectiveness of programmes of support.

Of the 13,349 students identified as being in one of the four categories, 9345 (70.0%) were in Category 4 and 1034 (7.7%) in Category 1. However, the mean value of services provided to these students as reported by schools was inversely proportional to these figures. Across all services, 61.7% of the monetised value is provided to Category 1 students and 9.5% is provided to Category 4 students.

There were few statistically significant differences in either the distribution or allocation of resources or in the distribution of services to students. The effect of the isolation index was minimal as were other location variables although rural and small schools did report using less teacher aide hours than other schools. One resource where there were statistically significant differences in the way it was allocated was LSF. Rural schools received less LSF than other schools, as did composite schools.

Low decile schools reported a number of statistically significant different uses of resources to support students. They spent more on professional development and curriculum delivery than other schools. They also used more FTTE than other schools. No differences were found in the use of specialist hours, despite some concerns that isolated or rural schools might struggle to access this support.

> Appendix One: Special Education Resourcing Schemes

Resource entitlements to schools or clusters for support services for students with special needs are allocated in two ways:

- School based allocations, with schools or clusters given discretion over how to utilise these resources/funds; or
- Individually allocated resources specifically for individual students with identified needs within schools.

Both types of resources are discussed in brief detail below.

School based allocations

These are allocated to either a school or a cluster of schools for use at their discretion. Entitlements directed to a cluster are allocated by a 'fund holder' school(s) to other schools within the cluster.

Many of these allocations are determined based on the roll size of the school(s). An additional factor for the allocation of some funds is the decile rating of the school(s).

Below is a brief description of all school based allocations that schools and clusters receive to support students with special needs.

SPECIAL EDUCATION GRANT (SEG)

Schools are allocated the SEG, as part of their operations grant, to assist students with moderate special education needs on their school roll. The amount of this allocation is based on the school's decile ranking and roll size. Discretion is given to schools over how to use their SEG. The SEG comprises approximately 4% of a schools' operational funding.

TARGETED FUND FOR EDUCATIONAL ACHIEVEMENT (TFEA)

TFEA is a resource to assist schools in lowering barriers to learning faced by students from low socio-economic communities. TFEA allows for local decision making on enhancing learning outcomes for special needs students with moderate learning needs. The fund is calculated on a per pupil basis using the school's decile ranking. Schools with lower decile rankings receive greater allocations per pupil.

ENHANCED POGRAMME FUND (EFP)

The EPF supports schools with a significant and/or disproportionate number of students with moderate special education needs[95]. Through application, schools or a cluster may ask for a supplementary grant to support a group of students with their special needs. This group of students may not be receiving any other form of targeted support but must have already been identified as having a special need through an IEP, RTLB referral or placement on the special needs register.

RESOURCE TEACHERS: LEARNING AND BEHAVIOUR (RTLB)

RTLBs are specialist teachers who provide advice and guidance within schools for students in Years 1 to 10 who are at risk of low achievement due to learning and/or behaviour difficulties.

RTLBs are based at a particular school (their host school) and usually service a group of schools (known as a cluster), with the time spent in each school dependent on student needs, as determined by the cluster management committee.

The RTLB allocation for each cluster is determined by aggregating a weighted score based on roll size and decile for each individual school within that cluster. Payments are made to the school(s) designated as the 'host' school which then manages staffing entitlements for other schools within their cluster. Payments cover the costs of staffing plus administration and travel for RTLB staff within the cluster.

RTLB Year 11-13+

This funding is provided to clusters of schools to support students in Years 11-13+ who have learning and behavioural difficulties. The purpose of the fund is to encourage flexibility and local decision-making across a broader community of interest (i.e. the entire cluster of schools). The fund is calculated based on the roll and decile of each school within the cluster.

LEARNING SUPPORT FUNDING (LSF)

This funding is provided to a nominated school (usually the host school) within a cluster to provide:

- support to students needing individual support but not meeting the criteria for other special education initiatives for schools within the cluster; or

[95] These schools are sometimes referred to as "magnet schools".

- release time for classroom teachers to meet with RTLB's; or
- professional development of departments, syndicates or schools to enhance skills in behaviour management or curriculum development.

Funding is calculated based on the roll and decile of each school within a cluster.

Individually Allocated Resources

Funds discussed below are allocated specifically to individual students with special needs.

THE ONGOING AND REVIEWABLE RESOURCING SCHEMES (ORRS)

ORRS provide resources for a very small group of students (approximately 1% of the total student population) throughout New Zealand who have the highest needs for special education.

Students with identified ongoing needs will stay in this funding scheme for their entire school career (known as the ongoing resourcing scheme). Those with reviewable funding will receive support for a period of up to four school years, at which point this support is reassessed, with the aim being that most students in this group leave the scheme at this point.

ORRS is managed and funds are allocated through Group Special Education (GSE) who acts as the overall 'fund holder' for students identified on this scheme. Schools wishing to have students funded through ORRS apply to the GSE, who through a team of verifiers, assesses each application, and decides on eligibility. Students can be assessed as either High Needs or Very High Needs.

GSE is responsible for the overall management, allocation and budgeting of resourcing (including staffing) provided under ORRS. The total pool of ORRS funding allocated for each student can be used to purchase specialist expertise, additional teaching, paraprofessional support or consumable items. Each student accessing ORRS funding generates an allocation of additional teaching time to the school they are enrolled at. The amount of time depends on the student's High or Very High needs, according to the Table A1.1.

Table A1.1: allocated additional teacher time provide by the ORRS resource according to verified level of need.

Level of Verification (Ongoing or Reviewable)	Full Time Teacher Equivalent (FTTE)

Very High	0.2 FTTE or one day per week
High *	0.1 FTTE or half a day per week

* includes Combined Moderate Ongoing Needs

GSE allocates funds to particular schools approved by the MoE as *Specialist Service Providers* (SSP).

SSP's manage their ORRS money through a funding agreement with the Ministry and regularly report how they use their resources. At least 20% of the funding must be used to employ specialists, and up to 8% can be used for administration.

SEVERE BEHAVIOUR INITIATIVE (SBI)

This service provides advice and specialist support to children and young people with the most severe behaviour difficulties in schools. Behaviour specialists, provided through GSE, work with children and young people displaying severe and challenging behaviour that may endanger themselves or others, damage property, or affect their social interactions and learning.

This service may be available for ORRS funded students, as well as other students presenting challenging behaviour. Support is usually provided to students Year 10 and below, unless they are ORRS funded.

Specialists include educational psychologists, special education advisors, teachers with significant experience in working with students with behaviour difficulties, and behaviour support workers. This team provides short-term support for teachers, families and whānau to manage the most difficult behaviours, while developing long-term strategies for positive changes in student behaviour.

SPECIAL NEEDS PROPERTY GRANT

This grant is provided to schools to undertake capital improvement projects such as alterations or additions to school property for children with high special needs who have recently enrolled or will be enrolling at the school. Works such as the construction of ramps, rails, and specialised bathrooms (amongst other property modifications) at a school site are funded through this grant.

In conjunction with GSE and specialist service recommendations, a school applies to the Ministry of Education's Property Division to make the appropriate changes.

ASSISTIVE TECHNOLOGY GRANT (AT)

This grant is available to schools, on application, to provide special needs students with a range of specialised equipment and assistive technology such as computers, overlay keyboards, software, etc.

Schools may apply to their local Ministry of Education Special Education Technology Coordinator, on behalf of any student who is currently being supported through a Special Education initiative. These initiatives include all targeted supports, as well as the SEG, as long as evidence is provided of ongoing support for that particular student.

The aim of the fund is to support a student's capacity to be present, participate and learn at school. Thus, the school must provide evidence that previous adaptations and technologies have not worked, and an IEP must specify how assistive technology would aid students in meeting specific IEP targets. Tools are trialled and evaluated, before a grant for a piece of equipment is issued to the school.

OTHER SPECIFIC RESOURCE TYPES

SCHOOL HIGH HEALTH NEEDS

This support is provided in two ways – through regional hospital health schools, and through the School High Health Needs fund (SHHNF). Only the latter is considered in this report, although one regional health school is included in the study.

This fund provides resourcing for teacher aide care and supervision of children with high health needs so that they can safely attend schools. The fund is for students who require significant care and supervision in the medium or long term (i.e. for more than six weeks). Students receiving ACC support, exhibiting moderate health care needs, or with a mental health condition that requires management of their behaviour are not eligible for this fund.

Verifiers from the GSE decide on a student's eligibility. The student's parent/caregiver, health care workers, and teacher agree on the level and type of care required in an Individual Care Plan which then determines the amount of funding allocated.

INTERIM RESPONSE FUND (IRF)

The purpose of the fund is to provide temporary support to schools when a student's challenging behaviour reaches a crisis point (i.e. the student has or is likely to seriously harm

themselves or others). Students currently receiving support from GSE or RTLB are not eligible for this fund.

The fund is available so that principals can stabilise the current situation and meet a student's immediate needs, while a comprehensive intervention plan is designed. The fund is available by application direct to the Ministry of Education.

MODERATES CONTRACT

This fund is targeted at students with physical disabilities who do not meet the criteria for ORRS, Communication Initiatives or the Severe Behaviour Initiative, but whose needs are significant enough for schools to identify and address.

Eligible students with physical disabilities receive services under what is known as the moderate contract. Services are delivered by physiotherapists and occupational therapists from both GSE and SSP's.

Students who access this service are described as having a primary physical disability which could have underlying perceptual-motor and/or sensory motor difficulties. The student's physical disability impacts on their ability to access their school environment and is a barrier to educational participation and learning.

SPEECH-LANGUAGE SUPPORT (ALSO KNOWN AS THE COMMUNICATION INITIATIVE)

This support is in place for students with severe communication needs who have speech (articulation) difficulties, fluency disorders, voice resonance disorders, language difficulties or significant language delay. Speech-language therapists assess students, after which point an individual programme of support is developed.

The speech-language therapist may provide ongoing support to an individual student, groups of students and/or provide advice and training to families and teachers. The focus is on supporting students in their first three years of school, although some older students may receive a service.

SUPPLEMENTARY LEARNING SUPPORT (SLS)

SLS provides additional support to children and young people with significant and ongoing special education needs, who do not meet eligibility criteria for ORRS. The SLS was created in response to a recommendation by Wylie (2000) that ORRS support be expanded to

include more students. The initiative was designed to provide more support to students who were perceived to have just missed out on meeting ORRS eligibility.

Eligible students are ones already receiving support from Special Education initiatives such as the Special Education Grant (SEG), Learning Support Funding (LSF), and/or communication or behaviour initiatives but who require additional ongoing support.

SLS funds learning support teachers, employed by the school, to assist the classroom teacher(s) in developing learning programmes to assist identified students and to develop the teaching resources needed to put these programmes into place. In addition, learning support teachers may be able to assist the classroom teacher with some direct classroom teaching or one-on-one specialist support for the student.

TRANSPORT ASSISTANCE

A subsidy or allowance for travel between home and school (by public transport, private conveyance, or taxi or bus) may be paid for students with high special needs who need this for mobility or safety reasons. In many cases, transport assistance applications result from a student's assessment by special education professionals within GSE.

Accident Compensation Corporation (ACC)

ACC funding is targeted at students who as a result of an accident have cover under ACC legislation and who have special education needs resulting from this. This fund supports paraprofessional support, specialist support not available from within the Special Education 2000 initiatives, and/or additional specialist services and transport assistance when support from Ministry of Education special needs funds is not sufficient for ACC to meet its responsibilities to the claimants.

> Appendix Two: Demographic Classifications

Schools and students have been aggregated/grouped in meaningful ways, according to certain demographic characteristics, to assist with analysis.

Area Type

Four indicators are used to indicate whether a school is located in an urban or rural area. **Main** urban areas have a minimum population of 30 000 centred on a city or major urban centre (for example, schools in Dunedin or Wanganui). **Secondary** urban areas have a population between 10 000 and 29 999, centred on a larger regional centre (for example, schools in Whakatane or Ashburton). **Minor** urban areas are centred around smaller towns with a population between 1000 and 9999, such as Dannevirke or Westport. **Rural** centres have a population between 300 and 999, and include schools located in Akaroa and Kaipara Flats.

Decile

Deciles are the indicator used in New Zealand to indicate the extent to which a school's student population is drawn from low socio-economic communities. Deciles are 10% groupings of schools, with Decile 1 schools being the 10% of all schools with the highest proportion of students from low socio-economic communities while Decile 10 schools have the smallest proportion of these students on their roll. This indicator of a school's student population is determined by considering census data on:

- Household income
- Parental occupation
- Household crowding
- Educational qualifications
- Proportion of households on income support

For the purposes of analysis, three groups have been used – **low** decile (Deciles 1 to 3), **medium** decile (Deciles 4 to 7), and **high** decile (Deciles 8 to 10).

The only school in the sample for this study that does not have a decile rating is the Correspondence School. It has been omitted from all decile analyses.

Ethnicity

Students have been classified into five major ethnic groupings – **European/Pakeha, Māori, Pasifika, Asian**, and **Other** – according to information obtained from schools at the time of field visits.

Group Special Education (GSE) and Group Special Education Districts

Group Special Education is the section of the Ministry of Education that has responsibility for special education, and provides services to schools for special educational needs.

GSE is organised into 16 administrative units throughout the country. These are **Northland, Auckland North-West, Auckland Central, Manukau, Waikato, Bay of Plenty East, Bay of Plenty West, Gisborne, Hawkes Bay, Taranaki, Manawatu/Wanganui, Greater Wellington, Nelson/Marlborough, Canterbury, Otago,** and **Southland**. These administrative units have been used in analysis to assess matters of equitable allocation of resourcing, particularly where schools have to access resources through GSE.

Isolation Index

The Ministry of Education assigns an index to each school according to a formula that takes into account its distance from three urban area types (population centres of 5000 or more, 20 000 or more, and 100 000 or more). Depending on the isolation index, a school may receive additional funding to recognise the difficulties that some schools experience as a result of their isolation. In the case of the Isolation Index, there are effectively four funding categories based on this index – schools with an index less than 1.65 (for the purposes of this report, we have called these schools **Not Isolated or Remote**) receive no additional Equity Funding and there are cut scores for differential levels of funding at 1.65 to 1.83 (termed **Isolated** in this report), 1.84 to 2.53 (**Remote**), and above 2.54 (**Very Remote**). These groups have been used to determine whether schools have equitable access to special education resources irrespective of their isolation from main centres where services might be more readily accessible.

Ministry of Education Regions

The Ministry of Education is organised into four geographic regions: **Northern** (with offices in Whangarei and Auckland); **Central North** (with offices in Hamilton, Rotorua and Napier); **Central South** (with offices in Lower Hutt and Wanganui); and, **Southern** (with offices in Nelson, Christchurch, Dunedin and Invercargill). The four regions have been used as a broad geographic indicator.

Roll size

Three groups have been used to classify schools according to the number of students on the roll using the official Ministry of Education roll figures for July 2007, with different thresholds for primary and secondary schools. Schools are described as **small** if they are a primary school of no more than 100 students or a secondary school with no more than 300 students. **Medium** sized schools are primary schools with a roll from 101 to 249, or secondary schools

with a roll from 301 to 699. All other schools are described as **large**. Note that the Correspondence School (July 2007 roll = 5546) has not been classified for this purpose because it is an outlier in this respect.

School Type

For the purposes of this study, only two schools types have been used – primary and secondary. **Primary** schools include contributing schools, full primary schools, intermediate schools, restricted composite schools and special schools. **Secondary** schools include composite schools, Year 7-15 schools and Year 9-15 schools. The Correspondence School has not been assigned to either school type.

> Appendix Three: Survey instruments.

School Main Interview

1. Describe your RTLB cluster approach to distributing LSF funding to schools in the cluster.
2. Describe your RTLB cluster approach to allocating RTLB time across schools in the cluster.
3. How do you identify and group students with special learning needs in your school in order to determine resourcing priorities?
4. What internal and external resourcing/support do you and your staff access to support the teaching and learning of students with special needs that have not been recorded in the survey spreadsheets?
5. How are decisions around the allocation of resourcing/support made, and by whom?
6. What processes are in place to monitor the effectiveness of the resourcing/support that is allocated?
7. What reporting, processes and/or systems are in place to inform future decision making based on any evidence gathered about the effectiveness?
8. What might the next steps you would take look like, as a result of that decision making?
9. What are the processes for determining the budget for special needs and who makes these decisions at a strategic and a class level?
10. How would you rate the adequacy of funding for your school?
11. How would you rate how well you are using the resources that you are currently provided with? Give reasons for your rating.
12. If you could have more special needs education resourcing and support for your school, prioritize the following types of additional resource? More money, more school staffing and more external specialist expertise. Please rank these
13. Please describe what you would use this additional resourcing/support for, if it was available.
    a. If you had more money list the three key ways you would use it?
    b. If you had more staffing how would you use it?
    c. What other specialist expertise is there that you would use?

Teacher Case Study Interview

1. What, if any, has your involvement been in the assessment of this student's special needs?
2. What involvement, if any, have you had in acquiring support for this student?
3. What involvement, if any, have you had in the development of an education plan to address this student's special education needs?
4. What are the key goals in 2007 for this student and to what extent are these goals being met to date?
5. How do you assess whether these goals are being met?
6. How would you rate the overall progress this student is making as a result of their current programme of support to address their special education needs?
7. Rate the effectiveness of the current support in place to address the special education needs of this student. Explain the reason for your rating?
8. Rate how you believe the current level of resourcing for the special needs of this student have affected their experiences in your classroom? Explain the reason for your rating?
9. Rate how the current level of resourcing for the special needs of this student affected the teaching in your classroom? Explain the reason for your rating?

Guardian Focus Group Interview

1. Describe the level of involvement that you may have had in the development of a programme of support for your family member that addresses their special education needs.
2. What has your involvement been in the ongoing monitoring and adjustment of your family members programme to address their special education needs?
3. Rate the overall progress that your child is making in their current programme of support to address their special education needs. Explain the reasons for your answer?
4. Is your child going to their nearest local school?
5. If your child is not going to their nearest local school please tell me why not.
6. Are there any other programmes or sources of support external to the school that your child accesses?

Survey One

1. School information	
Name of school	

2. Contact person	
Name of contact person	
Email of contact person	

3. Does your school have:	
a special needs unit?	

4. Is your school:	
a) an ORRS fund holder?	
b) a host school for satellite classes?	
c) an RTLB cluster lead school?	
d) an Enhanced Programme Fund recipient school?	
e) receiving ORRS funding from an ORRS fundholder school	
f) receiving ORRS funding from GSE?	

This section is to determine some basic characteristics of Special Education Resourcing in your school.

5. Is your school a Learning Support Fund (LSF) fundholder school?	
Yes/No	

6. Is your school an employing school in an RTLB cluster?	
Yes/No	

7. If your school is not the learning support fund (LSF) fundholder school, what is the name of your LSF fundholder school?	
Full name of school	

8. How much (if anything) did your school receive in Learning Support Fund (LSF) Funding in Terms 1 and 2 2007?	
$ (GST excl.)	

9. What was your planned allocation of RTLB hours across terms 1 and 2 for this year?	
Hours per week	

10. If you did not receive the hours above, how many hours short were you?	
Hours per week	

11. Does your school have enrolled students who are receiving their education at satellite classes in other schools in 2007?	
Yes/No (If no go to Q13)	

12. How many students who are enrolled in your school were located in these satellite classes in terms 1 and 2 2007?	
Number	

13. In total how much money did you pay to satellite class host schools in terms 1 and 2 for them to accommodate these students on their sites?	
$(GST excl.)	

14. Is your school a host school for a satellite class or classes in 2007?	
Yes/No (If no, go to question 16)	

15. How many students was your school hosting in this satellite class or classes in Terms 1 and 2 2007?	
Number	

16. In total how much money did you charge to provide a satellite class or classes for these students in Terms 1 and 2 2007?	
$(GST excl.)	

Survey Two

School Details

Please fill out your school name, school number and amount of students in Category 1-4!!

School Name	
School Number	

Number of students in Category 1	
Number of students in Category 2	
Number of students in Category 3	
Number of students in Category 4	

The numbers you have entered above will apear for your information in the allocated cells in the School Funding, Student Targeted and Other Sources sheet.

You may wish to print the category descriptions on page 5 of the Survey Instructions Overview as you work through the various sections of the survey!

School Funding

For each of the following Ministry sources of resourcing please explain how this resourcing is allocated and the number of students being supported in each category of need through these allocations. Where dollar values are indicated please provide a total amount over terms 1 and 2. For student numbers in each category these are the numbers of students using the resource in some way.

Special Education Grant										
Resources	Teacher Aide	Specialist support	Teacher	Resources for Delivering Curriculum	Externally Provided Programmes or Activities	SENCO	Professional development for teachers	Professional development for teacher aides	Other	Other
	hrs terms 1 and 2	**hrs terms 1 and 2**	**FTTE**	**$ value**	**$ value**	**FTTE**	**$ value**	**$ value**		
Quantity of resource										
Record the total number of students accessing each type of resource in each category										
Category 1-students										
Category 2-students										
Category 3-students										
Category 4-students										
Please write any comments here										

Field workers notes	

Enhanced Programme Funding										
Resources	Teacher Aide	Specialist support	Teacher	Resources for Delivering Curriculum	Externally Provided Programmes or Activities	SENCO	Professional development for teachers	Professional development for teacher aides	Other	Other
	hrs terms 1 and 2	**hrs terms 1 and 2**	**FTTE**	**$ value**	**$ value**	**FTTE**	**$ value**	**$ value**		
Quantity of resource										
Record the total number of students accessing each type of resource in each category										
Category 1-students										
Category 2-students										
Category 3-students										
Category 4-students										
Please write any comments here										

Field workers notes	

Learning Support Funding										
Resources	Teacher Aide	Specialist support	Teacher	Resources for Delivering Curriculum	Externally Provided Programmes or Activities	SENCO	Professional development for teachers	Professional development for teacher aides	Other	Other
	hrs terms 1 and 2	**hrs terms 1 and 2**	**FTTE**	**$ value**	**$ value**	**FTTE**	**$ value**	**$ value**		
Quantity of resource										
Record the total number of students accessing each type of resource in each category										
Category 1-students										
Category 2-students										
Category 3-students										
Category 4-students										
Please write any comments here										

Field workers notes	

Resource Teachers Learning and Behaviour (RTLB)										
Resources	RTLB working with students	Teacher Aide	Specialist support	Teacher	Resources for Delivering Curriculum	Externally Provided Programmes or Activities	SENCO	Professional development for teachers	Professional development for teacher aides	Other
	hrs terms 1 and 2	**hrs terms 1 and 2**	**hrs/ week**	**FTTE**	**$ value**	**$ value**	**FTTE**	**$ value**	**$ value**	
Quantity of resource										
Record the total number of students accessing each type of resource in each category										
Category 1- students										
Category 2- students										
Category 3- students										
Category 4- students										
Please write any comments here										

Field workers notes	

Operations Grant									
Resources	Teacher Aide	Specialist support	Teacher	Resources for Delivering Curriculum	Externally Provided Programmes or Activities	SENCO	Professional development for teachers	Professional development for teacher aides	Other	Other
	hrs terms 1 and 2	**hrs terms 1 and 2**	**FTTE**	**$ value**	**$ value**	**FTTE**	**$ value**	**$ value**		
Quantity of resource										
Record the total number of students accessing each type of resource in each category										
Category 1- students										
Category 2- students										
Category 3- students										
Category 4- students										
Please write any comments here										

Field workers notes	

TFEA									
Resources	Teacher Aide	Specialist support	Teacher	Resources for Delivering Curriculum	Externally Provided Programmes or Activities	SENCO	Professional development for teachers	Professional development for teacher aides	Other	Other
	hrs terms 1 and 2	**hrs terms 1 and 2**	**FTTE**	**$ value**	**$ value**	**FTTE**	**$ value**	**$ value**		
Quantity of resource										
Record the total number of students accessing each type of resource in each category										
Category 1- students										
Category 2- students										
Category 3- students										
Category 4- students										
Please write any comments here										

Field workers notes	

Other Ministry Resourcing										
Resources	Teacher Aide	Specialist support	Teacher	Resources for Delivering Curriculum	Externally Provided Programmes or Activities	SENCO	Professional development for teachers	Professional development for teacher aides	Other	Other
	hrs terms 1 and 2	**hrs terms 1 and 2**	**FTTE**	**$ value**	**$ value**	**FTTE**	**$ value**	**$ value**		
Quantity of resource										
Record the total number of students accessing each type of resource in each category										
Category 1-students										
Category 2-students										
Category 3-students										
Category 4-students										
Please write any comments here										

Field workers notes	

Student Targeted

For each of the following Ministry sources of resourcing please explain how this resourcing is allocated and the number of students being supported in each category of special needs through these allocations. Where dollar values are indicated please provide a total amount over terms 1 and 2. For student numbers in each category these are the numbers of students using the resource in some way.

ORRS Provision											
Resources	Teacher Aide	Specialist support	Teacher	Resources for Delivering Curriculum	Externally Provided Programmes or Activities	SENCO	Professional development for teachers	Professional development for teacher aides	Other	Other	Other
	hrs terms 1 and 2	**hrs terms 1 and 2**	**FTTE**	**$ value**	**$ value**	**FTTE**	**$ value**	**$ value**			
Quantity of resource											
Record the total number of students accessing each type of resource in each category											
Category 1- students											
Category 2- students											
Category 3- students											
Category 4- students											
Please write any comments here											

Field workers notes	

Severe Behaviour Initiative											
Resources	Teacher Aide	Specialist support	Teacher	Resources for Delivering Curriculum	Externally Provided Programmes or Activities	SENCO	Professional development for teachers	Professional development for teacher aides	Other	Other	Other
	hrs terms 1 and 2	**hrs terms 1 and 2**	**FTTE**	**$ value**	**$ value**	**FTTE**	**$ value**	**$ value**			
Quantity of resource											
Record the total number of students accessing each type of resource in each category											
Category 1- students											
Category 2- students											
Category 3- students											
Category 4- students											
Please write any comments here											

Field workers notes	

Property Modification Grant Special Needs Property Grant "first time enrolment grant"										
Resources	Capital Development e.g. Ramp, disabled shower, path rails						Professional development for teacher aides	Other	Other	Other
	Capital development 1	Capital development 2	Capital development 3	Capital Development 4	Capitol Development 5	Cap. Dev. 6				
	$ value									
Quantity of items										
Unit Cost ($)										
Number of students provided for										
	Record the total number of students accessing each type of resource in each category									
Category 1- students										
Category 2- students										
Category 3- students										
Category 4- students										
Comments about the data above										

Field workers notes	Has the school had to top up the funds or use additional funding to meet their identified requirements?

Assistive Technologies Grant											
Resources	Technology Purchased e.g. Computers, Mouse, Sound system							Professional development for teacher aides	Other	Other	Other
	item 1	item 2	item 3	item 4	item 5	item 6	item 7				
								$ value			
Quantity of items											
Unit Cost ($)											
Number of students provided for											
Record the total number of students accessing each type of resource in each category											
Category 1- students											
Category 2- students											
Category 3- students											
Category 4- students											
Comments about the data above											

Field workers notes	Do other students access these technologies?

Specific Resource Type											
Resources	ACC			High Health Needs Provision		Moderate Supports Contracts (Vision, Hearing, Physical		Speech Language Initiative	Supplementary Learning Support		
Type of resource (where empty - pick from drop down box)				Specialist Support		Physiotherapy	Occupational Therapy	Specialist Support	Specialist Teacher time - GSE Specialist		
	hrs terms 1 and 2	**$**	**hrs terms 1 and 2**	**hrs terms 1 and 2**	**hrs terms 1 and 2**	**hrs terms 1 and 2**	**hrs terms 1 and 2**	**hrs terms 1 and 2**	**hrs terms 1 and 2**		
Quantity of resources											
Number of students provided for											
Category 1- students											
Category 2- students											
Category 3- students											
Category 4- students											
Comments about the data above											

Field workers notes	

Other Sources

For each of the following sources of resourcing please explain how this resourcing is allocated and the number of students being supported in each category of special needs through these allocations. Where dollar values are indicated please provide a total amount over terms 1 and 2. For student numbers in each category these are the numbers of students using the resource in some way.

Resourcing from Parent Donation											
Resources	Teacher Aide	Specialist support	Teacher	Resources for Delivering Curriculum	Externally Provided Programmes or Activities	SENCO	Professional development for teachers	Professional development for teacher aides	ICT	Voluntary Time	Other
	hrs terms 1 and 2	**hrs terms 1 and 2**	**FTTE**	**$ value**	**$ value**	**FTTE**	**$ value**	**$ value**	**$ value**	**hrs**	
Quantity of resource											
Record the total number of students accessing each type of resource in each category											
Category 1- students											
Category 2- students											
Category 3- students											
Category 4- students											
Please write any comments here											

Field workers notes	

	Resourcing from other community, social or government agencies or organisations e.g. Youth Aid, Autism support, eating disorder clinics and rotary.										
Resources	Teacher Aide	Specialist support	Teacher	Resources for Delivering Curriculum	Externally Provided Programmes or Activities	SENCO	Professional development for teachers	Professional development for teacher aides	ICT	Voluntary Time	Other
	hrs terms 1 and 2	**hrs terms 1 and 2**	**FTTE**	**$ value**	**$ value**	**FTTE**	**$ value**	**$ value**	**$ value**	**hrs**	
Quantity of resource											
Record the total number of students accessing each type of resource in each category											
Category 1- students											
Category 2- students											
Category 3- students											
Category 4- students											
Please write any comments here											

Field workers notes	

Survey Three

Sample Data

Please provide data on your selected students										
ID	Gender M/F	Age	Ethnicity	Special Need Category (1,2, 3 or 4)	Individual resourcing e.g. ORRS, SLS	Nature of Need	Nature of Need	Nature of Need	Condition e.g. autism, dyslexia	Comment

School Name	
School Number	

Case Study Data

Please provide the following data on the three selected case study students from the sample on the previous sheet

	ID	Additional Teacher Individual	Additional Teacher Shared	Teacher Aide Individual	Teacher Aide Shared	Specialist Support	Resources for Delivering Curriculum	External Programmes and activities	Physical Environment modifications	RTLB
	Code	FTTE	FTTE	Hours per Week	Hours per Week	Hours per Week	Amount $	Amount $	Amount $	Hours per week
Student 1										
Student 2										
Student 3										

> Appendix Four: Contact with schools and Ethics Documents

August 2007

Dear Principal

Survey of Special Education Resourcing

The Ministry of Education (MoE) has engaged Cognition Consulting Limited (CCL) to undertake a national survey of special education resourcing in New Zealand schools. This letter is to invite your school to participate in this research. The research is being carried out in 250 New Zealand schools, and will take place in term 3 and term 4 of 2007. Your school has been randomly selected as part of this survey sample.

The results of this survey will be relied upon heavily when determining the future direction of special education resourcing. A high rate of participation across the diversity of New Zealand schools will ensure that the findings are representative of the circumstances and actions of New Zealand schools.

The two major objectives of the survey are:

- To provide understanding about the range of resourcing that children with special needs actually receive.
- To better understand how individual and school targeted funding is deployed at the local level.

Each participant school will be asked to complete a survey about the accessing and management of special education resourcing and what is actually allocated to students identified as having special needs. CCL will visit each school to assist with the survey completion and undertake interviews with key individuals. The survey will also seek some additional information on up to three students in your school with special needs. This latter process will also include interviews with the parents of these children.

The attached information sheet covers the survey details in more depth. If you have any further questions about the survey you can contact David Stuart or Lorrae Ward at CCL using the contact details below. In addition, the CCL website has an information page on which you can access a range of documentation.

David Stuart

dstuart@cognitionconsulting.co.nz

(04) 382 0308

Lorrae Ward

lward@cognitionconsulting.co.nz

(09) 638 4788

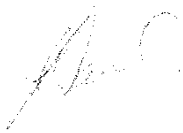
Please complete the attached consent form and return to Cognition Consulting either online through the website, by fax: (09) 638 4751 or by posting to:

Special Needs Survey
Cognition Consulting Limited
Private Bag 92617
Symonds Street
Auckland

This form needs to be **returned** to Cognition Consulting by **as soon as possible**.

Thank you very much for your consideration of this important survey project.

Yours sincerely,



Lorrae Ward
Operations Manager: Research & Evaluation
lward@cognitionconsulting.co.nz

Brett Lineham
Project Manager, Ministry of Education
Brett.Lineham@minedu.govt.nz

Survey of Special Education Resourcing, 2007:

Information sheet

What is the purpose of the survey?

The purpose of the survey is to develop an information base on the special education resources received by children in schools around New Zealand. The two key objectives of the survey are to:

- Provide understanding about the range of resourcing that children with special needs actually receive;
- Better understand how individual and school targeted funding is deployed at the local level.

The survey findings will be used by the Ministry of Education to:

- Inform future policy advice in this area
- Assess the diversity of ways that special education resourcing is allocated
- Look at the ways special education resourcing differs for different groups of students, and students in different schools.

When is the survey happening?

The survey will take place across term 3 and early term 4. Once we have a final group of participating schools, a timetable will be set for school visits in your area and participating schools will be contacted to arrange a data collection visit. We intend to send the survey out to all participating schools at the start of term 3 and to commence visits in August.

Why should we participate?

The results of this survey will be relied upon heavily when determining the future direction of special education resourcing. A high rate of participation across the diversity of New Zealand schools will ensure that the findings are representative of the circumstances and actions of New Zealand schools.

Why was my school chosen to participate?

The survey will be collecting data from about 10% of all schools in New Zealand. A sample was developed that conforms to the national profile of New Zealand schools by such characteristics as location, school type, and decile. The sampling also considered the enrolment profile of ORRS students in New Zealand to ensure that schools serving large numbers of ORRS students were well represented. Schools were randomly selected once the above criteria were considered.

What kinds of data will the survey collect?

The survey will collect the following kinds of data:

- The total resourcing/support actually received by each school and utilised for the purposes of special education. This could include support from a range of sources including Ministry of Education special needs funding as well as support from other organisations and the community.
- School management of special education resourcing.
- The kinds of support actually provided to students and how this support is used to meet their needs.

The survey will also collect data from schools about students whose special education needs are not being met.

How will the survey collect this data?

Once we have a complete list of schools who have agreed to participate we will create an electronic mailing list. The attached consent form asks each school to provide us with a contact

email for this purpose. Through this list we will provide schools with a link to an Excel spreadsheet on our website.

Schools will be asked to complete as much of this spreadsheet as they can and return it to us by email. Alternatively, schools can complete it in a hard copy and mail this to us. Schools may also choose to provide us with their own documentation to assist with form completion.

We would like schools to return the spreadsheet and/or documentation to us prior to our visit so that we can check for any missing data and highlight areas we would like clarification on. We will also be happy to assist with final completion of the spreadsheet during our visit.

During the field visit we will ask the person responsible for special needs support in the school and the school principal a series of interview questions about how the school manages, allocates and monitors its special education resourcing. (Please note we are presuming one of these people will have completed the survey). In addition, we would like to speak to the Board chair or the special needs representative on the Board if there is one.

We would also like to interview the parents of three students in your school with identified special education needs, to look closer at how resourcing is ultimately experienced by students and what the outcomes for these students are, and to interview at least one teacher who works closely with these students.

We recognise that for parents it may be difficult to arrange interviews in school time and we are happy to discuss other arrangements including a phone interview.

Will ethical procedures be followed with relation to this project?

Yes. The Ministry and CCL consider the ethics of this project a serious and important part of the survey process. CCL follow rigorous ethics processes and these will be adhered to. A copy of the CCL processes is available.

Will permission be sought from parents to collect student data?

Yes. We will be seeking consent from parents to collect certain types of data. If parents decline consent, this student's information will not be collected.

We will provide each school with parent information letters and parent consent forms to distribute to these parents.

Will my school and/or students be identified in any way?

No. When we receive any material back from schools we will remove all information that would readily identify either the school or individual students. We are suggesting that schools use a coding system when "naming" students. We will use a similar coding system for all schools.

All data will be synthesised and reported on collectively across groups of schools such as by region, decile, and roll size. No individual schools will be identified. If we become concerned that a school or student may be identifiable we will contact the school directly to discuss our concerns.

How will the 'student case studies' be conducted?

The parent consent forms will also ask families whether they are willing for their child's experiences to be considered in more depth. Up to three students will be selected by Cognition Consulting Ltd (CCL) in consultation with the school. We will send you a form to complete which identifies those families who have agreed to their child being considered. Again this can be returned to us electronically with your suggestions as to the most suitable three children.

For each of these students, some extra data will be collected from the school that draws out how the resourcing is ultimately constructed into a programme of support for this student's special education needs, and what its effects are. This may include looking at the student's IEP (Individual Education Programme) documentation where this exists.

Again, student names will not be recorded and individual students will not be identifiable in the final report. We will not interview these students or collect any data through student observation.

Doesn't the Ministry already have some of this special education resourcing data?

Yes it does. Where the Ministry of Education already has a record of particular types of special education resourcing being received by the school, this information will be collected by us to save you having to retrieve it. Part of the school consent form seeks your consent for this information to be accessed by us. Similarly, parental consent forms seek consent from parents for student level data to be accessed.

What does the survey define as special needs resourcing and special needs students?

The Ministry of Education is interested in what *schools* consider to be special education resourcing (potentially wider than resourcing provided under SE 2000 resourcing) and special education needs in their school. Schools utilise a variety of resourcing streams to address special needs including resourcing related to the needs of individual students, resources provided through operational funding (e.g. SEG), and general resourcing. The survey will contain a list of formal special education resourcing and schools will be invited to detail other resourcing sources.

How much time will it to take to participate in this survey?

We are developing survey documents and a survey implementation process that minimises the time and data required to undertake this survey in each school while still providing comprehensive data. The time commitment on your school will vary depending on a number of factors. We have developed the main survey tool in such a way as to enable you to complete it at your convenience prior to our visit. The actual school visit will be no longer than one school day although we may need to follow up some data by telephone.

Is there any additional funding for participating schools?

There is no funding available to compensate schools for participation. We are endeavouring to make the process as streamlined as possible so that your school's time commitment is kept to a minimum and that this time is efficiently used. We trust that the importance of this survey and the information it provides will lead you to accept our invitation.

What happens next if our school agrees to participate?

On receipt of your signed consent form we will be distributing full survey information and the first part of the survey itself. We will liaise with you to confirm a time in term 3 or 4 to visit to complete data collection.

Who can I ask if I have any further questions?

Lorrae Ward
Cognition Consulting Ltd
Phone: 09 638 4788
Email: lward@cognitionconsulting.co.nz

You can also contact the Ministry of Education Project Manager

Brett Lineham
Ministry of Education
Phone: 04 463 2857
Email: brett.lineham@minedu.govt.nz

School Participant Consent Form

Survey of Special Education Resourcing

To be completed by the school principal and/or Board of Trustees chairperson

This form acknowledges that your school has agreed to participate in the Ministry of Education funded research: *Survey of Special Education Resourcing.* It sets out some important information about the administration of the survey and how your school information will be used. Please tick the appropriate boxes and sign the form. This form may be returned to Cognition Consulting Ltd (CCL) either by fax: (09) 638 4751 or by posting to the address at the bottom of this page.

Before you complete and sign this form please read the attached letter and information sheet.

- ❑ I have been given, and have understood, an explanation of this research project. I have had an opportunity to ask questions and have them answered.
- ❑ I understand that the research team will collect current Ministry of Education data about special education support received by my school and the students in it, but that my school and students will not be named when the information is used.
- ❑ I understand that as the survey will be collecting student level data on those students who have recognised special education needs and are receiving support, parent consent for the collection of this data will be sought by CCL through the school. Where parent consent is not granted, CCL will not collect data from my school about these students.
- ❑ I understand that data collected from my school and the Ministry of Education will be stored in a secure location within CCL during the project and for a period of up to three years.
- ❑ I understand that the data will be used for the purposes of reporting to the Ministry of Education and for publication; and that when data is used for such purposes it will be done in a way that does not identify any schools or students, Board members, staff or parents involved in the survey.

I agree to my school participating in this project: *Survey of Special Education Resourcing*

❑ Yes ❑ No

Signed:_____

Name: _____

Position _____

School: _____

Please **return** this form to Cognition Consulting **as soon as possible**.

PARENT INFORMATION

Survey of Special Education Resourcing

Dear Parent/Carer,

The Ministry of Education has commissioned Cognition Consulting Limited (CCL) to conduct a survey to identify the range of resourcing that children with special needs receive at school and how schools manage their special education resourcing.

The Ministry will use the survey findings to inform special education resourcing policy over the coming years.

Your child's school is participating in this project.

More information about the project is available online at: www.specialedproject.org.nz

I am writing this letter to seek your permission to collect information about your child's special needs and the resources he or she receives at the school.

If you agree to your child's information being collected, this information will be kept confidential and anonymous. The research will in no way interfere with your child's study.

If you are willing for your child's information to be collected, please complete and sign the attached form and return to your school.

Please contact me (09 638 4788, lward@cognitionconsulting.co.nz); or Dr David Stuart (04 382 0308, dstuart@cognitionconsulting.co.nz) if you have any questions.

Yours sincerely,

Dr Lorrae Ward

Project Director

Family Participation Form

Survey of Special Education Resourcing

Please return this form to the school by (date)

I have been informed of the nature of the *Survey of Special Education Resourcing* project.

I give permission for you to collect information about my child's special education needs and the resources he or she receives at the school.

Yes ☐ **No** ☐

I am willing to be interviewed as part of this project.

Yes ☐ **No** ☐

Student's name *(please print):* _____

Guardian' name: _____

Guardian's signature: _____

Date: _____