Assistive Equipment Guidelines

CONTENTS

Acknowledgements 1
Reference Group 1
Focus Group 1
This Handbook 2
Assistive Equipment 2
Introduction 2
Use of Assistive Equipment 3
The Assessment Framework 4
The process for assessment and application 4
Eligibility for Funded Assistive Equipment 5
Role of the School 6
Success factors 7
Considering Assistive Equipment 8
STEP 1. Class-based Assessment 8
Process 8
Policies, attitudes and values 9
Information 9
Skills 9
Resources 10
Funding responsibility 10
Summary 10
Resource Section – Class-Based Assessment 10
STEP 2. School-based Assessment 12
Building on class-based assessment 12
Process 12
Policies, attitudes and values 13
Information 13
Skills 13
Resources 13
Summary 15
Resource Section – School-Based Assessment 16
Starting with the IEP 16
Looking at options and gathering information 17
STEP 3. Specialised Assessment 21
Building on clear information from a school-based assessment 21
Criteria for specialised assessment 22
Process 22
Policies, attitudes and values 22
Information 23
Skills 23
Resources 23
Funding – roles and responsibilities 24
Resource Section – Specialised Assessment 24
Examples of Specialised Assessment Teams 24
Considerations 26

Hierarchy of Assistive Equipment 26
Trial of Assistive Equipment 28
Points to Note for Trials 29
Training and Support 31
Who should be trained? 31
Responsibilities 31
Who can train? 31
Goal-oriented training plan 32
Further training 32
Use, Monitoring and Review 32
Integrating the assistive equipment into the student's programme 32
Review 33
Considerations and possible next steps 34
Applying For Funding 34
Assistive Equipment Process 34
A student will be considered for funding for assistive equipment and associated training if: 34
A student will be considered for funded specialised assessment for assistive equipment if: 34
Applying for Assistive Equipment Funding 35
Steps in the Application Process 35
1. Review of results of trial 35
3. Completion of the Application Form 36
4. Moderation, Funding and Allocation 37
5. Notification 38
Review of Decision - Dispute Resolution 38
Timeframe 39
Terms of reference 39
Outcomes from a review 40
Funding eligibility with different agencies 40
Insurance, Repairs, Transfer and Returns 40
Insurance 41
Repairs 41
Transfers 41
Returns 41
Meet The Students 42
Matu 42
A student who finds written language a significant challenge 42
Bella 47
A student needing systematic support for written communication in Y9 47
Six months later: 50
Glossary 52
Terms 52
Sources of Support 54
References 54
Appendix 56
Operational Protocol Between Health and Education 56

Acknowledgements

Reference Group

A reference group drawn from all interested sectors assisted the writers. Their ideas and feedback proved invaluable in shaping this document. The reference group school representatives are supporting significant numbers of students with high and complex special education needs.

Wendy Brenkley	Parent to Parent	Parent support organisation
Zoe Codd	Awatapu College	Secondary Principals' Association of New Zealand (SPANZ)
Margaret Gaïqui	Mt Roskill Intermediate	Fundholder
Sue Green	Specialist Education Services	Specialised services
Stephanie Hughes	NZ CCS	Parent and consumer support
Neil Lancaster	Mairehau High School	SPANZ
Paul Nees	Rangikura School	New Zealand Principals' Federation (NZPF)
Debbie Ngata	Parent to Parent	Parent support organisation
Sue Primrose	Abletech	Specialist service provider
Meredith Rayner	NZ CCS	Parent and consumer support
Erika Ross	Karori West School	NZPF
Ann Smaill	TalkLink	Specialist service provider
Reid Strang	Maitai School	Fundholder
Margaret Trotter	Van Asch Deaf Education Centre	NZPF

Focus Group

Another focus group provided the perspective of smaller schools and those where students are using assistive equipment but are not in the Ongoing and Reviewable Resourcing Schemes. The writers gratefully acknowledge the comments and suggestions of:

Frazer Mailman, Masterton Intermediate School

Kevin Mackay, Gladstone School

Robyn Deverall, Hutt Valley High School

Carol Ratnam, New Zealand CCS

Margaret Marshall and Tanya Duncan, The Correspondence School.

This Handbook

These guidelines are for school staff, boards of trustees, students and their families and whänau, fundholders, specialised assessors and therapists. They are to provide useful information and advice on assessment, funding and the effective use of assistive equipment in schools.

These guidelines also:

- Clarify the roles and responsibilities of students, families, whänau, schools, fundholders and specialised service providers

- Detail the current processes for:

    - assessing students and their need for assistive equipment
    - funding assistive equipment
    - providing training and support for the student so that they use assistive equipment effectively

- Provide examples of current effective practice using assistive equipment.

Assistive Equipment

Introduction

Ko koe ke tënä, ko ahau ki tënai o te kete.
You at that, and I at this handle of the basket.

Assistive equipment is sometimes called specialised equipment or assistive technology and can be described as "simply anything that can help a person with disabilities do something they cannot do, or help them do it better than they can without it".*

* Source: Reed P, July/August 98 *Disability Sources*

The term assistive equipment embraces a wide range of equipment, from what is referred to as "low-tech" or "light-tech", through to "high-tech". In the education context these terms cover a range of devices from a pencil grip to a complex, especially modified computer-based system.

Use of assistive equipment supports the Essential Learning Areas and Essential Skills of The New Zealand Curriculum Framework. Assistive equipment is neither an end in itself, nor an alternative to other teaching and learning strategies. It is simply a tool.

As outlined in the National Education Guidelines, appropriate assistive equipment contributes to: "Success in learning for those with special education needs by ensuring that they are identified and receive appropriate support," and "Equality of educational opportunity for all New Zealanders, by identifying and removing barriers to achievement."

Assistive equipment supports:

- Adapting the curriculum for the student
- Helping the student to access learning activities.

Use of Assistive Equipment

Use of assistive equipment by school students is affected and governed by several key elements in the New Zealand education system. These are:

- **The New Zealand Curriculum Framework (Ministry of Education 1993) comprising Essential Learning Areas and Essential Skills** that states "All young people have the right to gain, through the state schooling system, a broad, balanced education that prepares them for effective participation in society"
- **The National Education Guidelines** that state: "All students should have the opportunity to undertake study in essential areas of learning and to develop essential skills"
- **Special Education 2000** – a policy that provides a clear, consistent and predictable framework for supporting students with special education needs, regardless of school setting or geographical location
- **Individual Education Programme (IEP)** process (see *IEP Guidelines*, Ministry of Education 1998) that helps with the planning necessary to implement the New Zealand Curriculum through programmes of learning support
- **Digital Horizons: Learning through ICT** (Ministry of Education, 2002). Many applications for assistive equipment in schools are to support the process of written communication and information handling
- **Operational Protocol between Health and Education** clarifies the funding responsibility for assistive equipment for school students
- **Operation Protocol between ACC and Education** clarifies the funding responsibility for assistive equipment for school students.

The Assessment Framework

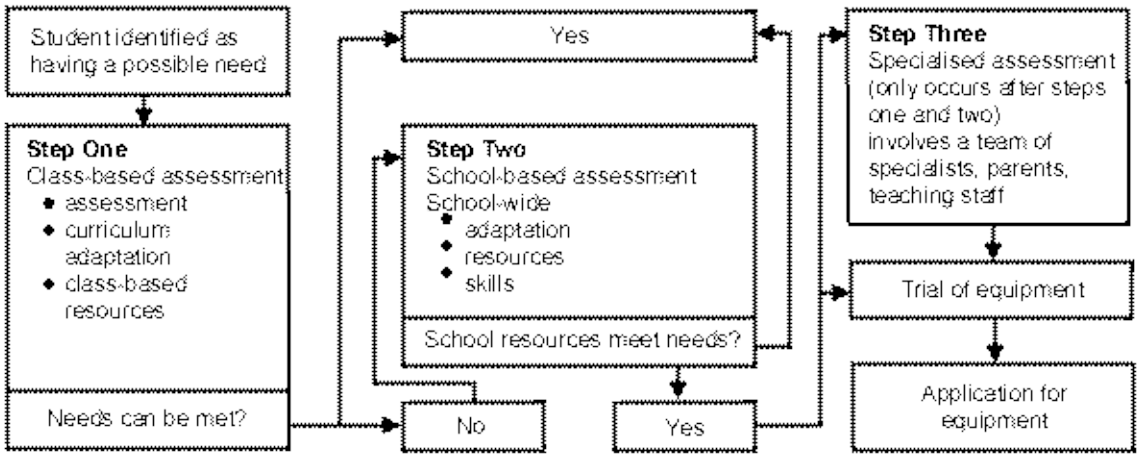
There are three clear levels of assessment:

1. Class-based assessment
2. School-based assessment
3. Specialised assessment.

Assessment and resource support for all students begins in their classroom, and most are only likely to need *class-based assessment* and the use of school resources. However, some students may need additional assessment and resources, requiring a more formal *school-based assessment*. This may lead to the school applying for funding for assistive equipment.

Once these steps have been completed a small number of students need additional *specialised assessment*. Again, this may lead to an application for funding for assistive equipment.

The process for assessment and application



All planning, assessment and support processes are centred on the student, and their family and whānau. Principles of assessment are described in Assessment: Policy to Practice, Ministry of Education, 1994. Assessment for assistive equipment follows the same principles, always involves a team approach, and includes the student, their family, whānau, peers, and school staff. Specialised assessment usually involves resource people from outside the school.

Since 1997, the Ministry of Education has increasingly aligned funding support for assistive equipment within the Special Education 2000 framework. There are now national systems for:

- Determining a student's eligibility and priority
- Funding very complex, specialised assessments by accredited assessment teams
- Funding the purchase of assistive equipment and associated training
- Managing the funded equipment (including a national database and a trial/reissue pool).

This funding support is available only for individual students (not groups of students). It is aimed at supporting specific achievement objectives and learning outcomes. Assistive equipment funded through the Ministry of Education is used mainly in schools but may also be used when the school, student, and student's family agree that learning programmes should continue in the student's home.

Group Special Education, as part of the Ministry of Education manage these equipment-related services.

Eligibility for Funded Assistive Equipment

School students with special learning needs are eligible to be considered for assistive equipment funding if they are supported through any of the Special Education 2000 initiatives. A school student is one who is:

- Enrolled in a registered school (compulsory education)
- Aged between 5 and 19 years (up to the end of the year in which they turn 21 if they have a special education agreement).

In addition the student must meet one of the following criteria:

The student must currently receive special education assistance through:
• Ongoing and Reviewable Resourcing Schemes (ORRS) • Speech-Language (Communication) Initiative • Severe Behaviour Initiative • Special Education Grant • Resource Teachers: Learning and Behaviour (RTLB) • National provision for students with sensory impairments and physical disabilities • School High Health Needs Fund

Research and analysis within New Zealand indicates that there are key times in a student's school career when assistive equipment is of particular benefit. These are called priority indicators and will be applied during the application process to ensure fair access to funding. Note that more than one priority indicator may apply.

Priority indicators for consideration of assistive equipment:	
1.	**The student's circumstances have changed markedly due to:**
a.	Starting school (aged 5 - 7)
b.	Personal health/physical changes eg, deterioration of disability
c.	Existing special education equipment requires replacement/modification. **And/or**
2.	**The student enters a transition phase, as they:**
a..	Change school setting
b.	Enter for examinations within the New Zealand Qualifications Authority (NZQA) framework (within one year of date of application)
c.	Prepare for post-school occupation (no more than two years and no less than one year before the date they plan to leave school). **And/or**
3.	**There is clear evidence that the student's access to one or more of The Essential Learning Areas from The New Zealand Curriculum Framework will be provided by assistive equipment, specifically:**
a.	Physical access modifications
b.	Adapted presentation of learning materials.

Approximately 70 percent of students receiving Ministry of Education funded equipment are in the Ongoing and Reviewable Resourcing Schemes. Thirty percent are supported through other Special Education 2000 initiatives.

Role of the School

All schools are expected to:

- Work in consultation with the student, family and whānau to identify priority learning goals
- Gather base-line data

- Develop effective learning programmes
- Use appropriate teaching strategies
- Provide all students with access to a range of technologies within the school
- Ensure all teaching and support staff have the skills to make use of technologies typically found in schools eg, computers.*

* See Digital Horizons: Learning through ICT (Ministry of Education 2002).

Regular school funding covers the provision of class-based assessments, programmes and support for all students. Support includes provision of a typical range of classroom resources, together with teaching staff with the skills and confidence to support these technologies.

All schools are expected to use their Special Education Grant to provide support for students with special education needs in accordance with their special education policy. Schools supporting students in the Ongoing and Reviewable Resourcing Schemes are expected to use the annual materials grant to provide a range of low-cost and consumable items needed by the student. The specialist teacher (0.1 or 0.2 position) is expected to be a key support person in the assistive equipment assessment team.

Some schools are fundholders for students in the Ongoing and Reviewable Resourcing Schemes. All fundholders are required to provide specialist services and therapies for students in these schemes. School-based assessment and support for assistive equipment are included in these services through the involvement of specialist staff.

Schools are encouraged to seek further information and advice on processes and resources from their local Group Special Education Technology Co-ordinator. For details (see contact details).

Success factors

New Zealand and international research* shows that a student will get maximum benefit from assistive equipment providing:

- Everyone involved has realistic expectations
- The students and their support team are committed and motivated. The support team will include representatives from school eg, the principal, special education needs co-ordinator, specialist teacher, teacher, teacher aide, peers from the family, whānau and often from the community. A specialised assessment team may also be involved

- There is ready access to informed, knowledgeable and competent providers of specialised services
- The student's skills are accurately assessed when identifying their learning goals – this requires an assessment team with appropriate expertise and experience
- The student's skills and assistive equipment are matched (measured by trials in situations where equipment will be used)
- All key support people are trained in how the assistive equipment is used
- The student receives ongoing support
- The student's situation is regularly evaluated.

* Harris, D. and Boyd, S. A Link to Learning: The Use of Computers by Children with Disabilities. NZCER, 1998. Also References for additional references.

Considering Assistive Equipment

Three Levels:

1 Class-based Assessment
2 School-based Assessment
3 Specialised Assessment

STEP 1. Class-based Assessment

Matching effective support to student needs starts in the classroom with the teachers carrying out the regular curriculum assessment-into-practice cycle for all students. This cycle takes place within the framework of the seven Essential Learning Areas and eight Essential Skills within the National Education Guidelines.

Process

The steps of class-based assessment process are to:

- **Assess** the individual students in the context of their peers and their classroom environment
- **Use** a range of adaptive teaching strategies (alternatives) and classroom resources (options)*

- **Document** assessment findings and the strategies used.

* An *alternative* is another way of achieving the identified goal – in the school context this usually refers to an adaptation to the curriculum. An *option* is an identified possible solution. In the context of assistive equipment, this usually refers to a choice of different technologies.

Policies, attitudes and values

The policies, attitudes and values relating to the successful use of assistive equipment in a classroom are the same as those that ensure successful learning by all students, and include:

- The belief that all students will contribute to their own learning and that of their peers
- A celebration of the diversity of cultures, interests and skills of all students
- A valid approach to assessment and data-gathering
- A 'can-do' approach.

Information

The class-based teaching team needs up-to-date information about:

- Curriculum adaptation strategies
- Gaining access to additional support and resources
- The capabilities of existing classroom technologies.

Skills

The class-based teaching team will have specific skills in:

- Data gathering
- Devising and implementing curriculum adaptations for individual students and groups of students
- Effective use of classroom technologies.

Resources

Resources typically available to all students in the classroom include:

- Tape-recorder
- Calculator
- Spell-checker
- Electronic notetaker (class set)
- Computer
- Copy-holder
- Wrist-rest
- Pencil grip.

Funding responsibility

Assessment and equipment provision form part of regular school provision.

Summary

If whole class adaptations do not meet the student's needs:

- State the identified need
- Summarise the information gathered, including the results of adaptations that have been tried
- Initiate a school-based assessment by referral to school Special Education Needs Co-ordinator (refer to the school's special education policy).

Resource Section – Class-Based Assessment

Examples of possible class-based adaptations*

* For more excellent ideas on adapting the curriculum, see Udvari-Solner, A. Designing Effective Adaptations for Inclusive Classrooms. Network, Volume 4, No. 3, pages 31 – 38. 1995

What adaptations have you tried in the last six months and what were the results?	
Possible Adaptations	**Results**
Being part of a full class programme	
Co-operative groups where each student has a defined role	
Small groups eg, formal, informal, friends	
Peer partners - informal, directed, spontaneous	
Peer tutoring, as tutor/pupil	
Curriculum adaptations – whole or partial programme eg, • reducing the number of tasks • simplifying content • focusing on one concept • using other materials • simplifying instructions and lessons • discovery learning • games-based learning • role plays • experiential lessons • community-referenced activities	
Material modification eg, • enlarged print • darker lines • sound cues • photocopied notes • key phrases • additional materials	
Modifying the physical environment eg, • lighting • desk location • heating • lesson location • whiteboard vision	
Classroom management – is this the best method for the learner?	

• Consider the appropriateness of this class	
Considering learner's learning style - visual, auditory, kinaesthetic?	
Modifying the social environment - teaching class rules and expectations	
Other	

STEP 2. School-based Assessment

Building on class-based assessment

Some students will be identified (by themselves, their families, whänau, other agencies and/or their teacher) as having needs that are not being met within the existing classroom programme. They require additional assistance to help them meet their learning objectives. A *school-based assessment* broadens the context of assistance for the student to the school's structure for example special education policy, procedures and identified school resource people.

Process

Class-based assessment is required before a school-based assessment is started.

The steps of school-based assessment are to:

- Refer the matter to the school's special education committee
- Determine whether use of school resources (alternatives and options *) can meet the student's identified needs
- If not, trigger the Individual Education Programme (IEP) process or link to the existing IEP. Identify school resources and sources of support to implement the IEP
- Identify additional resources and sources of support (students in different Special Education 2000 initiatives are likely to need different types and levels of support)

- Determine the student's eligibility for funding support – this may lead to applying for assistive equipment funding

- Ensure clear documentation.

* An *alternative* is another way of achieving the identified goal – in the school context this usually refers to an adaptation to the curriculum. An *option* is an identified possible solution. In the context of assistive equipment, this usually refers to a choice of different technologies.

Members of the school team work through a school-based assessment, trialing different strategies and interventions, and gather important information about possible ways to overcome identified barriers to the student's learning.

If an application for funding of assistive equipment is made as a result of this assessment, all information must be clearly documented and included in the accompanying report. See Report Checklist for recommended report ingredients.

Policies, attitudes and values

The following are taken into account

- Special education policy

- Information and Communication Technology policy.

Information

The following are clarified:

- Funding responsibilities of agencies, including Health, the Ministry of Education, and ACC.

Skills

The following are examined:

- Specific programme strategies to support students with a range of special education needs

- Comprehensive technical and teaching support for classroom technologies.

Resources

The following are assessed:

- Resources that may be part of school-wide support for students with identified special education needs. These may include options such as:

    - Specialised software, such as an overlay keyboard or “talking” word processor

    - Furniture of different heights, for example footstool, chair, table

    - A range of writing aids, for example pencil grip, lined paper, non-slip mat, left-handed scissors, keyboard stickers

    - A range of physical education equipment, for example lightweight ball.

Who Has Funding Responsibility?
Assessment
• For the majority of students the school has the responsibility • If the student is verified in the Ongoing and Reviewable Resourcing Schemes, then funding is managed by the fundholder

Equipment
• School board of trustees • Possibly through the Information and Communication Technology strategy for some computer-related technologies; certainly for teacher professional development in effective use of school information and communication technologies • Curriculum budgets eg, sports gear, furniture (Note: Schools have responsibility for providing all students with ergonomically-sound furniture) • Complex assistive equipment is likely to involve an application for funding from the relevant agency. • Complex assistive equipment is defined as equipment that has been specifically designed or extensively adapted for use by people with special education needs and disabilities.

Summary

If the school-based assessment and support do not fully meet the individual student's needs, the student may require a specialised assessment:

- **State** the identified need
- **Summarise** the information gathered, including results of adaptations tried and additional resources used
- **Identify** school-based staff who will form part of the specialised assessment team
- **Initiate** a specialised assessment by a referral to local Group Special Education Technology Co-ordinator.

- *An application for funding will be deferred if the elements listed are not contained in the accompanying assessment report*
- *There must be clear and explicit proof that the recommended options are cost-effective.*

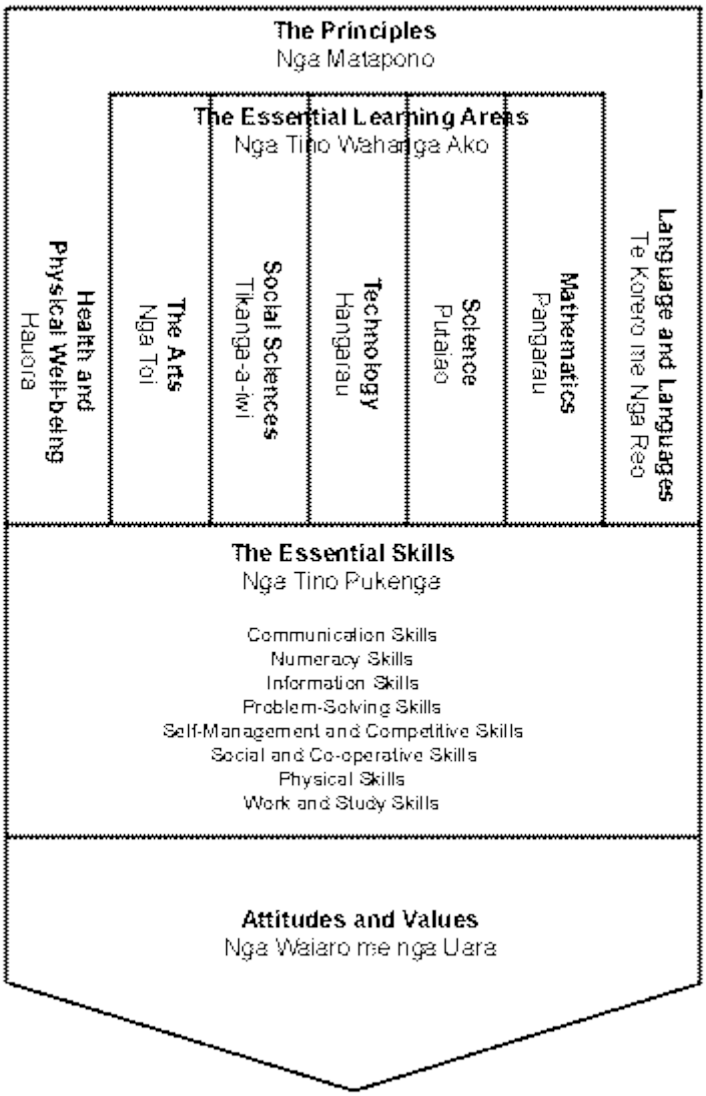
Resource Section – School-Based Assessment

Starting with the IEP

During the Individual Education Programme (IEP) meeting, the student's team:

- Identifies the area(s) of the curriculum which will be the student's priority focus
- Considers plans for other interventions, strategies and tools to help the student meet the agreed learning outcome.

The New Zealand Curriculum Framework



Looking at options and gathering information

1. **Identify** the current priority Essential Learning District and/or Essential Skill areas (see figure above).

2. **State** the IEP achievement objective (relating to possible use of assistive equipment) and specific learning outcome to support the achievement objective.

3. **Indicate** the link between this learning outcome and the Essential Learning District and/or Essential Skills.

4. **Consider** what other information you need to know.

- Additional information that would give a clearer picture of the student's skills and needs in order to achieve the identified goals, and

- Where (or from whom) you would find this information.

5. **Ask** about the student's skills, barriers and tools required.

- What are the student's identified skills and needs in the priority Learning Area - how are these identified needs being addressed in class at present?

- What are the barriers to learning for this student?

- What skills and tools does the student need to overcome these barriers?

6. **Record** the interventions that have already been tried in class, and the results.

7. **Consider** the need for specialist input or assessment (for example from a speech language therapist, occupational therapist, physiotherapist, or sensory resource specialist). Fundholders, including Group Special Education, are required to provide specialist services and therapies to students in the Ongoing and Reviewable Resourcing Schemes for whom they hold funds. These specialists and therapists will work with the class teacher(s) to carry out assessments for assistive equipment (school-based assessment). Schools are not expected to fund specialist input into assessments for students who are not in the Ongoing and Reviewable Resourcing Schemes.

Where the level of complexity is such that a specialised team assessment is required, currently schools will apply for access to this service through Group Special Education Technology Co-ordinators.

8. **Summarise** actions so far and possible options.

- List other interventions to be considered (alternatives and options). How will these be monitored?

- Is some form of assistive equipment a possible option? Identify the required characteristics of the equipment eg, it must be portable, robust, and able to be accessed with one hand (see hierarchy of assistive equipment).

If the assistive equipment is a possible option

A trial of *at least* two possible assistive equipment options is necessary

Trial

- Based on the results of past interventions, consider possible assistive equipment for trial

- If necessary, arrange to borrow equipment

Loan Agreement – Form 3 as attached.

- Identify the trial goals

- Name the people involved

- Plan the trial time(s) and duration

- Proceed with the trial and evaluate

- As necessary continue with other options for trial.

If assistive equipment is not appropriate at this time

Write a concluding statement. The data gathered through this exercise provides clear baseline information as to what has been considered. It will be used should there need to be further assessment at a later date.

9. **Review** and check the result

If the school-based assessment results in a decision to apply for assistive equipment, the student's eligibility needs to be confirmed. At this point (or indeed at any stage of the school-based assessment) schools may wish to contact their local Group Special Education Technology Co-ordinator to gain clarity and guidance about:

- Eligibility criteria and priority indicators

- Report format and expectations

- Funding responsibility
- Application form
- Quotes
- Dates and process for consideration of applications
- Specialised assessment and referral form.

This information service is currently funded by the Ministry of Education and is therefore available at no cost to all schools, families and other agencies. It is available by phone, fax and email – school visits and assessments are not part of the information service.

Early contact with the local Group Special Education Technology Co-ordinator will help students, schools, parents/ caregivers and whänau to have informed and realistic expectations of assistive equipment, particularly the ongoing supports necessary for effective links to the learning process. The team is expected to work together to achieve sensible balance and wise judgement.

10. **Decide** whether the student is eligible

As a result of school-based assessment, the school team, with access to guidance from the local Group Special Education Technology Co-ordinator by phone, fax, and e-mail, will decide to:

- Continue with the current adaptations and school-based resources, as they presently meet the student's identified needs
  or
- Continue with the current adaptations and school-based resources while gathering more information
  or
- Determine student eligibility for funding (Ministry of Education criteria and priority indicators, operational protocols between funding agencies)
- Evaluate the results of the trial and recommended actions in terms of school priorities and funding (board of trustees) – this could lead to a decision to purchase assistive equipment from school funds, such as subject budget,
  or
- Proceed with the application to the Ministry of Education, as there is enough information to write a report and effective trialing has taken place
  or

- Determine if the student will be eligible for a funded specialised assessment: If so, refer to the Group Special Education Technology Co-ordinator for a specialised assessment.

  Referral for Specialised Assessment - Form 1 as attached.

11. **Collate** the report to be submitted with the application

The report submitted with the application needs to describe the student and their needs, and demonstrate that a sound assessment process has taken place. All the information presented here will have been previously recorded as part of the assessment process.

There is no need for full reports of other interventions – these are best summarised if relevant, for example, results of communication programme as part of summary of communication abilities. Letters of support are not required.

	Report Checklist
1.	**Name, date of birth and contact details of student, their family, whänau, and their school**
2.	**Names and roles of members of the assessment team**
3.	**Brief history and functional impact of the student's disability**
	• If relevant, state cause of disability, for example head injury sustained in a car crash, and year in which this occurred • State diagnosis if it conveys unique information, for example identifying a diagnosis of muscular dystrophy will help the team with planning and provision.
4.	**Identified and agreed outcomes based on the IEP goals** • Goals identified by the student and their significant support people, stated in terms of The New Zealand Curriculum Framework, for example English Level 1 - "Mereana will listen and respond to text and relate it to personal experience by eye pointing to indicate choice from both on-screen and off-screen activities" • Outcomes are stated in functional terms, for example 'Matu will contribute to class newspaper' rather than 'to improve written output'; or 'Matu will take part in shared reading' rather than 'to increase vocabulary of sight words'.
5.	**Barriers to achievement**
	• Identify what is preventing the student achieving their agreed outcome • The identified need is to overcome or compensate for the identified barrier and so achieve the identified outcome, for example "Ana has difficulty presenting her written work in a legible and timely manner" rather than "Ana needs a keyboard to write all her work".
6.	**Recent and current support provided, and the results**
	• What strategies, interventions (alternatives) and resources (options) have been tried; what worked, what did not and why • Current support - assistive equipment and/or support people.

7.	**Alternative ways to achieve outcomes**
	• Alternatives (non-technological) considered during assessment • Indicate any possible negative consequences of non-action, eg, isolation from peers during workshop technology class.
8.	**Possible assistive equipment options (maybe low-tech and/or high-tech)**
	• Provide a rationale for including an option eg, rate enhancement software to reduce fatigue and number of keystrokes • Include a range for example, different rate enhancement software • Indicate that cost-effectiveness has been considered.
9.	**Evidence of skills required to make use of options**
	• Specific skills which link to identified options for example, ability to scan left to right as pre-requisite for using scanning software • Present skills of the student in relation to what is required.
10.	**Results of trial**
	• Results of trials of options –include a summary of achievements for example, number of words/minute using different options • Note any special requirements for successful use.
11.	**Recommendations**
	• Best option(s) and rationale (including cost-effectiveness) for choice • Summarise in relation to outcomes - restate link between the recommended assistive equipment, the New Zealand Curriculum Framework and current IEP goal(s).
12.	**Training**
	• Training/support plan, indicating rationale, timing, people involved, responsibilities (even if no funding is being sought).
13.	**Monitoring and / or review**
	• Roles and responsibilities for monitoring, methods for doing so • Review date, usually as part of every IEP - could be more frequent if there is a particular reason.
14.	**Names and roles of those who will receive report.**

STEP 3. Specialised Assessment

Building on clear information from a school-based assessment

After completing both the class-based and school-based assessments (these are prerequisites), the student and their team may conclude that further assessment, resources and support are needed. Only a small number of students require complex, specialised assessments involving assistive equipment. It's also important to note that a specialised assessment may not lead to an application for funding for assistive equipment. The team,

including the student, family, whänau, school staff and specialised assessors may conclude that the student's current needs would be best met in other ways.

The point at which this additional support is required will be different for students in the Ongoing and Reviewable Resourcing Schemes (ORRS) and within other Special Education 2000 initiatives. This is because the ongoing funding for students in the Ongoing Reviewable Resourcing Schemes covers a range of specialist services and therapies.

Criteria for specialised assessment

A specialised assessment is a comprehensive scrutiny of the student's needs in relation to their learning objectives, learning environment, and skills. These assessments are likely to be required when there is clear evidence of one or more of the following:

- Student's *needs* are complex (ie, there are three or more functional considerations, such as seating and cognition *and* communication)

- Degree and extent of the *adaptations* required are complex (eg, written language is presented through symbols, and accessed via single-switch input)

- Identified assistive *equipment* is complex (such as a computer, which is required to link to a Braille output device and provide text-to-speech output).

Process

Specialised assessment builds on the school-based support.

A referral for specialised assessment is made to the local Group Special Education Technology Co-ordinator, (see contact details).

In consultation with the referring school, members of the specialised assessment team decide on the most appropriate accredited equipment assessors to provide the specialised assessment. This will depend on the identified needs of the student.

Details of actual specialised assessment approaches and strategies are beyond the scope of these guidelines. Specialised assessment service providers will be able to supply schools, families and whänau with this information.

Suppliers of assistive equipment are prohibited from being accredited equipment assessors…

Policies, attitudes and values

The following is taken into account:

- Equity and consistency of access to skills and resources, regardless of geographical location or school setting.

Information

The following are considered:

- Implementation of the inter-agency operational protocols between Health and Education, and ACC and Education
- Processes for specialised assessment and support.

Skills

A specialised assessment involves members of the core school-based team as well as assessors with the relevant specialised and specific skills. The specialists are currently accredited equipment assessors recognised and endorsed through the Accredited Equipment Assessor (AEA) scheme.* They will represent a range of areas, for example, communication (including hearing and vision), and learning and self-management. This is because a single assessor cannot provide the range of skills that are required to support a student with complex needs (involving several functional areas). In some parts of the country these accredited assessors will be drawn from a number of schools and agencies for example, fundholder schools, Group Special Education and specialist service providers. In other parts of the country all the accredited equipment assessors are likely to be employed by one agency or specialist provider.

* Work on revised standards and accreditation procedures for specialised assessors is in progress through the ACCESS project. These are expected to take effect in 2000/2001.

Resources

Resources recommended as a result of the specialised assessment are usually more complex than those already in the school. However, some may supplement existing school-based assistive equipment. Most specialised assessments are concerned with communication and information exchange.

Resources frequently funded as a result of specialised assessment include:

- FM personal radio aids for students with hearing impairment
- Electronic notetakers (for individual use) to support written communication
- Specialised software, such as a symbol generator
- Specialised input devices, such as switches, mounting systems

- Height-adjustable seating systems for classroom use
- Changing tables.

Funding – roles and responsibilities

Assessment

- Ministry of Education provides managed access to funding for specialised assessment through Group Special Education within national criteria, priority indicators and eligibility.
- Ministry of Health funds specialised assessments for assistive equipment which ensures safety and security and is for whole-of-life use (see Operational Protocol between Health and Education – appendix)
- ACC funds assistive equipment which supports rehabilitation.

Equipment

- Ministry of Education funds assistive equipment which removes barriers to learning
- Ministry of Health funds assistive equipment which ensures safety and security and is for whole-of-life use (see Operational Protocol between Health and Education – appendix)
- ACC funds assistive equipment which supports rehabilitation
- Students in the Ongoing and Reviewable Resourcing Schemes receive a grant for materials and items of small value. No funding allocation will be made for items of $50 or less for students with high needs or for items of $100 or less for students with very high needs.

Resource Section – Specialised Assessment

Examples of Specialised Assessment Teams

Example 1:

A rural primary school student's therapy needs are being met through the Special Education 2000 National provision for students with sensory impairments and physical disabilities. Following a class-based and school-based assessment, the student is identified as requiring a review of her seating, mobility and hearing in relation to assistive equipment.

The school does not currently employ therapists, as there are no students in the Ongoing and Reviewable Resourcing Schemes on the roll. The class teacher and Special Education Needs Co-ordinator provide school-based support.

What has been done?

- A school-based assessment has been carried out
- Contact has been made with the local Group Special Education Technology Co-ordinator to request a specialised assessment
- Eligibility has been established
- Consultation with the school has occurred to establish the assessment team, which consists of the core school-based team plus specialised accredited equipment assessors.

Therapists providing services under the Special Education 2000 National provision for students with moderate sensory impairments or physical disabilities have the skills to assess mobility but not complex seating. The specialised assessment will therefore be provided by:

- An advisor on deaf children, employed by Group Special Education
- A physiotherapist employed by a secondary school with facilities for students with physical disabilities (the nearest employer of physiotherapists with these skills)
- An occupational therapist contracted from a private practice in the town.

Example 2:

A student in a large urban secondary school has verified high needs in the Ongoing and Reviewable Resourcing Schemes and the school is an accredited fundholder for the Scheme. The student is sitting four National Certificate of Achievement (NCEA) subjects this year and has been using a laptop computer for all written work since Year 7 to compensate for low vision, learning and fine motor difficulties. The equipment has not been monitored nor its use reviewed, and is now constantly breaking down. The latest quote for repair is more than its value.

In-school support is provided by the class teacher, specialist teacher, occupational therapist, Special Education Needs Co-ordinator and Head of Department, Computing. The school-based assessment team are not accredited equipment assessors.

What has been done?

- A school-based assessment has been carried out
- Contact has been made with the local Group Special Education Technology Co-ordinator to request a specialised assessment
- Eligibility has been established
- Consultation with the school has occurred to establish the assessment team, which consists of the core school-based team plus specialised accredited equipment assessors.

The specialised assessment is therefore provided by:

- An itinerant resource teacher employed by the Auckland Visual Resource Centre (accredited in Vision)
- A technology resource person, employed by Group Special Education (accredited in Information and Communication Processing)
- An accredited occupational therapist, employed by a neighbouring fundholder school.

Considerations

- Hierarchy of Assistive Equipment
- Trial of Assistive Equipment
- Training and Support
- Use, Monitoring and Review
- Review

Hierarchy of Assistive Equipment

When considering options to overcome identified barriers to students' learning, it is easy to jump to a high-tech, multi-featured piece of equipment. Students, families, whänau, school staff and specialised assessors will be required to demonstrate that they have checked this hierarchy as they consider options for specific situations.

Level	Advantages	Disadvantages
No-tech: Lined Paper, soft pencil, support from buddy	Simple strategies are often the most durable. They tend to be low-cost and readily available in the natural environments of school and home.	May perpetuate unacceptable levels of dependence on others; may not allow for student to achieve to their capabilities.
Class-tech: Software loaded on class computer or one in computer room	Builds in expectation that all students have equitable access to school-based resources. Fosters inclusion of student with special education needs.	Student with special education needs may require more time that their classmates in order to achieve comparable output.
Light (lower)-tech: Dedicated word processor rather than computer	Low cost, ease of maintenance, highly portable. Ease of saving work.	Display screen may be too small or contrast too low for some students. Limited mathematics symbols, no diagram capability.
Recycled-tech: Assistive equipment which has been returned to trial and reissue pool	Low-cost, will assist with authentic trial and may reduce waiting time to access newer-tech. Insurance costs are lower than newer-tech.	May not have all the features of current newer-tech. May be more likely to need repair.
High-tech: Complex, specialised and current	Represents current developments in technology	Cost (purchase, insurance, and repair) Complexity – 80:20 rule.

Consider the purpose and context of assistive equipment

Adapting the curriculum to bring it within the student's reach, for example:	**Accessing the student's physical surroundings and learning activities, for example:**
• Alter the **presentation** – large print, use of pictorial cues	• Foot stool to help student balance on chair
• Reduce the **complexity** – 'name illustrations' instead of 'write a descriptive paragraph'	• Switch – large target district to make it easy for student to access choices
• Modify the **content** – simple words, fewer words	• Keyguard to help typing accuracy

• Allow more **time** – one sentence within the period instead of 10	• Slope board to help the physical demands of writing
• Use different **learning modes** – visual rather than aural	• Anti-glare screen so student can see the computer monitor
• Change the **social demands** – work in small group rather than 1:1	• Chair of appropriate height so that student can learn alongside peers

Trial of Assistive Equipment

Trialing assistive equipment is an essential component of the assessment process and is necessary to show that the proposed solution meets the student's identified needs.

There are three elements of a trial:

- Monitoring the student's use of the assistive equipment
- Evaluating the impact of the classroom setting (assistive equipment will be trialed in the environment in which it is to be used)
- Identifying any problems which may arise during the trial.

All elements of the trial will be documented. Sometimes better options are identified during the trial process. Trialing also allows students to use the equipment in their learning environment(s) (usually the classroom) and helps identify and remedy any problems before the equipment becomes an expensive mistake.

What it is	**What it is not**
A check to see if the option meets the student's identified need	A check to see if the student can use the identified option(s)
A goal-orientated, monitored trial of an option in the setting and circumstances in which it will be used	A short session with a supplier in a setting other than that in which the student will be using the assistive equipment
Of sufficient duration to enable the support team and student to determine if it meets the trial goals	A one-off or brief trial without team monitoring
Use of resources which closely approximate the identified characteristics of the preferred option(s)	…(necessarily) an exact match of all features of the preferred option(s)

It may not be necessary to use the identical make and model of assistive equipment for trialing as may be identified as being the best match to the student's needs. From the trial there will be a clear indication of the most suitable and cost-effective solution to meet the identified needs. Trialing the assistive equipment may be a matter of using equipment the school already has. For example, if the focus is on increasing a student's written output, and the consideration is a keyboard, then a school resource such as an electronic notetaker (eg, Alphasmart), or a word processor on the school computer could be used to trial keyboarding. Some points to watch will be the screen size on the Alphasmart, word processor or computer. A useful check for the team - is the trial method any faster than how the student presented their work originally?

When Ministry of Education-funded assistive equipment no longer meets the student's needs, or the student leaves the school system, the school is required to return the item(s) to the local Group Special Education Technology Co-ordinator.

The returned equipment is checked and prepared for reissue or use as part of a trial.

Some assistive equipment is available for loan from the local Group Special Education Technology Co-ordinator. The short term loan of this equipment is to support an effective trial during either a school-based assessment or a specialised assessment.

Loan Agreement - Form 3 as attached.

Points to Note for Trials

- Each trial must be linked to a specific learning outcome eg, "Tony will write spontaneously to record personal experiences (English Curriculum, Level 1, Expressive Writing)"

- It also must show some rationale as to why this piece of assistive equipment has been chosen for trial. List the range of alternatives already considered, such as:
  - pencil grip
  - variation of surfaces for writing on
  - variation of writing tools
  - consideration of student's writing position
  - variation in amount of people support
  - provision of cue cards.

- A trial involving use of a keyboard needs to be targeted to illustrate the student's abilities in handwriting compared with using a keyboard. See below for a useful sample format for recording the results of trials.

- If specific software is the trial option it is important to note that Ministry of Education funding will only cover one piece of curriculum software for each priority Learning Area, and then only if it is clearly not available in the school environment.

- Software that supports a student's learning is often general software that is available for all students. Use of such software is an ideal way to support the inclusion of the student with special education needs in their class. Ministry of Education funding will only support applications for specialised software that specifically meets the targeted learning outcome of the identified student.

The following is a summary of the writing performance					
Tasks	**Words**	**Sentences**	**Words per min.**	**Punctuation**	**Legibility of the Words**
By hand - copying	25	2	10	25%	56%
By hand - own ideas	9	1	11	50%	70%
By hand - speed test	14	1.5	14	0%	57%
Laptop (MAC) – copying	25	2	9	100%	100%
Laptop (MAC) - own ideas	9	1	9	100%	100%
Laptop (MAC) - speed test	11	1.1	11	100%	100%
Laptop (MAC) - speed test	10	1	10	100%	100%

Training and Support

Research in New Zealand and elsewhere shows that up to 70 percent of allocated equipment is not used * The main reason cited is lack of training for the students and their support team.

* Phillips, B. and Zhao, H. *Predictors of Assistive Technology Abandonment*. Assistive Technology 1993, pages 36 – 45 Harris, D. and Boyd, S. *A Link to Learning*: *the Use of Computers by Children with Disabilities.* NZCER, 1998.

Training is now an expected component of applications for assistive equipment. Each training plan is expected to show:

- Goals of the sessions
- Content of each session and the learning outcomes
- School commitment to support training
- Two quotes for the provision of training.

Who should be trained?

Training should be provided to all those who support the student, including parent(s), peers and school staff. It is important that the class teachers (and specialist teachers for students in the Ongoing and Reviewable Resourcing Schemes) are skilled in the effective use of the assistive equipment so they are able to incorporate its use into their whole-class planning. It is not considered satisfactory to train just the teacher aide.

Responsibilities

When making a request for funding for training, it is necessary to distinguish between regular use of assistive equipment to support curriculum goals and any technical skills required to make use of specialised resources.

Schools are expected to provide basic training in the use of computer technology. Under the Information Communication Technology (ICT) initiative schools have the responsibility to ensure all staff have basic competency with school technology.

Who can train?

Funded training will be provided by a recognised trainer with relevant qualifications and expertise, for example an accredited equipment assessor in Information Communication Processing will be able to provide training in use of computer technologies. The most suitable training provider will be identified as part of the assessment process.

The supplier is expected to set up the assistive equipment (this may include software installation). This should be separately costed in the quote.

Goal-oriented training plan

Each application for training must clearly indicate the timing, frequency and location of the training. The quoted rates and duration should be within the range approved by the Ministry of Education. A training plan format is found in section 7 of the application form.

Application - Form 2 as attached.

Further training

Training may also be required at times of change such as when students move with their assistive equipment from a contributing school to Intermediate school. At this stage there will be a new support team, who may not have the technical skills to support the student in her use of the specialised assistive equipment.

It may be appropriate to apply for specialised, technical training at such times of transition. Again, a training plan is required (see above).

Where a student changes setting within a school, the school is responsible for ensuring continuity of skilled support.

Use, Monitoring and Review

Integrating the assistive equipment into the student's programme

Use of the equipment

One method to ensure clear communication between all in the student's team and to keep a record of relevant information is to have a notebook that stays with the assistive equipment. This could contain:

- A full list and description (including serial numbers) of the allocated assistive equipment
- Points from training
- A record of student's support team

- Responsibilities in terms of the assistive equipment eg, turn on computer - student, make backup disc - class teacher (original disc stored in main office).

This notebook can then be used as a diary of how the student uses the assistive equipment, problems encountered and how they were overcome, dates, place and costs of any repairs and similar information.

The class teacher (and student, if applicable) is responsible for keeping a record of the amount of time the equipment is used by the student.

This degree of recording will be invaluable for providing:

- A review of the assistive equipment in relation to the student's needs

- If the equipment requires servicing there is a record of past interventions

- A communication aid between members of the support team.

The class teacher is responsible for the integration of the student's use of the assistive equipment into the class programme. This can be part of the whole class planning with the programme adaptation for the student being use of the assistive equipment. The student's use of the assistive equipment may be integrated as a tool within all curriculum planning. An example is in social studies when there is a discussion group the student with a keyboard may have the task of recording the notes.

Review

The purpose of the review is to:

- Ensure Ministry of Education funded equipment is being effectively used by the student

- Review the student's current needs in relation to the assistive equipment allocation.

The student's use of the allocated assistive equipment must be reviewed annually – ideally at an Individual Education Programme (IEP) meeting.

At times of transition between schools there is a need for a school-based review to ensure the assistive equipment will still meet the student's needs in the new environment. As part of transition a copy of the application made for the assistive equipment needs to go with the student to ensure the receiving school knows the rationale behind the allocation of the assistive equipment. The equipment is formally transferred and the new school accepts responsibility.

Considerations and possible next steps

Consider if a comprehensive review of this student's needs is required. If the assistive equipment is no longer meeting the identified needs then return it to the local Group Special Education Technology Co-ordinator.

Review - Form 6 as attached.

Applying For Funding

- Assistive Equipment Process
- Applying for Assistive Equipment Funding
- Review of Decision – Dispute Resolution
- Insurance, Repairs, Transfer and Returns

Assistive Equipment Process

A student will be considered for funding for assistive equipment and associated training if:

- The student is currently receiving support from one of the Special Education 2000 initiatives
- There is clear evidence that the processes detailed in these guidelines have been followed
- The priority indicator(s) demonstrate the rationale for the timing of the application
- Sufficient funds are available.

A student will be considered for funded specialised assessment for assistive equipment if:

- The student is currently receiving support from one of the Special Education 2000 initiatives
- There is clear evidence that both class-based and school-based assessments have been carried out and the identified needs of the student have not been met

- If the student is in the Ongoing and Reviewable Resourcing Scheme, there is clear evidence that the fundholder has provided specialist services, including assessment
- The priority indicator(s) demonstrate the rationale for the timing of the application
- Sufficient funds are available.

Note:

The Ministry of Education has specific contracts with the two Deaf Education Centres for specialised assessment, associated training and for maintenance of equipment related to hearing impairment. The Visual and Sensory Resource Centres provide specialised assessment and production of specialised resources. These Education and Resource Centres are expected to provide specialised assessment for the student groups they support. Similarly, the Ongoing and Reviewable Resourcing Schemes Advisors of Deaf Children in Group Special Education provides specialised assessments for FM listening devices for students in the Ongoing and Reviewable Resourcing Schemes for whom Group Special Education is a fundholder.

Students in the Ongoing and Reviewable Resourcing Schemes receive a grant for materials and items of small value. No funding allocation will be made for items of $50 or less for students with High Needs or for items of $100 or less for students with very high needs.

Applying for Assistive Equipment Funding
Steps in the Application Process

1. Review of results of trial

The students, their parents/caregivers or whänau, the school-based support teams and specialised assessors from outside the school (if they have been involved) meet together to:

- Review the results of the trial
- Note any new information which may have become apparent
- Confirm next step – often an application for funding of assistive equipment.

2. Obtaining two quotes for assistive equipment

Schools and assessment providers are encouraged to work together to obtain quotes for the recommended assistive equipment options. Schools have often developed a good relationship with local suppliers, and may wish to ask them for a quote. To ensure transparency and cost-effectiveness, a second quote is required – often the specialised

assessor obtains this. The quote should clearly specify what is covered, such as setup, installation of software, any bundled products, cartage, and terms of warranty. Please note that education prices are available. The assessor will also investigate the possibility of providing equipment from store.

For a few items of highly specialised assistive equipment, there may be only one New Zealand importer/supplier. In these exceptional circumstances, the application must clearly detail the rationale for only one quote.

Clear evidence of cost-effectiveness is required. This may not necessarily be the cheapest option. For example, proven follow-up support and training may well make an option very cost-effective. Cost-effectiveness will be demonstrated through:

- Evidence that no-tech alternatives have been tried and are part of the comprehensive package of support for the student

- A recycled equipment option has been explored

As previously indicated, schools are responsible for providing equitable access to school-based resources for students with special education needs.

Each quote will include a warranty or guarantee. An extended warranty for a laptop is standard expectation.

3. Completion of the Application Form

The Ministry of Education Application Form is a requirement for any application for assistive equipment. The form:

- Summarises the information in the report

- Provides evidence that the use of the equipment is related to the IEP achievement objective/specific learning outcomes, the Essential Learning Areas and Essential Skills.

- Demonstrates that the assessment process has taken place

- Includes signatures confirming school responsibilities for maintenance, repairs and insurance of assistive equipment funded by the Ministry of Education

- Includes the signatures of the student's parents/caregivers, indicating that they have been included in the assessment and application process, and confirming their responsibilities for maintenance, repairs and insurance of assistive equipment while it is at home

- Provides a clear indication of the specific item(s) to be purchased, the cost and the supplier.

Checklist of components to be sent to Group Special Education Technology Co-ordinator

- Application form
- Assessment report, including training plan
- Current Individual Education Programme (IEP)
- Two quotes for recommended option.

Please note: Supporting letters are not required

Application - Form 2 as attached.

4. Moderation, Funding and Allocation

Group Special Education, as part of the Ministry of Education, receives all applications, checks all components are correct and recommends the next action.

The local Technology Co-ordinator receives all applications and presents them at a regional moderation meeting. This process involves checking for eligibility, priority indicators and the essential components (see previous page). If any component is missing or insufficient, the application will be returned to the school with a written indication of what is required.

All applications are logged into a national database.

Recommendations can be:

1. Approve, subject to funding availability

2. Defer, pending additional information

3. Decline, because the:

    - Funding responsibility lies elsewhere

    - Student does not meet the criteria

    - Student's circumstances do not meet priority indicators

4. Partial, a combination of approval, and defer or decline.

The applications are then moderated at a regional level, to ensure consistency and to remove any risk of bias. During this process, comparable requests are evaluated against one another. This ensures that students with similar requirements receive similar support.

The final stage in the process is national moderation. Again, this process ensures consistent and equitable access to resources and support for all eligible students.

This decision and moderation process takes place every month during the school year. The schedule of dates is available from Group Special Education District offices.

5. Notification

The moderation outcome (approve, partially approve, defer, decline) is sent to schools with a letter of explanation.

Approved assistive equipment is itemised on the quote sheet.

Items may be provided from:

- Store (new or reallocated) or
- Ministry of Education funding – this will be deposited in the school account

The person(s) responsible for purchase and/or setting up the assistive equipment in the school (or their delegate – could be the assessor, or the supplier) will have been identified during the assessment. Schools are responsible for providing Group Special Education with copies of invoices and/or equipment serial numbers (as appropriate) as proof of receipt.

Variation

Occasionally the approved assistive equipment is no longer available, prices change, or changed circumstances require a minor change to the approved assistive equipment items. In these situations a Variation Agreement Form is required.

Variation Agreement – Form 5 as attached.

Review of Decision - Dispute Resolution

The purpose of a review is to ensure that the process of assessment, recommendation, provision and training provided have met the requirements of the Ministry of Education Assistive Equipment scheme.

A review of an allocation decision or reassessment may be requested when there is concern:

- That the required procedures have not been followed, or there is a

- Dispute about the specific equipment identified *and/or* recommended.

The re-assessment is carried out by an assessment team which does not include the original assessor. The team has access to the findings of previous assessments.

The student, their parent/caregiver, whänau, school, assessment provider, the Ministry of Education, or Group Special Education may request a review. The request may be lodged with the National Co-ordinator, Assistive and Technology, Ministry of Education.

The review will be carried out by the:

- National review team - currently Group Special Education representatives
- Representative of the school at which the student is enrolled
- Manager or equivalent person responsible for quality assurance of accredited equipment assessors (but not the manager of the original assessor)
- Accredited equipment assessor(s) with accreditation in the relevant functional areas. (This person cannot be the original assessor).

The original assessor will be requested to make the file available to the review team. The assessor and school-based support team may also be asked to provide supplementary information if required.

Timeframe

An application for a review will be acknowledged by the Ministry of Education within five working days. The review report must be available within 10 working days from receipt of permission to access the file.

Terms of reference

1. Determine the reason for the review request.

2. Check that the following requirements have been met:

    - Eligibility for funding from the Ministry of Education, using the criteria of the Operational Protocol between Health and Education (see appendix) and the Operational Protocol between ACC and Education
    - Provision of current IEP (within last six months)
    - Evidence of school-based support, including links to identified IEP goals

- Evidence that the use of the equipment is related to the Curriculum Framework (with Learning Areas and Essential Skills specified)
- Evidence of team assessment or assessment co-ordination
- Process of determining best match to needs of equipment, including:
    - alternatives and options considered
    - evidence of trial of at least two options, or explanation if not possible
    - demonstration of cost-effectiveness of final choice.

Outcomes from a review

If there are concerns that the required procedures have not been followed the outcome will either be to:

- Endorse process, or
- Request re-assessment.

If there are concerns or disputes about the specific equipment identified and/or recommended the outcome will be to:

- Endorse the decision, or
- Request re-assessment.

Funding eligibility with different agencies

If there is a dispute about eligibility for funding, this will be managed through the agreed disputes resolution processes between agencies detailed in the Operational Protocols.

Insurance, Repairs, Transfer and Returns

In signing the Ministry of Education application form, both school staff and parents/caregivers have accepted the following responsibilities in relation to the allocated assistive equipment.

Insurance

Each school must have insurance cover to at least the equivalent level as that provided by the Ministry of Education policy. This policy covers all assistive equipment while it is being used for *educational purposes*, including off-site and in transit. The assistive equipment remains the property of the Ministry of Education but is the responsibility of the school. Parents/caregivers may also asked to provide insurance cover for home use of the assistive equipment, and transit between home and school.

Repairs

All repairs to the equipment are the responsibility of the school.

Transfers

When a student moves to another school, every effort is made to ensure the assistive equipment moves with the student. This is the time when the local Group Special Education Technology Co-ordinator needs to be informed. The new school formally acknowledges transfer of responsibility using a transfer form.

Transfer - Form 4 as attached.

Returns

The school, the student/the student's family are responsible for returning any assistive equipment when:

- It is no longer being used
- It no longer meets the student's educational needs
- The student leaves school.

The equipment is returned to the local Group Special Education Technology Co-ordinator.

Schools are expected to make every possible effort to ensure the assistive equipment is stored safely while allocated to the student, for example:

- Secure central storage point for a lap top, Alphasmart, word processor
- Avoid laptops being left in school corridors where they are more likely to get damaged

- Backup copies of software in daily use - safe storage of original software disks, CDs and manuals.

During service of a computer system it is likely the service providers will ask for the original software so the software can be reinstalled. Schools are required to comply with software copyright requirements.

Funding assistive equipment in tertiary education and in the workplace is not the responsibility of the Ministry of Education. Students and their support teams need to prepare for this transition by embarking on an application to the relevant funding agency before they leave school. It is advisable to begin this process at the start of the student's last year at school.

Meet The Students

- Matu
- Bella

Matu

A student who finds written language a significant challenge

Matu, aged 12, attends his local Kura Kaupapa with his two sisters and one brother. He has an excellent vocabulary, but his written work does not match his rich oral language. He reads at about the 7.5 age level and puts much expression into oral reading.

The Kura Special Education Needs Committee identified a number of students who are experiencing some difficulties with written language. These students work in small groups and spend 30 minutes every day on a range of adapted writing tasks. Their programme is set up by the Special Education Needs Co-ordinator and supported by a teacher aide, funded from the Special Education Grant.

Annie notices that Matu is very hunched over his book when he writes, that he frequently stops writing to stretch his hands, and that he takes a very long time to write very little. Annie decides to collect detailed information about Matu's writing in class. She notes how long it takes Matu to copy a paragraph from a journal, and then to write two sentences on a topic of his choice.

Class-based assessment

Annie is concerned to observe what a struggle it is for Matu to form letters – it appears that he finds the process painful.

Annie talks over these concerns with Matu's parents, Ray and Mere, who say that Matu never shows them any written work these days. They ask what else can be done to help Matu.

Annie wonders if using the computer would make writing easier for Matu. There is a suite of computers in the school, as part of a project involving schools working together to foster use of Information and Communication Technologies (ICT). After two weeks of observation Annie realises that Matu hardly ever uses the computer, even when the rest of the class is using it for project work.

School-based assessment and support

Annie asks Matu to type out the same two paragraphs as he had previously written out by hand. It takes Matu even longer to complete the task, but he says that it is not at all painful for him to use the keyboard.

Adaptation

Annie takes her concerns to the Special Education Needs Co-ordinator, Hone. They review the class-based information, the observations in the computer suite, and the comments from the teacher aide supporting the literacy group. Hone and Annie agree to seek advice from the other members of the Special Education Needs committee.

An IEP meeting is arranged for Matu, Ray and Mere, Annie and Hone to discuss the concerns. Matu tells the IEP team how stupid it makes him feel when he can't get his ideas down on paper.

Hone offers to contact the local Group Special Education to find out what help is available to the Kura. He learns that Matu might meet the eligibility criteria for therapy services for students with moderate physical disabilities.

Phone advice on process and resources from local Group Special Education

Mere and Ray are delighted to agree for a referral to be made to Group Special Education, the provider of services in that District under the Moderate Contract.

Referral to provider of services for students with moderate physical disabilities

David (occupational therapist, provider of services for students with moderate physical disabilities) arranges to visit the Kura and meet Matu, Mere, Ray, Annie and Hone. David explains the screening and assessment process, and then observes Matu carrying out several fine motor activities. David shows Matu a number of different strategies and 'no-tech' devices to reduce the strain and pain of writing, and lends him a couple of different types of pen and pencil to try. David also recommends that Matu should keep the pencil grip that feels most comfortable. Hone agrees that the Kura will fund the pencil grip; Mere and Ray will buy any different types of pens and pencils that are found to help Matu.

Consideration of alternatives and options

Kura funding support; parents' funding responsibility

On a subsequent visit, David introduces Matu to the technique of 'concept-mapping' and makes a short video of him using this. Matu finds that this strategy helps him to organise his ideas and assemble the materials he needs for an activity. His classmates are intrigued by this new way of learning, while Annie is impressed by Matu's increased self-management skills.

Alternative strategy – peer support

Referral for specialised assessment

David suggests a referral to the local assistive technology team, for consideration of a range of strategies and technologies. He confirms that Matu meets the eligibility criteria for funding support from the Ministry of Education. Matu's Kura team refers to the local specialised assessment team, and provides a summary of interventions tried so far.

Planning the specialised assessment

The specialised assessment team needs to include accredited equipment assessors with skills, experience and knowledge of:

- Alternative forms of creating and accessing written language
- Fine motor development and interventions
- Organisation and self-management.

Members of the specialised assessment team are identified

David will continue to assist with self-management, organisation, and fine motor activity support. Penny, a psychologist with Group Special Education, has particular experience in curriculum adaptations incorporating effective use of assistive equipment. They agree to work with Hone and Annie to carry out a specialised assessment of what is required to overcome the barriers to writing for Matu.

This team finds that there is sufficient existing information from the school-based assessment to give a picture of Matu's response to learning demands. What is needed is more specific information about the physical aspect of writing, together with a set of alternative strategies and support options. The team predicts that this will involve one in-class co-assessment, two to three trials, and preparation of a report and possibly a funding application.

Alternatives and options

Matu works with the specialised assessment team to identify a number of strategies that lead to increased quality and quantity of written output, at the same time as decreasing the pain in his hands. The team recommends a combination of:

- Photocopied notes from teacher and classmates
- Use of class tape recorder for discussions during project development time

Skill-building

- Six week block of keyboarding tuition, using a 'typing tutor' on one of the Kura computers
- Use of concept-mapping software for ease and speed
- Use of lightweight electronic note-taker for all written work.

After trial of the electronic notetaker, Matu achieves a 60 percent increase in speed of written output, and experiences no pain in his hands. He continues to use a tape recorder to capture group discussions, and makes full use of photocopied notes where possible. The combination of all these strategies leads to a substantial increase in the quality of Matu's written output, and in his overall confidence and self-esteem.

Results of trial

Matu, his parents and the support team from the Kura decide to put in an application for funding to the Ministry of Education for an electronic notetaker. When Matu wants to print out his work or embellish it with graphics, he links his note-taker to one of the computers in the Kura suite.

Application for funding to the Ministry of Education; use of school resources

Staff of the Kura have considerable experience with a range of information and communication technologies. There are sufficient skills and levels of confidence among staff in the Kura for Annie and Hone to draw upon. The note-taker is a simple form of technology. The Kura team agree that there is no need for any specialist training.

Training

Annie will provide monitoring of the programme, including the use of the note-taker.

Ongoing monitoring

Bella

A student needing systematic support for written communication in Y9

Bella, aged 14, has cerebral palsy and is dependent on others for all her daily activities. She is the only student in her local secondary school who is verified as having very high needs in the Ongoing and Reviewable Resourcing Schemes. Bella makes her needs known by 'pointing' with her eyes, and by a series of sounds which her mother, Sue, is able to interpret.

Bella is a full member of a small Year 9 class, which she has recently joined after arriving from overseas. She moves around the school in a power wheelchair, which she controls with head-switches.

Bella has been a token user of various technologies since early childhood. When she made the transition to high school she brought with her an elderly and dysfunctional computer, software, and switching system. There is scant information on her cognitive abilities, although Sue says that Bella understands everything that is said to her.

Bella's support 'package' includes funding for her school to employ a 0.2 specialist teacher and a paraprofessional (teacher aide), together with a grant to the school as a contribution to the cost of consumables. In addition, funds are managed by a neighbouring fundholder school on behalf of a number of students and schools. A full range of specialist support and therapies are purchased from these funds

Bella's form teacher, Mark, notices that Bella enjoys being part of the class and that she responds when addressed. Mark, however, has limited opportunity to observe Bella as the class is only together for school notices in the mornings.

Class-based assessment

Bella eye-points to picture and word cards displayed on a perspex 'eye-gaze' board, which she brought with her from overseas. The eye-gaze board is large, and requires Bella's communication partner to sit opposite her to interpret the eye-pointing.

'No-tech' option

Face-to-face communication is a 'whole-of-life' activity, and therefore the eye-gaze board would be funded by Health (see Operational Protocol, Appendix).

At the recent IEP, Sue said her priority goals are for Bella to learn to communicate with all her teachers and classmates; to read and write; and to be a fully contributing member of her class.

Goal-setting

The specialist teacher, Hanna, carries out observations of Bella's response to requests, instructions and printed materials. Hanna notes that Bella listens attentively, follows turned pages with her eyes, and makes responsive sounds at the appropriate times. Using her eye-gaze board, Bella recognises and matches line drawings, some symbols and a few words.

School-based assessment demonstrates that Bella has pre-requisite skills for learning to read and to use symbolic communication systems

To assist with training for peers a short video is done at this stage.

The speech-language therapist, occupational therapist and psychologist employed by the fundholder school are asked to work with the school team to determine Bella's understanding of formal symbol systems and text. Building on Bella's ability to retrieve meaning from line drawings, the speech-language therapist introduces her to the Picture Communication Symbols (PCS) system with text captions.

Alternative Strategy

Support teams (class and subject teacher, specialist teacher, teacher aide and parents) from a number of schools in the district attend an after-school communication workshop. Here they learn the principles of symbolic communication, how the use of symbols can be integrated across school and home and how computer software can be used to create communication boards and to adapt books.

Training for teaching teams and peers

Curriculum adaptation

Hanna and the speech-language therapist take Bella's class for English each week and introduce alternative forms of communication, including symbols and signing. The students create a series of symbol-enhanced books and taped resources.

Including peers

The occupational therapist and physiotherapist confirm that Bella has reliable control over her head movements and drives her powerchair safely. They contact their local Group Special Education Technology Co-ordinator for advice on the process for trialing and obtaining assistive equipment. Bella meets the eligibility criteria for Ministry of Education funding for specialised assessment and equipment that is required to overcome barriers to learning.

Proven skills for head-switch access

Phone advice on eligibility criteria, process and resources from local Group Special Education

Bella and her support team trial several different head-activated switches linked to simple communication and scanning devices, adding this to the video to provide a record of baseline data.

Trial of at least two options

Bella surprises her team by reliably selecting both symbols and text from eight location choices on the rotary scanner. Her peers take it in turns to record messages on the bank of Connectables mounted on the wheelchair tray. However, Bella does not use this system for immediate face-to-face communication, as it is too clumsy to make the change-over from the switch system which controls the wheelchair.

'Low-tech' equipment borrowed from trial pool

Two months later:

At the subsequent IEP, Sue and the school support team agree that the combination of reliable switch access, symbols, text and scanning skills has transformed Bella into an active participant in her class.

Overcoming barriers to learning

Sue and the school agree to apply to the Ministry of Education for funding. The application (form, report and current IEP) is forwarded to the local Group Special Education for processing. Following regional and national moderation, funding is provided to the school for purchase of a rotary scanner, head switch and mounting system to attach the switch to Bella's wheelchair.

Application for funding to Ministry of Education – written communication (reading, writing) is a learning activity, and therefore the switch, mounting system and rotary scanner are funded by Education (see Operational Protocol, Appendix).

Bella continues to use her eye-gaze board to communicate more complex ideas with school staff and her peers. She writes and provides comments by scanned selection from an increasingly wide vocabulary of symbols and text. Her peers and the teacher's aide, Jane, incorporate these selections into group project work and written output.

Adaptations to the curriculum

Integration of specialised equipment into classroom programme

Six months later:

Hanna takes responsibility for monitoring the effective use of the technologies. Six months and another IEP later, Sue asks the team to explore ways to further extend Bella towards independent reading, writing and social interaction. Specifically, the team agrees that Bella needs to be able to:

Monitoring and review

- Read by herself
- Directly select, sequence and print symbols and text.

Goal-setting

Barriers are identified as:

- Physical access to books'
- Reliance on peers and the teacher's aide to interpret selections
- Lack of information as to Bella's ability to retrieve meaning from print.

Barriers to learning achievement

Sue and the school support team decide to seek more specialised help to assess and identify ways to overcome these barriers. They contact the local Group Special Education Technology Co-ordinator for information on specialised assessments.

Phone advice on process and resources from local Group Special Education

Bella's team refers to the specialised assessment team, providing a summary of interventions tried so far and include the video taken at different stages of the process.

Referral for specialised assessment

The specialised assessment team needs to include accredited equipment assessors with skills, experience and knowledge of:

- Access strategies and technologies
- Alternative forms of creating and accessing written language.

Planning the specialised assessment

Hanna previously worked in Reading Recovery. She will support the assessment.

An occupational therapist employed by another fundholder school has considerable experience in switching techniques. Group Special Education employs a special education advisor who has extensive experience in using computer-based technologies in curriculum adaptations. These assessors will form the specialised assessment team, and will work with the existing school-based team.

Members of the specialised assessment team are identified

It is agreed that the specialised assessors will need to make two co-assessment visits to Bella in her classroom, set up and review trial of two options, and prepare a report and possibly a further funding application.

Funding is agreed for specified hours of specialised assessment

Following the specialised assessment and subsequent trials, a further application for specialised equipment – symbol-generating software, and computer interface – is made to the Ministry of Education. The school support team agrees that Bella will use the specialised software on a school computer for her written language. She will access this computer by using her existing head-switch via a special switch interface box. At this stage this activity is expected to take no more than 15 minutes a day. In the future, as Bella writes more, she may well need her own computer.

Further application builds on existing funded equipment

Jane (Teacher's Aide) has no experience of computer use. The school is just embarking on a comprehensive Information and Communication Technologies (ICT) professional development programme. All staff are expected to achieve a level of competence and confidence so they can choose and use computer applications in their teaching. Jane will join the programme.

Schools' responsibility for ensuring all staff have the skills to use and support Information and Communication Technologies (ICT) in the classroom

The software (Clicker 4) is a comprehensive package with many supportive features. Although Mark and Hanna attended the introductory workshop on symbol use, neither has experience in using such complex software to meet learning goals. The application includes a request for funded specialist training in the use of this package.

Training is a crucial factor in successful use of complex technologies

Glossary

- Terms
- Sources of Support
- References

Terms

Assistive equipment - any tool which assists a student to do something or do something better than they were unable to do without the equipment in relation to their learning environment

Complex assistive equipment - equipment which has been specifically designed or extensively adapted for use by people with special education needs and disabilities

Assistive equipment assessment - the process of identifying accommodations and adaptations that need to be in place to allow the students to access and be successful in the curriculum. (Closing the Gap Aug/Sept. 99)

Accredited assessor - a person with qualifications accepted by New Zealand Disabilities Resource Centre to be able to competently assess a person in their district of expertise such as

- expressive communication
- hearing
- household management
- information and communication processing
- personal care
- seating and positioning (levels 1,2, & 3)

- standing
- vision
- walking
- wheelchairs

Assessors are professionals who have the specified qualifications and skills to assess and approve equipment that best suits the needs of a person with a disability.

Alternative - another way of achieving the identified goal such as adapting the curriculum to allow some success such as reducing the number of tasks for identified student

Option - an identified possible solution. In context of assistive equipment this usually refers to a choice of different technologies

Adaptation - an adjustment to an existing programme, process or way of working to make suitable, achievable and accessible for the identified student

Specialised assessment - a comprehensive scrutiny of the student's needs in relation to their learning objectives, learning environment and their skills

Cost effective - the most effective and economic solution to meet the identified learning needs of the student. It is not always the cheapest but cost does need to be considered.

Specific learning outcomes - (as in Ministry of Education IEP Guidelines) - the results of learning, teaching and other forms of intervention. Outcomes occur at an individual level (the student makes gains), at a class and school level (the learning and teaching programme is effective) and at a systems level (the collaborative IEP process is successful)

No tech - an intervention which does not require great expense or effort or is readily available such as a visual timetable (timetable as written on blackboard with corresponding symbols) and uses every day resources or a rearrangement such as changing the classroom environment

Low tech - a minor intervention or adaptation to the school environment or use of existing classroom resources in a different way such as a pencil grip, use of tape recorder, or slanting school desk.

Sources of Support

Group Special Education District Offices:	
National Office	Telephone: 0-4-499 2599
Tai Tokerau	Telephone: 0-9-438 7677
Auckland	Telephone: 0-9-623 3970
North West	Telephone: 0-9-489 9433
Manukau	Telephone: 0-9-262 7530
Waikato	Telephone: 0-7-856 0940
Taranaki	Telephone: 0-6-867 9859
Bay of Plenty West	Telephone: 0-7-349 5145
Taranaki	Telephone: 0-6-867 9859
Bay of Plenty East	Telephone: 0-7-578 9438
Hawkes Bay/Tairawhiti	Telephone: 0-6-870 9750
Central	Telephone: 0-6-358 3026
Greater Wellington	Telephone: 0-4-570 3666
Nelson/Marlborough/Westland	Telephone: 0-3-548 2344
Canterbury	Telephone: 0-3-379 5383
Otago	Telephone: 0-3-477 8610
Southland	Telephone: 0-3-218 2442

or call the Special Education Information Line 0800 622 222

References

Bain, B and Leger, D. Churchill Livingstone (1997) *Assistive Technology: An Interdisciplinary Approach.*

Bryant, D and Bryant, B. (1998) *Using Assistive Technology Adaptations to Include Students with Learning Disabilities in Co-operative Learning Activities.* Journal of Learning Disability, 31 (1), pages 41 - 54.

Drew, C; Harrison, P; Millar, M; Stewart, J and Wedde, R (1998) *Overlay Keyboards in Inclusive Education.* Presentation at Specialist Education Services Conference, Auckland, September 1998.

Harris, D and Boyd, S (1998) *A Link to Learning: The Use of Computers by Children with Disabilities.* NZCER.

Judge, S and Parette, H. Brookline. (1998) *Assistive Technology for Young Children with Disabilities: A Guide to Family-Centred Services.*

Lewis, R (1998) *Assistive Technology and Learning Disabilities: Today's Realities and Tomorrow's Promises.* Journal of Learning Disabilities, 31 (1), pages 16 - 26, 54.

Mastrangelo, S (1996) *Computers in Special Education.* http://www.edu.york.ca/~tcs/~smastrangelo/specialed.html.

Murray, J (1994) *Early Literacy: The Benefits of Using a Concept Keyboard.* Computers in NZ Schools. Volume 6, Number 2, July 1994, pages 21 - 28.

Phillips, B and Zhao, H (1993) *Predictors of Assistive Technology Abandonment.* Assistive Technology, pages 36 - 45.

Udvari-Solner, A (1995) *Designing Effective Adaptations for Inclusive Classrooms.* Network, Volume 4, Number 3, pages 31 - 38.

Appendix

Operational Protocol Between Health and Education

Frame of Reference for Clarifying Responsibility for Purchasing/Funding of Assistive Equipment Services and Environmental Support Services*

* Operational Protocol on Assistive Equipment Services And Environmental Support Services for School Students with Disabilities between the Ministry Of Education and the Health Funding Authority (Disability Support Services) effective from 18th November, 1999, page 6.

Education Responsibility	Triggers for Decisions	Health Responsibility
Promote equality of educational opportunities by removing barriers to educational achievement	The following three key triggers identify the entry points for decision-making about purchasing/funding responsibilities	Maintain and increase essential independent function at the level which promotes safety and security
Learning <<<	**Identified Need** • Is the principal need central to everyday living activities or learning activities	>>> Living
Learning <<<	**Identified Purpose** • Is the purpose of the equipment to meet everyday living needs or education needs or both	>>> Living
Learning <<<	**Both** • The principal purpose is to ensure safety and security **or** • The principal purpose is to remove barriers to educational achievement	>>> Living

		Identified Setting		
Learning	<<<	• Is the equipment required in the everyday living setting, or educational setting or both	>>>	Living
		Both	>>>	Living
		• Its principal purpose is to ensure safety and security		
Learning	<<<	**or**		
		• Its principal purpose is to remove barriers to educational achievement		