JOINED-UP:
A COMPREHENSIVE, ECOLOGICAL MODEL FOR WORKING WITH CHILDREN WITH COMPLEX NEEDS AND THEIR FAMILIES/WHANAU

A review of the literature
carried out for the New Zealand Ministry of Education

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EXECUTIVE SUMMARY

Chapter One: Introduction

1. *This review was commissioned by the Ministry of Education to assist in building its knowledge about what would be the ideal model of practice if students with complex needs were to be moved from residential services to non-residential services or into a hybrid option. It is a 'desk review' and is not intended to be a full review of provisions for students with complex needs in New Zealand.*

2. *International definitions of complex needs and allied concepts are presented. A useful working definition involves consideration of two intersecting factors: breadth (multiple needs that are interrelated) and depth (profound, severe or intense needs).*

3. *A wraparound approach to providing services for children and young persons with complex needs and their families is predicated on several principles, including:*

   - *Families and whānau comprise systems which are, in turn, embedded in a series of other systems – schools, communities, social, health, justice, recreational, political, environmental…*
   - *Such systems should be 'joined up', which involves both horizontal and vertical integration. Horizontal integration requires linking systems at the same level to ensure consistency and compatibility of approach. Vertical integration requires linking more immediate, or proximal, systems with the more distal systems in which they are embedded.*
   - *The whole is greater than the sum of its parts, i.e. the principle of non-summativity. This principle requires that systems within different levels work together cohesively and with common purpose.*
   - *Individuals are both individuals in their own right and social beings. Schools play a critical role in ensuring a balance between these liberal and communitarian views as they endeavour to reconcile individualism and diversity with an individual's obligations to the common good.*
   - *Educators and other human services professionals are increasingly being expected to use programmes and strategies that are evidence-based and theoretically coherent. Further, their implementation and evaluation of programmes and strategies are expected to be evaluated through data-driven processes.*
   - *The rationale for designing services for children with complex needs may be portrayed in the form of a Venn diagram. This diagram indicates that there are universal needs i.e., those shared by all children; semi-universal, i.e., those shared by all children with special needs; and specific, i.e., those that are specific to all children falling into a particular category, e.g., complex needs. And, of course, each child is unique, with his or her own individual needs.*

4. *In addition to the above principles, several assumptions are posited with specific reference to children and young persons with complex needs. These include:*

   - *They are diverse, with varying abilities, interests, aspirations, and needs, which change over time as they mature and gain more experience.*
   - *There is no single pre-determined programme for them. One size does not fit all.*

- *The focus of planning programmes for them is on what they are capable of performing, whilst at the same time paying due regard to the challenges their behaviours create. In other words, the underlying philosophy driving the provisions of such individuals is a strengths-based model, rather than a deficit model.*
- *The child or young person with complex needs is central to planning and delivering services.*
- *The ultimate aim of any programme directed at them is to enhance their quality of life as citizens and as members of their culture, to maximise their potential for education and work, and to help them achieve a satisfying balance between independence and interdependence.*

5. *The New Zealand policy context is explained, with particular reference to the UN Convention on the Rights of Persons with Disabilities, the policy on special education – Success for All – and a recent Green Paper for Vulnerable Children.*

6. *While New Zealand can, and should, learn from other countries' experiences, it is important that it gives due consideration to its own social, economic, political, cultural, and historical singularities when considering overseas policies and programmes for children with complex needs. This includes consultation with Māori and Pasifika communities.*

Chapter Two: Joined-up Approaches

1. *Increasingly, in the past two decades or so, both overseas and in New Zealand, there has been a distinct trend towards 'joined-up thinking' in providing human services.*

2. *This trend calls for radical, transforming systems change manifested in the move from fragmentation to coordinated or integrated intervention and from narrowly-focused and specialist-oriented, 'silo' services to comprehensive, general approaches.*

3. *The following examples of joined-up approaches have a high degree of overlap.*

4. ***Wraparound** is a system-level intervention that quite literally aims to 'wrap' existing services around children and young people and their families to address their problems in an ecologically comprehensive and coordinated way. The strength of evidence that wraparound can positively affect child and adolescent outcomes is rather mixed, but trending in favour of wraparound, compared with more traditional approaches.*

5. ***Systems of care** closely resembles wraparound. It is a service delivery approach that builds partnerships to create a broad integrated process for meeting families' multiple needs. It is based on the principles of interagency collaboration, individualised services, and full participation of families at all levels of the system.*

6. ***Full-service schools,** or **community schools,** are 'one-stop' institutions that integrate education, medical, social and/or human services to meet the needs of children and youth and their families on school grounds or in locations that are easily accessible. They necessitate information sharing between agencies, the appointment of a lead professional, developing common assessment frameworks, and creating a common core of training for the professionals involved. They vary in character according to the nature of the communities they serve and the availability and commitment of various agencies. They require consideration of such issues as (a) management of the programme, (b) establishing mechanisms for*

collaboration, (c) building from localities outwards; (d) avoiding the potential for schools to 'colonise' the system, (e) avoiding undue reliance on the medical model, (f) determining the financing model, and (g) evaluating outcomes.

7. ***Health-promoting schools*** *engage health and education officials, teachers, students, parents and community leaders in efforts to promote health through strengthening schools' capacities as healthy settings for living, learning and working. As with other variants of joined-up approaches, health-promoting schools are concerned with establishing partnership and collaboration, not only between different sectors at the national and regional levels, but also with everyone involved in the everyday life of the schools.*

8. ***Joined-up assessment*** *involves adopting an integrated approach to assessing the needs of children, including valuing parents' and children's expertise regarding their own needs and experience as they are supported to play an active partnership role in the assessment process.*

9. ***A bio-psycho-social approach*** *to children and young people with complex needs integrates individual biological and intra-psychic dimensions with the interpersonal and social. It gives equal respect to the contributions of the different disciplines, allowing, indeed requiring, 'trans-professionalism'.*

10. *In implementing joined-up approaches to human services, several issues have to be addressed. These include: (a) resistance to change among the key players, (b) the paucity of relevant research, (c) the risk of a depersonalised approach to young people, (d) possible infringement of client privacy, and (e) possible information overload among participating professionals.*

Chapter Three: Wraparound: A Comprehensive Ecological Model

1. *This chapter takes into account the assumptions regarding joined-up systems as outlined in Chapter Two.*

2. *In developing joined-up services for children and young persons with complex needs (indeed all children and young persons), it is essential to see them as being embedded in various systems: their families/whānau, classrooms, schools and communities.*
3. *A general systems theory has the following features:*

   - *a social system can be studied as a network of unique, interlocking relationships with discernible structural and communication patterns;*
   - *all systems are subsystems of other, larger systems;*
   - *boundaries of varying degrees of permeability give a social system its identity and focus as a system, distinguishing it from other social systems with which it may interact;*
   - *there is an interdependency and mutual interaction between and among social systems;*
   - *a change in any one member of the social system affects the nature of the social system as a whole;*
   - *social systems vary in the extent to which they are purposive, goal-directed and in constant states of interchange with their environments;*
   - *change within or from without a social system that moves the system to an imbalance in structure will result in an attempt by the system to re-establish*

that balance;

- *systems may be open or closed, depending on the degree to which they engage in exchanges with their environment (both receiving inputs and delivering outputs); and*
- *systems reach a 'steady state', or equilibrium, with respect to their exchanges with the environment.*

4. *Bronfenbrenner identified four levels of nested settings: the microsystem (the family or classroom), the mesosystem (two microsystems in interaction), the exosystem (external environments that indirectly influence development, e.g., parental workplace), and the macrosystem (the larger socio-cultural context, such as the individual's ethnicity, culture and belief systems).*

5. *The present review adapts Bronfenbrenner's model and reviews the literature under the following headings: the child in the family, the child in the inclusive classroom, and the child in the full-service school.*

Chapter Four: The Child in the Family/Whānau

1. *Parents play important, if not critical, roles in educating and supporting students with special educational needs.*

2. *Many parents of children with special educational needs require support and training to deal with their children, especially those with complex needs.*

3. ***Parent Management Training** (PMT) involves parents being trained to define and monitor their child's behaviour, avoid coercive interchanges and positively reinforce acceptable behaviour by implementing developmentally appropriate consequences for their child's defiance. Research shows that it is one of the most strongly-supported preventative interventions for children with social and emotional behaviour disorders, particularly conduct problems.*

4. *The **Incredible Years** programme is a variant of PMT and is aimed at children aged two to seven and their parents. It utilises videotape modelling sessions with group discussions. It has been extensively researched, and has been found to be more useful in the long term than other similar programmes.*

5. ***Parent-child Interaction Therapy** is also closely related to PMT, but without the close adherence to behavioural principles. Its main aim is to help parents develop warm and responsive relationships with their children and develop acceptable behaviours. It includes non-directive play, along with more directive guidance on interactions. Research shows it to be generally effective in decreasing a range of children's disruptive and oppositional behaviours, increasing child compliance with parental requests, improving parenting skills, reducing parents' stress levels and improving parent-child relationships.*

6. ***Triple P- Positive Parenting Programme** is a multi-level parenting and family support strategy aimed at reducing children's behavioural and emotional problems by enhancing the skills of their parents. It includes five levels of intervention of increasing strength. Research has demonstrated its efficacy.*

7. *Two New Zealand programmes, **Strengthening Families** and **Whānau Ora**, are further examples of wraparound human services that have a focus on families.*

8. *The success of parenting programmes such as those outlined above is contingent on a number of factors, which include:*

- *the severity or chronicity of the disorder, and the presence of co-morbidities;*
- *including parents who choose not to complete the programme;*
- *parental negativity towards the child;*
- *maternal psychopathology, in particular depression and life events;*
- *the accessibility and affordability of training for staff; and*
- *socio-economic status (low SES is associated with more limited outcomes).*

9. *The effectiveness of parent training interventions is dependent in part upon the cultural competence of the parent educator who must be able to establish a positive interpersonal relationship with parents from a variety of different cultural backgrounds.*

Chapter Five: The Child in the Inclusive Classroom

1. *The inclusive classroom is an essential component of the comprehensive ecological approach to working with students with complex needs.*
2. *There are universal needs i.e., those shared by all children; semi-universal needs, i.e., those shared by all children with special needs; specific needs, i.e., those that are specific to all children falling into a particular category (e.g., those with complex needs); and needs that are unique to each individual child.*
3. *All students, including those with special needs, benefit from a common set of strategies, even if they have to be adapted to take account of varying cognitive, emotional and social capabilities. What is required is the systematic, explicit and intensive application of a wide range of effective teaching strategies.*
4. *Response to Intervention (US) and Graduated Response (England) models involve consideration of an individual student's response to instruction across multiple (three or four) tiers of intervention:*

   Tier I: core classroom instruction.

   Tier II: supplemental (or secondary) instruction.

   Tier III: instruction for intensive intervention (tertiary).

   Tier IV: highly specialised intervention.
5. *Educators are increasingly expected to be responsible not only for helping students to achieve the best possible outcomes, but also for using the most scientifically valid methods to achieve them.*
6. *Evidence-based teaching strategies may be defined as 'clearly specified teaching strategies that have been shown in controlled research to be effective in bringing about desired outcomes in a delineated population of learners'.*
7. *As with all students, those with complex needs should be provided with an education that enables them to acquire academic skills such as literacy and numeracy, as well as maximise their emotional well-being and positive social functioning.*
8. *Strategies and programmes that have a strong evidential base include:*
   - *Adapted curricula*
   - *Assessment*
   - *Cooperative group teaching*
   - *Peer tutoring and peer support*
   - *Classroom climate*

- *Social skills training*
- *Cognitive strategy instruction*
- *Self-regulated learning*
- *Behavioural approaches*
- *Functional behavioural assessment*
- *Cognitive behavioural therapy*
- *Review and practice*
- *Formative assessment*
- *Feedback*
- *Social and emotional learning programmes*
- *Early intervention*
- *The Hei Āwhina Matua project*
- *Multi-component programmes.*

Chapter Six: The Child in the Whole School

1. *This chapter examines how the whole school and its wider community can be harnessed to provide a comprehensive range of services for all children, particularly those at risk, including those with complex needs.*

2. *The culture of the school as an organisation plays a critical role in determining the philosophy of care and education for students with special educational needs.*

3. *School-wide Positive Behaviour Support is a systems-oriented, proactive approach to building an entire school community's capacity to deal with the wide array of behavioural challenges. It is widely implemented and well founded in research.*

4. *Success for All is a widely-used, research-supported programme aimed at preventing school failure or intervening when deficits occur. It focuses on reading, and includes regular assessments, a solutions team to support parents, and a facilitator to work with teachers.*

5. *Check and Connect is a drop-out prevention programme that relies on close monitoring of students' school performance, as well as mentoring and case management.*

6. *Wraparound refers to a system-level intervention that quite literally aims to 'wrap' existing services around children and young people and their families to address their problems in an ecologically comprehensive and coordinated way. (See Chapter Two.)*

7. *Full-service or community schools are 'one-stop' schools that integrate education, medical, social and/or human services to meet the needs of children and youth and their families on school grounds or in locations that are easily accessible. They necessitate information sharing between agencies, the appointment of a lead professional, developing common assessment frameworks, and creating a common core of training for the professionals involved. They vary in character according to the nature of the communities they serve and the availability and commitment of various agencies. (See Chapter Two.)*

8. *Health-promoting schools engage health and education officials, teachers, students, parents and community leaders in efforts to promote health through strengthening schools' capacities as healthy settings for living, learning and working. (See Chapter Two.)*

9. *Student Support Committees should be set up in all schools to monitor the*

progress of all students with special educational needs, including those with complex needs.

Chapter Seven: The Child in Special/Out-of-Home Placements

1. *A range of placements is typically available for students with complex needs if they cannot be managed in the regular classroom. Such students are more likely to be placed in restrictive or exclusionary settings than students in any other category.*
2. *This field is under-researched.*
3. *Special units or special classes yield mixed results, with some evidence from Sweden showing day special schools improved students' mental health, but other research indicating special class placements can lead to marginalisation and not to the learning of coping strategies. In England and Wales, pupil referral units vary in quality but the best of them have such features in common as strong, authoritative leaders; responsiveness to behaviour problems that develop in schools; capacity to help students with emotional and behavioural difficulties while at the same time helping them academically; a shared purpose and direction; and a well-designed curriculum.*
4. *Residential schools have been little researched. Limited evidence points to very small effects on behaviour after the students leave residential facilities. On the positive side, some studies point to residential schools having restorative value, offering respite from negative influences, and providing opportunities for resignification. Follow-up studies are quite discouraging.*
5. *Nurture group comprises a small group of 6 to 10 children/young people, usually based in a mainstream educational setting and staffed by two supportive adults. They offer a short-term, focused, intervention strategy, which addresses barriers to learning arising from social/emotional and or behavioural difficulties. There is evidence that nurture groups yield improvements in students' self-management behaviours, social skills, self-awareness and confidence, skills for learning and approaches to learning.*
6. *Multidimensional Treatment Foster Care involves children with severe behavioural difficulties being placed with specially trained foster parents who are provided with ongoing support by a team of trained therapists. Placements typically last for 9-12 months. The programme involves a structured behaviour management system for the child, supplemented with family therapy and support for the child's birth family. It has been shown to be an effective and viable method of preventing the placement of children and adolescents in institutional or residential settings.*
7. *Teaching Family Homes provide out-of-home treatments for children with severe conduct problems. In these homes, up to six children are placed with specially trained foster parents who act as therapists who teach the children a range of behavioural skills.*

Chapter Eight: Conclusions

1. *Scope of review.*
2. *Aims of provisions for children with complex needs.*
3. *The policy context.*
4. *The New Zealand cultural context.*
5. *Local solutions within national frameworks.*
6. *Evidence-based, theoretically coherent programmes and strategies.*
7. *Joined-up approaches.*
8. *The spiral ecological model.*
9. *A bio-psycho-social approach.*
10. *Prevention and early intervention.*
11. *Needs shared by all, many, some, or no other children.*
12. *Gradations of need and intervention.*
13. *The child in the family/whānau.*
14. *Evidence-based teaching strategies*
15. *Whole-school approaches.*
16. *Special and out-of-home placements.*
17. *Workforce training.*
18. *An Action Plan.*

CHAPTER ONE

INTRODUCTION

1.1 Background and Terms of Reference

The Ministry of Education provided the following background information for the present review:

> There are four residential schools in New Zealand for students with complex needs – Westbridge Residential School, McKenzie Residential School, Halswell Residential College and Salisbury School. Halswell School is currently trialling an outreach wraparound service for students with complex needs as an alternative to residential services. The Ministry of Education (the Ministry) is implementing a wraparound programme throughout NZ with the funding that came from the closure of Waimokoia Residential School for students with severe challenging behaviour/conduct problems.
>
> The Ministry wishes to build its knowledge of effective models of practice for students with complex needs. It is particularly interested in building its knowledge about what would be the ideal model of practice and framework if students with complex needs were to be moved from residential services to non-residential services or into a hybrid option (where residential and non-residential services are combined in some way).
>
> The students currently accessing residential services are typically aged 8-12 years.
>
> For the residential behaviour schools (McKenzie and Westbridge residential behaviour schools and the "intensive behaviour service") the students are those with severe behaviour needs (conduct difficulties) whose behaviour and learning needs intervention and support at school, in the community and in their family/whānau. These students will have had a record of ongoing difficulty in spite of being provided a behaviour service by the Ministry's behaviour team and their enrolment, educational progress, wellbeing in their whānau/family and community will be considerably at risk because of their behaviour.
>
> For Halswell and Salisbury the students will be presenting with significant behavioural and social difficulties but typically these difficulties will be associated with cognitive delays and/or other impairments. These students, like those enrolled in the behaviour schools, will have had a record of ongoing difficulty in spite of being provided a range of special education services and their enrolment, educational progress, wellbeing in their whānau/family and community will be considerably at risk because of their behaviour/social difficulties.
>
> It has been asserted by the board and others associated with Salisbury School that no service could be developed that effectively responded to the needs of girls and that the needs of girls are different and therefore would require a different service model. It would be useful for your report to comment on this issue.
>
> The Ministry expects that your report will provide a description of the approaches that have demonstrated efficacy in other jurisdictions the applicability of those approaches to the client groups currently enrolled in the residential schools and applicability to the New Zealand context especially given the disproportionate numbers of Māori students accessing these services.
>
> Sub-topics of interest within this are:

- outcomes for different models of practice
- what good looks like for different models of practice
- key success factors for different models of practice
- who benefits most and least for different models of practice (with consideration of type of impairment, gender and other factors)
- potential risks and ways of mitigating risks for different models of practice. Findings from this research will inform consultations with residential schools during 2012.

1.2 Scope of Review

It must be emphasised from the outset that this is a 'desk review' of the literature and is not intended to be a full review of provisions for students with complex needs in New Zealand. The conclusions that arise from the review will be drawn from the international literature and have not involved consultations with stakeholders.

The review:

- covers international literature
- focuses on primary and intermediate-age children
- concentrates on children with complex needs, but will also refer to other categories of children with special needs
- emphasises evidence-based strategies and programmes.

It excludes consideration of the effects of medication. See the Werry Centre (2010) report for coverage of this topic.

Reflecting the fact that students with complex needs represent a very small minority of the student population, the research literature relating directly to provisions for them is quite sparse. Therefore, the review net was widened to include overlapping categories, especially those referred to in the following reviews:

- Church's 2003 review of severe behaviour disorders;
- Cooper & Jacobs's 2011 review of children with emotional disturbance/behavioural difficulties;
- Meyer & Evans's 2006 review of challenging behaviour in children and youth with developmental disabilities;
- Blissett et al.'s 2009 report on conduct problems; and
- The New Zealand Government's 2012 Green Paper on vulnerable children.

The review is divided into eight chapters.

In this chapter, definitions of 'complex needs' will be presented. This section will be followed by a set of guiding principles, summarised by the term 'joined-up thinking'.

This will be followed by an outline of underlying principles for designing services for students with complex needs, a set of assumptions about such students. Finally, the New Zealand policy context of relevance to this review will be explained, with particular reference to the UN *Convention on the Rights of Persons with Disabilities,* the policy on special education – *Success for All* – and a recent *Green Paper for Vulnerable Children*.

Chapter Two examines a range of 'joined-up' approaches to human services: wraparound, systems of care, full-service schools, health-promoting schools, joined-up assessment, a bio-psycho-social approach. It concludes with critiques of joined-up approaches to human services.

Chapter Three presents a comprehensive ecological wraparound model, drawing on the work of Bronfenbrenner. It posits that in developing joined-up services for children and young persons with complex needs (indeed *all* children and young persons), it is essential to see them as being embedded in various systems: their families/whānau, classrooms, schools and communities. This chapter will give an overview of evidence-based approaches that should be utilised at all these system levels.

Chapter Four outlines a range of strategies that have been found to be successful with working with families/whānau. These include such approaches as parent management training, parent-child interaction therapy, Triple P - Positive Parenting Programme, the Incredible Years Parent Programme. The importance of culturally responsive programmes is emphasised.

Chapter Five presents a range of classroom-focused strategies, including classroom climate, peer tutoring and support, functional behavioural assessment, social skills instruction, early intervention, assessment, various social and emotional learning programmes, and response to intervention.

Chapter Six examines such school-wide strategies as school culture, School-wide Positive Behaviour Support, and Check and Connect, and reiterates the implications of the joined-up approaches outlined in Chapter Two.

Chapter Seven will examine issues to do with special and out-of-home placements. It will outline provisions in special units and special classes, residential schools, nurture groups and multidimensional treatment foster care.

Conclusions are presented in Chapter Eight.

1.3 Definitions of Complex Needs

As can be seen in Section 1.1 above, the Ministry of Education refers to 'students with complex needs', elaborating this descriptor by referring to students with 'severe behaviour needs (conduct difficulties)'. In the case of students enrolled in Halswell Residential College and Salisbury School, the reference is to students with 'significant behavioural and social difficulties', which are typically 'associated with cognitive delays and/or other impairments'.

The international literature contains a range of related definitions of 'complex needs'. For example, in the UK Boddy et al. (2006) prefer a very practical definition for 'children with significant and complex needs', referring to them as those where there is 'involvement of at least two (or three) services'. A similar perspective is reported by Greco & Sloper (2004).

A recent Scottish review found a plethora of terms linked with the concept of 'complex and multiple needs' (Rosengard et al., 2007). These included 'multiple disadvantage', 'multiple disabilities', 'multiple impairment' and 'high support needs'. These writers cite Rankin and Regan's (2004) criteria as being useful. The latter view the essence of complex and multiple needs as implying both:

- *breadth* – multiple needs (more than one) that are interrelated or interconnected, and
- *depth of need* – profound, severe, serious or intense needs. (p.1)

Further, Rankin and Regan suggest that the term complex and multiple needs offers:

> a framework for understanding multiple, interlocking needs that span health and social issues. People with complex needs may have to negotiate a number of different issues in their life, for example learning disability, mental health problems, substance abuse. They may also be living in deprived circumstances and lack access to suitable housing or meaningful daily activity. As this framework suggests, there is no generic complex needs case. Each individual with complex needs has a unique interaction between their health and social care needs and requires a personalised response from services. (p 1)

In another Scottish report (Scottish Executive, 2000), 'complex needs' are defined as 'needs arising from both learning disability and from other difficulties such as physical and sensory impairment, mental health problems or behavioural difficulties' (p.3). In the same vein, the report refers to them as 'the needs a person has over and above their learning disability. For example, extra physical or mental health problems, challenging behaviour or offending behaviour' (p.128).

In considering what interpretation is to be placed on the concept of 'complex needs', it is worth noting that one of the key features of most definitions is a reference to 'conduct problems'. The New Zealand Advisory Group on Conduct Problems has suggested the following definition of this category:

> Childhood conduct problems include a spectrum of antisocial, aggressive, dishonest, delinquent, defiant and disruptive behaviours. These behaviours may vary from none to severe, and may have the following consequences for the child/young person and those around him/her: stress, distress and concern to adult care givers and authority figures; threats to the physical safety of the young people involved and their peers; disruption of home, school or other environments; and involvement of the criminal justice system (Blissett et al., 2009).

1.4 Underlying Principles for Designing Services for Children and Young Persons with Complex Needs

As will be seen in the course of this review, a wraparound approach to providing services for children and young persons with complex needs and their families is predicated on several principles. These are best expressed by the concept of 'joined-up thinking' – hence the title of this report – or *Fitting Together.*

Principle #1
Children and young people with complex needs and their families and whānau share many features in common with other children and young people and their families.

Principle #2
All children and young people and their families and whānau have unique cultures, economic circumstances, characteristics, abilities, interests and needs.

Principle #3
Families and whānau comprise systems which are, in turn, embedded in a series of other systems – schools, communities, social, health, justice, recreational, political, environmental…

Principle #4
Such systems should be 'joined up', which involves both horizontal and vertical integration. Horizontal integration requires linking systems at the same level to ensure consistency and compatibility of approach. Vertical integration requires linking more immediate, or proximal, systems with the more distal systems in which they are embedded.

Principle #5
The whole is greater than the sum of its parts, i.e., the principle of non-summativity. This principle requires that systems within different levels work together cohesively and with common purpose.

Principle #6
Individuals are both individuals in their own right and social beings. Schools play a critical role in ensuring a balance between these liberal and communitarian views as they endeavour to reconcile individualism and diversity with an individual's obligations to the common good.

Principle #7

Educators and other human services professionals are increasingly being expected to use programmes and strategies that are evidence-based and theoretically coherent. Further, their implementation and evaluation of programmes and strategies are expected to be evaluated through data-driven processes.

Principle #8

The rationale for designing services for children with complex needs may be portrayed in the form of a Venn diagram (Figure 1). This diagram indicates that there are universal needs i.e., those shared by all children (**A**); semi-universal, i.e., those shared by all children with special needs (**B**); and specific, i.e., those that are specific to all children falling into a particular category, e.g., complex needs (**C**); And, of course, each child is unique, with his or her own individual needs, some of which are shared with all children, some with other children with special needs, some of which are shared with other children with complex needs, but, critically, some of which are unique to him or her.

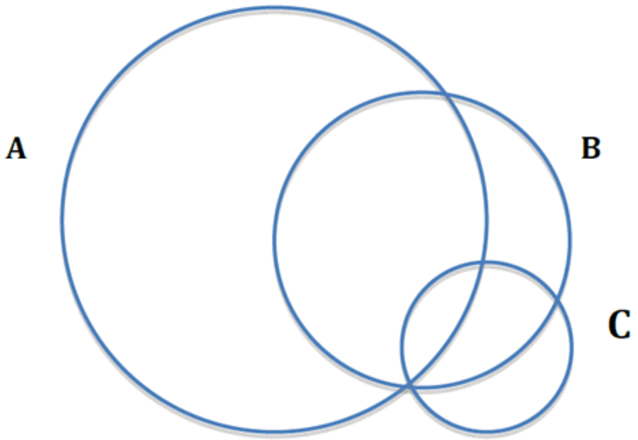

Figure 1. Design of services from universal, through semi-universal to specific

1.5 Assumptions Regarding Students with Complex Needs

In addition to the above principles, several assumptions are posited with specific reference to children and young persons with complex needs – who constitute the focus of this review:

- They are diverse, with varying abilities, interests, aspirations, and needs, which change over time as they mature and gain more experience.
- They have valued roles in the community and in educational and working environments, with the potential to contribute a wide array of expertise, skills and talents to society.

- Quality programmes for them must be based on the expectation that they can achieve successful school and post-school outcomes.
- Societies have a responsibility to identify and remove barriers confronting them.
- Negative attitudes are one of the major barriers to them at school and in the community.
- There is no single pre-determined programme for them. One size does not fit all.
- Quality programmes for them result from the support and commitment of qualified and knowledgeable personnel who collaborate with each other, with the individuals' families, and with the individuals themselves.
- The focus of planning programmes for them is on what they are capable of performing, whilst at the same time paying due regard to the challenges their behaviours create. In other words, the underlying philosophy driving the provisions of such individuals is a strengths-based model, rather than a deficit model.
- The child or young person with complex needs is central to planning and delivering services.
- The ultimate aims of any programme directed at children with complex needs is to enhance their quality of life as citizens and as members of their culture, to maximise their potential for education and work, to enhance their emotional well-being and to achieve mutually satisfying relationships with others.
- As with all students, those with complex needs should be provided with an education that enables them to acquire academic skills such as literacy and numeracy, as well as maximising their emotional well-being and positive social functioning.

1.6 The New Zealand Policy Context

Four documents play a significant role in determining effective models of practice for students with complex needs.

1.6.1 The United Nations Convention on the Rights of Persons with Disabilities

In 2008, New Zealand ratified this Convention. Of particular significance for the theme of this report is Article 24, which includes the following:

> 1. States Parties recognize the right of persons with disabilities to education. With a view to realizing this right without discrimination and on the basis of equal opportunity, States Parties shall ensure an inclusive education system at all levels, and life-long learning, directed to:

> (a) The full development of the human potential and sense of dignity and self worth, and the strengthening of respect for human rights, fundamental freedoms and human diversity;
> (b) The development by persons with disabilities of their personality, talents and creativity, as well as their mental and physical abilities, to their fullest potential;
> (c) Enabling persons with disabilities to participate effectively in a free society.
>
> 2. In realizing this right, States Parties shall ensure that:
> (a) Persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability;
> (b) Persons with disabilities can access an inclusive, quality, free primary education and secondary education on an equal basis with others in the communities in which they live;
> (c) Reasonable accommodation of the individual's requirements is provided;
> (d) Persons with disabilities receive the support required, within the general education system, to facilitate their effective education;
> (e) Effective individualized support measures are provided in environments that maximize academic and social development, consistent with the goal of full inclusion.

1.6.2 Success for All

In keeping with its obligations under the UN *Convention*, the New Zealand Government has committed to *Success for All - Every School, Every Child*, a four-year plan to achieve a fully inclusive education system (Ministry of Education, 2010). Of particular relevance to the issues developed in the present review, this policy will involve such steps as the following:

> There will be better coordination between government agencies, and the Ministry of Education, the Office for Disability Issues and the disability community will work together on improving awareness of the challenges facing people with disabilities (sic). (p.2)
>
> The Ministries of Education, Health and Social Development are working together to make access to services easier for families. They will consider how to streamline the eligibility, referral processes and services for children and young people, focusing on those with the highest special education needs first. (p.2)

1.6.3 The Government's Green Paper for Vulnerable Children

In a similar vein to *Success for All*, the recent *Green Paper for Vulnerable Children* (New Zealand Government, 2012) has this to say*:*

> Failures in communication and co-ordination between agencies are frequently cited in inquiry reports, research and policy documents as one of the main reasons for poor outcomes for vulnerable children. (p.26)

It goes on to note that:

> a variety of agencies and organisations deliver services for children and their families and whānau, including government agencies, non-government

organisations, iwi and community groups. However, not all families and whānau find these services readily accessible, acceptable or appropriate to their needs. Concerns often cited by families and whānau, and professionals about the way in which services are delivered include:

- Having difficulty in obtaining information about the roles of different services
- Conflicting advice from different services
- Having to repeat their story to many different service providers
- Having needs that fall into gaps between the roles of different services
- Not having services that are delivered at times or locations that are convenient for families and whānau to access. (p.30)

The *Green Paper* notes that initiatives which have shown to improve outcomes for children involve comprehensive plans to better support the workforce who work with children, including:

- Common principles and standards such as cultural competencies and quality standards to guide those who work with children
- Joint workforce development and training
- Common assessment frameworks for assessing children's needs
- Protocols for information sharing, referrals and follow up
- Accreditation, audit and evaluation processes to monitor performance (p.27).

Finally, the Government feels that it could improve the effectiveness of its service delivery by:

- Increasing delivery of services in locations where children are, such as early childhood education centres and schools
- Building on current opportunities such as Whānau Ora and Integrated Family Health Centres, and Work and Income's Integrated Service Response, to bring services together with a focus on children, and their family and whānau
- Working in partnership with iwi, hapu and whānau to deliver services, for example on marae or community centres. (p.31)

In the course of this review, I will return to this *Green Paper* for further ideas.

1.6.4 The Canterbury earthquake

In July 2011, Cabinet agreed the following:

- the development of Recovery Plans, as required in the Canterbury Earthquake Recovery Act 2011, will have regard to the New Zealand Disability Strategy;
- implementation of a trial in Canterbury of more individualised supports for disabled people that increase their choice and control over what they do during the day. This will explore combining existing funding for supports for living in the community (from the Ministry of Health), and for community participation (from the Ministry of Social Development);
- development of education social services hubs based in some schools, where community members can access a range of social services. This work is being led by the Ministry of Education.

1.7 Respect the New Zealand Context

Since there is no one model of provisions for children with complex needs that suits every country's circumstances, caution must be exercised in importing particular models from overseas. While New Zealand can, and should, learn from other countries' experiences, it is important that it gives due consideration to its own social-economic-political-cultural-historical singularities. The challenge is to determine how far New Zealand's country's indigenous philosophies, ideologies and practices should be encouraged, respected, challenged, overthrown or blended with those from 'outside' (Mitchell, 2005). In New Zealand, it is essential that there be involvement and collaboration with the Māori and Pasifika communities to ensure the incorporation of culturally appropriate principles and practices.

1.8 Summary

1. *This review was commissioned by the Ministry of Education to assist in building its knowledge about what would be the ideal model of practice if students with complex needs were to be moved from residential services to non-residential services or into a hybrid option. It is a 'desk review' and is not intended to be a full review of provisions for students with complex needs in New Zealand.*
2. *International definitions of complex needs and allied concepts are presented. A useful working definition involves consideration of two intersecting factors: breadth (multiple needs that are interrelated) and depth (profound, severe or intense needs).*
3. *A wraparound approach to providing services for children and young persons with complex needs and their families is predicated on several principles, including:*
    - *Families and whānau comprise systems which are, in turn, embedded in a series of other systems – schools, communities, social, health, justice, recreational, political, environmental…*
    - *Such systems should be 'joined up', which involves both horizontal and vertical integration. Horizontal integration requires linking systems at the same level to ensure consistency and compatibility of approach. Vertical integration requires linking more immediate, or proximal, systems with the more distal systems in which they are embedded.*
    - *The whole is greater than the sum of its parts, i.e. the principle of non-summativity. This principle requires that systems within different levels work together cohesively and with common purpose.*
    - *Individuals are both individuals in their own right and social beings. Schools play a critical role in ensuring a balance between these liberal and communitarian views as they endeavour to reconcile individualism and diversity with an individual's obligations to the common good.*
    - *Educators and other human services professionals are increasingly being expected be to use programmes and strategies that are evidence-based and theoretically coherent. Further, their implementation and evaluation of*

programmes and strategies are expected to be evaluated through data-driven processes.

- *The rationale for designing services for children with complex needs may be portrayed in the form of a Venn diagram. This diagram indicates that there are universal needs i.e., those shared by all children; semi-universal, i.e., those shared by all children with special needs; and specific, i.e., those that are specific to all children falling into a particular category, e.g., complex needs. And, of course, each child is unique, with his or her own individual needs.*

4. *In addition to the above principles, several assumptions are posited with specific reference to children and young persons with complex needs. These include:*
    - *They are diverse, with varying abilities, interests, aspirations, and needs, which change over time as they mature and gain more experience.*
    - *There is no single pre-determined programme for them. One size does not fit all.*
    - *The focus of planning programmes for them is on what they are capable of performing, whilst at the same time paying due regard to the challenges their behaviours create. In other words, the underlying philosophy driving the provisions of such individuals is a strengths-based model, rather than a deficit model.*
    - *The child or young person with complex needs is central to planning and delivering services.*
    - *The ultimate aim of any programme directed at them is to enhance their quality of life as citizens and as members of their culture, to maximise their potential for education and work, and to help them achieve a satisfying balance between independence and interdependence.*
5. *The New Zealand policy context is explained, with particular reference to the UN Convention on the Rights of Persons with Disabilities, the policy on special education– Success for All - and a recent Green Paper for Vulnerable Children.*
6. *While New Zealand can, and should, learn from other countries' experiences, it is important that it gives due consideration to its own social, economic, political, cultural, and historical singularities when considering overseas policies and programmes for children with complex needs. This includes consultation with Māori and Pasifika communities.*

CHAPTER TWO

JOINED-UP APPROACHES

> *All departments or sections communicating efficiently with each other and acting together purposefully and effectively: joined-up government.*
> *Focusing on or producing an integrated and coherent result, strategy etc.:* ***joined up thinking.***
> *Forming an integrated and coherent whole:* ***joined-up policies*****.**
> (Collins English Dictionary – Complete & Unabridged 10th Edition, 2009)

2.1 Introduction

Increasingly, in the past two decades or so, there has been a distinct trend towards 'joined–up thinking' in providing human services. For example, in the UK, Prime Minister David Cameron has pledged to end 'the deep divide between health and social care that is causing serious problems for vulnerable, often elderly, people and their families' (Campbell, 2011, p.1). In a speech to the NHS in June 2010, Cameron was quoted as saying:

> I've listened to patients who are keen to make sure that, whatever happens, their care is joined up, that they don't have to put up with the frustrations they have today – with different appointments in different places with different people, all to discuss the same thing (Campbell, 2011, p.4).

As noted in the previous chapter, here in New Zealand the Government's policies, as articulated in *Success for All – Every School, Every Child,* and the *Green Paper for Vulnerable Children* have strong 'joined-up' threads running through them.

In the international literature, depending on which agency's perspective is taken, the trend towards joined-up policies is reflected in such approaches to human services as *systems of care* (social welfare), *health-promoting schools* (health), *full-service schools* (education), and a *bio-psycho-social approach* (education of children with emotional disturbance/behaviour difficulties). Embracing all of these overlapping approaches to service delivery, the notion of 'wraparound' seems to have the most generic utility. For the purposes of this review, this approach will be extended into what I refer to as a comprehensive ecological wraparound model, drawing on the original work of Bronfenbrenner (1979). This will be outlined in Chapter Three and expanded in subsequent chapters.

As will be seen in the following descriptions, these joined-up approaches have several features in common:

- **they call for radical, transforming systems change manifested in the move from 'fragmentation to coordinated/integrated intervention and from narrowly-focused, problem-specific and specialist-oriented services to comprehensive, general approaches' (Adelman & Taylor, 1997, p.409);**
- **they provide overarching frameworks for service planning and service delivery, but do not prescribe particular treatments;**
- **they aim to break down silo approaches of education, health-care and welfare services for children, young people and their families and replace them with a coordinated service[1];**
- **they are focused on individual children and their families;**
- **they aim at integrating children and young people into their local schools and communities;**
- **they provide a vehicle for evidence-based practices.**

This remainder of this chapter is arranged under the following headings:

2.2 Wraparound
2.3 Systems of care
2.4 Full-service schools
2.5 Health-promoting schools
2.6 Joined-up assessment
2.7 A bio-psycho-social approach
2.8 Critiques of joined-up approaches to human services
2.9 Summary

2.2 Wraparound

To set the scene, a recent New Zealand review of intervention with challenging behaviour in children and youth with developmental disabilities, carried out by Meyer & Evans (2006), recommended the following with regard to wraparound services:

> Our review supports the provision of wraparound support and training services to all families with a child aged birth to eight years who has severe challenging

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[1] This point is stressed in the New Zealand Government's recent *Green Paper for Vulnerable Children*: 'Children's needs don't fit neatly into silos. Children, and their families and whānau, get tired of telling the same story to different services' (p.13).

> behaviour, dependent upon voluntary participation and at a level appropriate for caregiver capacity and preferences. This is because of the overwhelming evidence of the effectiveness of structured educational interventions accompanied by family and peer intervention support programmes. Our review also supports the provision of wraparound community-based services for families with older children on an as-needed basis. This is because of the severe needs represented by this age if earlier interventions have not by that time resulted in the necessary reductions in serious challenging behaviour. Without wraparound community-based services, families and typical school environments are unlikely to be able to accommodate the levels of risk to safety represented to self and others (p.105).

In a nutshell, wraparound is a system-level intervention that quite literally aims to ‘wrap’ existing services around children and young people and their families to address their problems in an ecologically comprehensive way. ‘The wraparound philosophy posits that direct intervention in the service system to provide individualized service planning will lead indirectly (via specific services) to positive change within the child and family’ (Stambaugh et al., 2007, p.144). It means developing ‘a sufficient range of services to meet the needs of those served’ (Adelman & Taylor, 1997, p. p410).

Wraparound was originally developed in the US in the 1980s as a means for maintaining youth with serious emotional and behavioural disorders (EBD) in their homes and communities. As described by Landrum (2011), these students have historically been educated in more restrictive environments than their peers with other disabilities, and this includes out-of-community placements for a disproportionate number of them. He goes on to note that partly in response to this pattern of services ‘a trend that gained considerable traction in the 1990s was a heightened focus on comprehensive, or “wrap-around” services designed to keep students with EBD in their home environments’ (p.217). However, despite this notion gaining wide acceptance, ‘a major shift in policy, funding, and systematic evaluation of such efforts has yet to be seen’ (ibid.). Even so, wraparound has continued to expand in the US, both in uptake and in its scope. According to Bickman et al. (2003), at the time of their analysis 88 percent of US states and territories were using some form of a ‘wraparound’ approach to provide services to children and adolescents with, or at risk of developing, severe emotional disorders. More recently, Bruns et al. (2011) estimated that the wraparound process is available via nearly 1,000 initiatives in nearly every one of the states in the US, with the number of them taking implementation state-wide increasing every year.

The most authoritative definition of wraparound can be found in the writings of Eric Bruns, Janet Walker and their colleagues at the National Wraparound Initiative in the US. (Bruns et al., 2004; Bruns et al., 2006a; Bruns et al., 2006b; Bruns et al., 2007;

Bruns & Suter, 2010; Bruns & Walker, 2010; Bruns & Walker, 2011; Walker & Bruns, 2006). In an overview of the wraparound process, for example, Bruns & Walker (2010) defined it as:

> an intensive, individualized care planning and management process for children and adolescents with complex mental health and/or other needs. Wraparound is often implemented for young people who have involvement in multiple child-serving agencies and whose families would thus benefit from coordination of effort across these systems. Wraparound is also often aimed at young people in a community who, regardless of the system(s) in which they are involved, are at risk of placement in out-of-home or out-of-community settings, or who are transitioning back to the community from such placements (p.1).

In their various writings, Bruns and Walker, as well as Eber (2001) and Eber et al. (1997), emphasise that, like the systems of care model outlined above, wraparound is not a treatment *per se*. Rather, as noted in the above definition, it is a *process.* As such, it aims to achieve positive outcomes through several mechanisms, such as:

- employing a structured and individualised team planning process;
- developing plans that are designed to meet the identified needs of young people and their caregivers and siblings;
- addressing a range of life areas;
- emphasising team-based planning that aims to develop the problem-solving skills, coping skills, and self-efficacy of the young people and their families;
- utilising skilled facilitators to guide teams through a defined planning process;
- integrating young people into their communities and building their families' natural social support networks,
- employing culturally competent practices;
- recognising the strengths of young people and their families;
- employing evidence-based treatments within the process;
- monitoring progress on measurable indicators of success and changing the plan as necessary;
- having access to flexible funding;
- focusing on, and being accountable for, outcomes (Bruns et al., 2004; Bruns & Walker, 2010; Bruns et al., 2011; Eber, 2001; Kolbe et al., 1999).

According to Bruns & Walker (2010), during the wraparound process, a team of individuals who are relevant to the life of the child or youth (e.g., family members, members of the family's social support network, service providers, and agency representatives) collaboratively develop an individualised plan of care, implement it, monitor its efficacy and work towards its success over time. They emphasise that 'a hallmark of the wraparound process is that it is driven by the perspective of the family and the child or youth. The plan should reflect their goals and their ideas about what sorts of service and support strategies are most likely to be helpful to them in reaching their goals' (p.2). According to Eber et al. (1997), a major advantage of applying the wraparound process in the school domain is the availability of well-trained personnel and access to supportive services. In addition, 'school is a place where children are available for a significant part of the weekday, and is a logical place to deliver and coordinate intervention' (p.552).

Bruns and his colleagues have developed a Wraparound Fidelity Index that reflects the above processes (Bruns et al., 2006b), while Miles, Brown & and the National Wraparound Initiative Implementation Workgroup (2011) have published a detailed *Wraparound implementation guide*: A *handbook for administrators and managers,* and Walker & Bruns (2008) have described phases and activities of the wraparound process.

Implementing and sustaining wraparound is both complex and difficult, according to several of its proponents. For example, Bruns et al. (2006a) refer to such challenges as:

- re-negotiating relationships among providers, consumers (i.e., families) and the community
- developing a single, comprehensive plan that defines how each agency involved will work with the child and family;
- funding the plan;
- satisfying the mandates of agencies with different missions;
- different, perhaps conflicting, priorities between families and agency-based professionals.

Clearly, for wraparound to work, there needs to be clarification of roles, a coordinating mechanism (often in the person of a facilitator), sound selection and training of the professionals involved, data based decision-making, and adequate and flexible funding, to mention only the top priorities.

Evidence. The strength of evidence that wraparound can positively affect child and adolescent outcomes is rather mixed, but trending in favour of wraparound, compared with more traditional approaches. In a recent meta-analysis, Suter & Bruns (2009) identified seven outcome studies comparing wraparound and control groups. They found effect sizes as follows: living situations (0.44), mental health outcomes (0.31), overall youth functioning (0.25), school functioning (0.27) and juvenile justice-related outcomes

(0.21). More rigorous evaluation is needed in the future, especially if it is employed in different contexts, such as New Zealand.

Positive results have been reported by Myaard et al. (2000), in a multiple-baseline study of four adolescents with serious mental health issues. They present evidence that the wraparound process can result in substantial changes that persist over time, while Eber & Nelson (1997) found that improved emotional and behavioural functioning, as well as academic performance, was obtained with students receiving services through a wraparound approach. In a third more recent study, Bruns et al. (2006a) carried out a matched comparison study of youths in child welfare custody over a period of 18 months, 33 in wraparound vs. 32 receiving usual mental health services. After 18 months, 27 of the 33 youth who received wraparound moved to less restrictive environments, compared to only 12 of the 32 comparison group youth. Mean scores on a Child and Adolescent Functional Assessment Scale for youth in the wraparound approach improved significantly across all waves of data collection (6, 12, 18 months) in comparison to the traditional services group. More positive outcomes were also found for the wraparound cohort on school attendance, school disciplinary actions, and grade point averages. No significant differences were found in favour of the comparison group. A fourth study also reported positive findings in favour of wraparound approaches (Pullman et al., (2006). This was a matched comparison study (>2 years) of youth involved in juvenile justice and receiving mental health services: 110 in wraparound vs. 98 in conventional mental health services. Youths in the comparison group were three times more likely to commit a felony offence than youths in the wraparound group. Youth in the latter group also took three times longer to recidivate than those in the comparison group. According to the authors, a previous study of theirs showed ‘significant improvement on standardised measures of behavioural and emotional problems, increases in behavioural and emotional strengths, and improved functioning at home, at school, and in the community’ (p.388) among wraparound youth. A fifth study, by Mears et al. (2009), compared outcomes for 93 youth receiving wraparound with 30 receiving traditional child welfare case management. Those in the wraparound group showed significantly greater improvement on a functional assessment scale and greater movement toward less restrictive residential placements. In a sixth study, Rauso et al. (2009), compared the placement outcomes and associated costs of children who graduated from wraparound in Los Angeles County to similar children who were discharged successfully from residential care settings. Of those discharged from wraparound, 58 percent had their cases closed to child welfare within 12 months, compared with only 16 percent of those discharged from the residential care settings. Moreover, 70 percent of the former were placed in *less* restrictive settings after 12 months, compared with 70 percent of the latter who were placed in *more* restrictive environments. And, finally, the mean post-graduation cost for the wraparound group was $10,737, compared with $27, 383 for the residential care group.

Somewhat less positive findings were reported by Bickman et al. (2003) in their study of treatment outcomes for children needing mental health services. In their comparison of a wraparound group and a 'treatment as usual' group, Bickman et al. found that while the former received greater continuity of care, there were no differences between the two groups on such measures as their functioning, symptoms, and life satisfaction. Possible reasons for the apparent failure of the wraparound approach to affect clinical outcomes are advanced. Firstly, it is possible that the 'logic chain between the types of services introduced in wraparound and clinical outcomes is too long'; secondly, 'the ability to assign youth to appropriate services is not sufficiently well developed'; thirdly, the 'services delivered to families [within the wraparound model] may not have been effective' (p.152). Elsewhere, Stambaugh et al. (2007), put forward a fourth explanation why research on wraparound is producing mixed findings. They note that wraparound is difficult to study in a controlled way because treatment plans are individualised for each individual: 'It is possible that some youth in wraparound have access to evidence-based treatments targeted for their specific problems while others may not because of a lack of such treatment or other barriers' (p.151).

In a similar vein to Bickman et al., Clark et al. (1998) draw tentative conclusions from their comparison of foster-care adolescents in wraparound (N=54) and in standard practice foster care control conditions (N=78). Results showed significantly fewer placement changes for youths in the wraparound programme, fewer days on runaway, and fewer days incarcerated. In approximately half of the comparisons there were no differences in outcomes, including on measures of internalising behaviours. The effects on externalising behaviours were more complex, with males seeming to benefit from the wraparound programme and females experiencing a detrimental effect.

As noted by Bickman et al. (2003), other researchers draw tentative conclusions as to the efficacy of the wraparound approach. For example, Oliver et al. (1998), conclude that the relationship between levels of wraparound expense and favourable client outcomes remains to be determined. Similarly, Borduin et al. (2000), conclude that controlled evaluations of short- and long-term outcomes are needed before more definite conclusions can be drawn about the efficacy of wraparound services. Or, as expressed by Bickman et al. (2003), ‘the picture remains unclear because few studies on wraparound exist and even fewer are methodologically sound’ (p.138).

The preceding studies have compared broad systems-levels approaches, i.e., traditional organisational practices with wraparound. This can be portrayed as comparing apples with apples. An example of a comparison in which apples seem to be being compared with oranges can be found in a study by Stambaugh et al. (2007). In a system-of-care demonstration site in the US, 12 year old children received wraparound-only, multisystemic therapy (MST) only, or a combination of both approaches. (MST comprised intensive home- and community-based family therapy directed at children and adolescents with emotional and behavioural problems.) All three groups improved over the 18-month study period, but the MST-only group demonstrated more clinical improvement than the other two groups. The researchers concluded that ‘targeted, evidence-based treatment may be more effective than system-level intervention alone’ (p.143). These findings suggest that what actually goes on in a wraparound approach is critical to its success. This theme will be further developed in subsequent chapters of the present review, in which the focus will be on evidence-based interventions.

2.3 Systems of Care

In the US, Congress first addressed the concept of a system of care approach in 1984, when funds were appropriated for the Child and Adolescent Service System Program (CASSP) (Bickman et al., 2003). CASSP was initiated to assist states in developing an infrastructure for the provision of community-based services for identifying and providing appropriate mental health services to children with severe emotional disturbances (Pumariega & Vance, 1999). Since then, all 50 States have received CASSP grants to develop a system of care to coordinate services across multiple health and human service agencies, including public health systems, schools, law enforcement, public health, and social services.

The U.S. Department of Health and Human Services defines ‘systems of care’ as being:

> a service delivery approach that builds partnerships to create a broad integrated process for meeting families’ multiple needs. [It] is based on the principles of interagency collaboration; individualized, strength-based services; accountability; and full participation of families and youth at all levels of the system (Child Welfare Information Gateway, 2008, pp.1-2).

According to this source, the systems of care approach originated in response to several concerns:

- children in need of mental health treatment were not getting the services they needed;
- services were often provided in restrictive out-of-home settings;
- few community-based services were available;
- service providers did not work together;
- families were not adequately involved in their child's care; and
- cultural differences were rarely taken into account.

Originally developed to address the needs of children with serious emotional disturbances and their families, the systems of care approach has since been extended to cover other categories of children and young people whose needs require services from multiple agencies, including those in child welfare systems.

Systems of care essentially provide a framework for processes and programmes designed to meet the needs of children and young people and their families. Thus, it is not a distinct treatment approach. Rather, it is intended to enable cross-agency coordination of services for children, youth, and families regardless of where or how they enter the system. To do so effectively, systems of care communities:

- agree on common goals, values, and principles to guide their work;
- develop a shared infrastructure to coordinate efforts toward common goals; and
- within that infrastructure, work to ensure the availability of a high quality array of evidence-based and promising practices and supports designed to support families and protect children.(Child Welfare Information Gateway, 2008, pp.3-4)

Example of systems of care: As noted in the Child Welfare Information Gateway (2008), Vermont's system of care serves the entire State, or a population of about 613,000 (147,000 of whom are children under the age of 18). The system of care is sustained by ACT 264, State legislation that required interagency cooperation and served as one of the catalysts to encourage further collaborative efforts at both the State and local levels. Because of this legislation, three State departments are required to work with families to build an interagency system of care and to write and implement coordinated service plans for eligible youth. These requirements have provided incentives for the State to blend funds across departmental lines to maximise State and Federal funding and better support community-based services.

2.4 Full-service Schools

One of the principal approaches to coordinating, even combining, education, health and welfare services comes under the heading of 'full-service schools' or 'full-service schooling'. Other descriptors of essentially the same phenomenon include 'school-linked services' (Volpe et al., 1999), 'school-linked service integration' (Sailor & Skrtic, 1996), 'collaborative school-linked services' (Wang et al., 1995), 'full-service community schools', or simply 'community schools' (Campbell-Allen et al., 2009).

As quoted by Joy Dryfoos (1994), one of the earlier and perhaps the most cited, of proponents of full-service schooling, such a school:

> integrates education, medical, social and/or human services that are beneficial to meeting the needs of children and youth and their families on school grounds or in locations which are easily accessible. A full-service school provides the types of prevention, treatment, and support services children and families need to succeed...services that are high quality and comprehensive and are built on interagency partnerships which have evolved from cooperative ventures to intensive collaborative arrangements among state and local and public and private entities (p.142).

Thus, to Dryfoos, the notion of a full-service school is of a school-based centre for health and social services, located in 'space set aside in a school building where services are brought in by outside community agencies in conjunction with school personnel' (p.142). In short, full-service schools are a 'one-stop, collaborative institution' (p.13).

The similarity of the concepts of full-service schools and community schools is apparent when comparing the above definition of the former with the following definition of the latter:

> A community school is both a place and a set of partnerships between the school and other community resources. Its integrated focus on academics, services, supports and opportunities, leads to improved student learning, stronger families and healthier communities. Schools become centers of the community and are open to everyone – all day, every day, evenings and weekends. (Coalition for Community Schools website: www.communityschools.org)

In the US, full-service schools (and equivalents such as community schools) have had significant appeal, especially for policy makers and educators concerned about high-risk children. As noted by Campbell-Allen et al. (2009), the following developments have taken place over the past three decades. In 1987 the state of New Jersey implemented a School-based Youth Services Program, which provided grants to community agencies to link education to health, human and employment services. Similar concepts followed in Florida in 1990, when its legislature passed the Full-Service School Act, which called for the integration of multiple services in a convenient location and required that state education and health departments collaborate to develop full-service schools. Similar legislation followed in California in 1991, targeting low-income schools and schools with high concentrations of students with limited-English-proficiency. Other US jurisdictions to have moved in similar directions include New York City, Chicago and Missouri, to name only a few. In the US, a driving force in promoting the concept of full-service schools and their various counterparts has been the Coalition of Community Schools, set up in 1998.

Most recently (March 2011), Senator Ben Nelson introduced the Full Service Community Schools Act into the US Senate, and a companion bill was introduced into the House of Representatives by Steny Hoyer. According to Senator Nelson:

> the Act would authorize grants to public elementary or secondary schools that integrate federal, state or local educational and social service programs with community-based organizations. These additional services focus on ensuring students have a full support network to help them succeed, including health, dental and nutritional services, career counselling for parents, and early childhood education programs (Senator Nelson press release, 15 March 2011).

Three other jurisdictions deserve mention. Firstly, in Canada, the Toronto District School Board (2010) has made a commitment to support *all* schools to become full-service schools and ‘vibrant hubs of the community’. It defines full-service schools as ‘the coordinated delivery of health, education, prevention, and social services designed to improve the quality of life for students, families and communities. The programs and services are located inside an operational school and are mutually beneficial to schools, students and communities’. However, the Board does allow for the possibility that health care and social service agencies may either be ‘on-site in schools or in the community, depending on the availability of the service’.

Secondly, in the Australian Capital Territory in Australia, a relevant policy is contained in the *Framework for Service Collaboration for the Care, Protection and Well-Being of Children and Young People in the ACT*, as well as the *Multi-Agency Response for Clients with Complex Needs* (Shaddock et al., 2009).

Thirdly, in England and Wales, the 2006 Green Paper, *Every Child Matters*, underpinned by the Children Act 2004, presents a series of points relevant to full-service schools (Chief Secretary to the Treasury, 2003). It promoted ‘full-service extended schools’, with the aim of establishing at least one in every LEA by 2006. These schools were defined in the following terms:

> The Government wants to integrate education, health and social care services around the needs of children. To achieve this, we want all schools to become extended schools – acting as the hub for services for children, families and other

> members of the community. Extended schools offer the community and their pupils a range of services (such as childcare, adult learning, health and community facilities) that go beyond their core educational function (Section 2.20).

As well, the Green Paper advocated the creation of Sure Start Children's Centres in each of the 20 percent of most deprived neighbourhoods. These would combine nursery education, family support, employment advice, childcare and health services on one site.

Other recommendations that are relevant to the theme of 'joined-up thinking' include the following:

- improving information sharing between agencies to ensure all local authorities have a list of children in their area, the services each child has had contact with, and the contact details of the relevant professionals who work with them. This would include developing a single unique identity number, and establishing common data standards on the recording of information;
- introducing a lead professional. Children known to more than one specialist agency should have a single named professional to take the lead on their case and be responsible for ensuring a coherent package of services to meet the individual child's needs;[2]
- ensuring information is collected and shared across services for children;
- developing a common assessment framework;
- integrating key services for children and young people under a Director of Children's Services as part of Children's Trusts to work closely with public, private and voluntary organisations to improve outcomes for children; and
- creating a common core of training for those who work solely with children and families and those who have wider roles (such as GPs and the police).

Thus, since 2006, every local authority has had a Children's and Young People Plan that brings together all local authority planning for children and young people. Further, each local authority has an Information Sharing and Assessment Team, which employs a Common Assessment Framework and operates as a central source of information for all participating agencies. As well, social services departments are required to designate an officer or officers who are responsible for working with schools and LEAs on behalf of children with special educational needs and to 'inform them of children they think may have special educational needs' (Department for Education and Skills, 2001, p.140).

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[2] The New Zealand Government's recent *Green Paper for Vulnerable Children* also suggests this when it recognises that services can be made more accessible by having 'an appropriate nominated person, such as a lead professional, whānau member or community worker, that coordinates services around the child and their family and whānau' (New Zealand Government, 2012, p.30).

So what do full-service schools look like? How do they operate? In a word, one size does not fit all, or, as expressed by Campbell-Allen (2009):

> In practice, full-service schools embody a rich and varied landscape of implementation and service provision. Nationwide [in the US], these schools differ widely in their governance structure, operational style, and coordination of services offered (p.17).

According to Smith (2000, 2004), the implementation of a full-service school includes 'a range of on-site and referral services for students, families and the wider community, ranging from health care and careers services to employment training, housing and family welfare services'. Many of these services would be accessible during the normal school day, while others would be offered before and after school hours, at weekends and during holidays. The programmes in full-service schools are often determined by the needs of the local community through collaboration of schools, public and private agencies, parents and other members of the community.

In establishing full-service schools, careful consideration has to be given to a range of issues, according to Smith (2000, 2004) and Adelman & Taylor (1997, 2002):

Managing the programme: Here there are four models (a) all services come under the single responsibility of the school principal, (b) a new governance structure with shared decision-making among equal-status participants, (c) the school and the other agencies operate independently, with the latter coming under a single management structure, or (d) each agency (e.g., school, welfare, health) is independently managed.

Learning to collaborate. Whichever of the three management models is followed, the managers and 'front-line' professionals in the different agencies have to learn to work in different ways. This means accommodating the other professionals: their requirements, culture, language (jargon), ways of doing things, worldviews, and so on. It also means managing the inevitable tensions that arise among different players in the full-service school, for example, over discipline matters. As Wang et al. (1995) emphasised, it is essential to develop a common vision among the players: 'The creation of a collaborative culture is believed to ensure the commitment of school faculty and agency service providers. When collaborative staff agree to a shared and articulated mission, they foster consensus, communication, and collegiality' (p.10). In New Zealand, this point is echoed in the recent *Green Paper* on vulnerable children, which suggests that the Government could develop a long-term, cross-sector and evidence-based plan for these children, which would 'provide common goals and a shared framework that would unify policies across sectors and be founded in the cultural needs of the diverse range of vulnerable children' (New Zealand Government, 2012, p.14).

Clearly, the nature of training for these new 'trans-professional' roles[3] (Cooper & Jacobs, 2011) with a shared vision has to be given careful thought. Ways should be found for what Melaville and Blank (1993) refer to as 'interprofessional training' (p.69). Such training should help professionals from different fields learn about each other's fields, as well as the processes of collaboration.

As noted by Adelman & Taylor (1997) and Campbell-Allen (2009), there is a need to create both *horizontal*, or *lateral*, cooperative arrangements to enhance coordination at the school and community level and *vertical* cooperation at various regional and national jurisdictional levels. And all this has to happen while at the same time paying due regard to the specialist skills that various professionals bring to the table.

There is a general consensus among providers of full-service schools that it is critical to have a person or a group of personnel tasked to ensure the horizontal coordination of the various services and the leveraging of resources (Campbell-Allen, 2009). It may be advisable, too, to create 'change teams' to carry out the daily activities involved in making systemic changes and re-designing processes to establish and maintain change over time (Adelman & Taylor, 2002).

Building from localities outwards. The full-service school concept should be interpreted to suit local, community circumstances. The first focus should be on the school and its immediate community: its resources, needs and aspirations. This means active and meaningful consultation with relevant stakeholders.

Avoiding the colonising effect of the school. Since, by definition, the school is the focus of the full-service school, there is a danger that it becomes the major, even dominant, player. Steps need to be taken, therefore, to avoid this potential 'colonising' effect and to ensure that the strengths of all involved agencies are harnessed. It will be the cumulative and unique constellation of contributions from diverse agencies that should emerge. As mentioned in Chapter One, the whole is greater than the sum of its parts – or it should be!

Avoiding the dominance of the medical model. One of the major purposes in setting up full-service schools is to develop more coordinated services for students with special educational needs, especially those manifesting conduct disorders. According to some writers (e.g., Smith, 2000, 2004), this carries with it an inherent risk that the focus is upon the behaviour of individuals, rather than on their proximal or distal contexts. Thus, the medical model kicks in, with the danger of pathologising students and/or their families. (For a different take on this issue, see Section 2.7 below.)

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[3] As distinct from multi-professional or multi-disciplinary roles.

Financing. This can be a major impediment to the success of the full-service school. (a) Does each agency have its own, separate budget? (b) Is there a pooling of the various budgets? (c) Is there a central pool, with each agency retaining its separate budget? If this is the case, where does the central pool come from – from each agency contributing an appropriate amount, or from Government? An early example of school-linked service integration in the US was the Indiana Consolidated State Plan, in which the state combined its resources from a variety of federal statutory authorities into a comprehensive, integrated plan linking all services under an interagency commission (Sailor & Skrtic, 1996).

Evaluating outcomes. Clearly, the decision to set up full-service schools is premised on the hypothesis that such an arrangement is likely to obtain better outcomes for students than the system it replaces. This means holding those involved accountable, not only for achieving those outcomes, but also for the expenditure involved in pursuing them. Desired outcomes (both short-term and long-term) should be defined with precision and ways of measuring them determined. It also means deciding who within the full-service school should be held accountable – a particularly challenging matter given the possible variations in management models alluded to above.

At the heart of all these issues is the re-distribution of power and its corollary, the delineation of turf.

2.5 Health-promoting Schools (HPS) (cf ‘Comprehensive School Health’ in USA)[4]

According to the International Union for Health-promoting Schools (IUHPS) (2009), a range of strategies have evolved in recent years to enable schools to make substantial contributions to students’ health and well-being. These strategies ‘share the connecting thread of a whole school approach and recognition that all aspects of the life of the school community are potentially important in the promotion of health’. The IUHPS states that there are six essential elements of promoting health in schools:

> *Healthy school policies*
> These are clearly defined in documents or in accepted practices that promote health and well-being. Many policies promote health and well-being e.g., policies that enable healthy food practices to occur at school; policies which discourage bullying.

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[4] This approach will not be dealt with in any depth in this report as it has been reviewed quite extensively by Cognition (2011).

> *The school's physical environment*
> The physical environment refers to the buildings, grounds and equipment in and surrounding the school, such as: the building design and location; the provision of natural light and adequate shade; the creation of space for physical activity and facilities for learning and healthy eating. The physical environment also refers to: basic amenities such as maintenance and sanitation practices that prevent transmission of disease; safe drinking water availability; air cleanliness; as well as any environmental, biological, or chemical contaminants detrimental to health.
>
> *The school's social environment*
> The social environment of the school is a combination of the quality of the relationships among and between staff and students. It is influenced by the relationships with parents and the wider community.
>
> *Individual health skills and action competencies*
> This refers to both the formal and informal curriculum and associated activities, where students gain age-related knowledge, understandings, skills and experiences, which enable them to build competencies in taking action to improve the health and well-being of themselves and others in their community, and which enhances their learning outcomes.
>
> *Community links*
> Community links are the connections between the school and the students' families plus the connection between the school and key local groups and individuals. Appropriate consultation and participation with these stakeholders enhances the HPS and provides students and staff with a context and support for their actions.
>
> *Health services*
> These are the local and regional school-based or school-linked services, which have a responsibility for child and adolescent health care and promotion, through the provision of direct services to students (including those with special needs). They include screening and assessment by licensed and qualified practitioners; and mental health services (including counselling) to promote students' social and emotional development; to prevent or reduce barriers to intellectual development and learning; to reduce or prevent mental, emotional, and psychological stress and disturbances, and to improve social interactions for all students.

In their review of health-promoting schools in Europe, Barnekow et al. (2006) note that 'there is an increasing recognition that new forms of partnership and inter-sectoral work are required to address the social and economic determinants of health' (p.12). Further, they claim that 'investments in both education and health are compromised unless a school is a healthy place in which to live, learn and work', and that 'the health of students, teachers and families is a key factor influencing learning' (op. cit.).

Thus, a health-promoting school can be characterised as a school that is constantly strengthening its capacity as 'a healthy setting for living, learning and working'.

> Towards this goal, a health promoting school engages health and education officials, teachers, students, parents and community leaders in efforts to promote health. It fosters health and learning with all the measures at its disposal, and

> strives to provide supportive environments for health and a range of key school health education and promotion programs and services.
>
> A health promoting school implements policies, practices and other measures that respect an individual's self esteem, provide multiple opportunities for success, and acknowledge good efforts and intentions as well as personal achievements. It strives to improve the health of school personnel, families and community members as well as students, and works with community leaders to help them understand how the community contributes to health and education. (http://www.definitionofwellness.com/dictionary/health-promoting-schools.html)

According to Barnekow et al. (2006), health-promoting schools include aims such as the following:

- to establish a broad view of health;
- to give students tools that enable them to make healthy choices;
- to provide a healthier environment engaging students, teachers and parents;
- to promote the health and well-being of students and school staff;
- to enable people to deal with themselves and the external environment in a positive way and to facilitate healthy behaviour through policies; and
- to increase the quality of life.

Critically, as far as the present review is concerned, Barnekow et al. argue that one of the main keys to success is 'partnership and collaboration not only between different sectors at the national, regional and local levels but also with everyone involved in the everyday life of the schools' (p.15).

And, further, they note that 'the concept of health-promoting schools includes the associated community and the environment beyond the school gates. Many other people therefore have a legitimate interest in this work, such as non-teaching staff, those providing confidential counselling, school architects, school food providers, police officers and transport specialists' (p.16).

In a recent paper, Cushman (2008) outlines the situation of health-promoting schools in New Zealand. She concludes that 'although comprehensive and user friendly resources have been freely available to schools for a number of years, there are more complex hurdles to be jumped before the concept of health-promoting schools become an integral feature of all New Zealand schools' (p.239).

2.6 Joined-up Assessment

In a UK study, Boddy et al. (2006) describe various models of 'joined-up assessment' for children with significant and complex health needs and/or disabilities. They provide case-study examples from six local authorities of different ways of adopting an integrated approach to assessing the needs of such children. Their research identified a number of enabling factors across the six case study authorities. Firstly, there were structural factors, such as pooled budgets across education, health and social care agencies, systems for sharing information, common training, key worker and lead professional roles. Secondly, there were attitudinal and practice factors, such as commitment from key personalities, good communication, and shared definitions and understandings (p.30).

Boddy et al. point out that joined-up approaches necessitate new ways of working. These include valuing parents' and children's expertise regarding their own needs and experience as they are supported to play an active partnership role in the assessment process, and the development of trust, communication and strong working relationships among workers from differing professional backgrounds and agencies. Among the difficulties and challenges they identified were uncertain funding, difficulties in engaging education providers due to autonomous structures, large numbers of agencies involved, difficulties in agreeing definitions, and reluctance to share information.

2.7 A Bio-psycho-social Approach

In their extensive review of the literature on the evidence of best practice in the education of children with severe emotional and behavioural difficulties (SEBD), Cooper & Jacobs (2011) argue very strongly for a 'bio-psycho-social approach'. Such a model 'integrates individual biological and intra-psychic dimensions with the interpersonal and social…[which] makes it truly holistic and lends itself well to understanding of the complexities of SEBD and its concomitant interventions' (p.163). Further, they point out, this framework gives equal respect to the contributions of the different disciplines, allowing, indeed requiring, 'trans-professionalism' (p.162). The latter point stresses the importance of social welfare, education and health working in harmony. This means that professionals from those fields must 'absorb rather than simply engage with the knowledge and understandings of representatives from other sectors' (p.162).

2.8 Critiques of Joined-up Approaches to Human Services

Before outlining the comprehensive ecological wraparound approach adopted in this review, it is worth pausing for a moment to consider some of the cautions that have been expressed regarding the joined-up approach to human services.

In a recent UK seminar on joined-up care, David Brindle, the *Guardian's* public service editor, noted that:

Integration of health and social care has long been an aspiration, but rarely an

> achievement. Patients and users of services know only too well how frustrating and awful it must be to have disintegrated services. But the forces of separateness, silo-based thinking and resistance to change have proved stronger than the pressure to do things differently. (Campbell, 2011, p.2)

In a similar vein, Lord Warner, a health minister in the previous Labour government, argued that money was the biggest barrier to setting up joined-up care: ‘The existing, divided system has in-built incentives for people to move financial liabilities…across organisational barriers’ (Campbell, 2011, p.3).

Three other issues are referred to by Jeffs & Smith (2011). Firstly, they point out that there has been little detailed or sustained research with regard to joined-up thinking. Where there has been any, it has been largely case study-based or anecdotal. Secondly, they criticise the assumption that people benefit from dealing with services that share information with one another. The downside to this is that it could be seen as curtailing the freedom of people to ‘shop around’ for services. Further, the key worker allocated to them may be incompetent or inappropriate. Thirdly, Jeffs & Smith argue that the compilation of comprehensive files on young people (often seen as a component of joined-up policies), together with an emphasis on coordinating the efforts of various agencies, ‘can lead to a depersonalized approach that emphasizes the management of cases rather than working with the young people’s accounts of situations and experiences’ (p.6).

Here in New Zealand, the recent *Green Paper for Vulnerable Children* (New Zealand Government, 2012) refers to two other problems inherent in information sharing among agencies: possible infringement of client privacy and information overload among the recipients of information.

And, finally, it must be recognised that the issue of re-defining the functions and boundaries of systems is a complex process. Systems, by definition, have distinct identities that tend to endure over time and resist radical re-structuring. This issue will be further explored in Chapter Three.

Clearly, then, implementing a joined-up policy is not a straightforward process, despite its obvious benefits. Issues such as the above deserve serious consideration.

Chapter Eight will address these and other issues in the form of conclusions and recommendations.

2.9 Summary

1. *Increasingly, in the past two decades or so, both overseas and in New Zealand, there has been a distinct trend towards '**joined-up thinking**' in providing human services.*
2. *This trend calls for radical, transforming systems change manifested in the move from fragmentation to coordinated or integrated intervention and from narrowly-focused and specialist-oriented, 'silo' services to comprehensive, general approaches.*
3. *The following examples of joined-up approaches have a high degree of overlap.*
4. ***Wraparound** is a system-level intervention that quite literally aims to 'wrap' existing services around children and young people and their families to address their problems in an ecologically comprehensive and coordinated way. The strength of evidence that wraparound can positively affect child and adolescent outcomes is rather mixed, but trending in favour of wraparound, compared with more traditional approaches.*
5. ***Systems of care** closely resembles wraparound. It is a service delivery approach that builds partnerships to create a broad integrated process for meeting families' multiple needs. It is based on the principles of interagency collaboration; individualised services, and full participation of families at all levels of the system.*
6. ***Full-service schools,** or **community schools,** are 'one-stop' institutions that integrate education, medical, social and/or human services to meet the needs of children and youth and their families on school grounds or in locations which are easily accessible. They necessitate information sharing between agencies, the appointment of a lead professional, developing common assessment frameworks, and creating a common core of training for the professionals involved. They vary in character according to the nature of the communities they serve and the availability and commitment of various agencies. They require consideration of such issues as (a) management of the programme, (b) establishing mechanisms for collaboration, (c) building from localities outwards; (d) avoiding the potential for schools to 'colonise' the system, (e) avoiding undue reliance on the medical model, (f) determining the financing model, and (g) evaluating outcomes.*
7. ***Health-promoting schools** engage health and education officials, teachers, students, parents and community leaders in efforts to promote health through strengthening schools' capacities as healthy settings for living, learning and working. As with other variants of joined-up approaches, health-promoting schools are concerned with establishing partnership and collaboration not only between different sectors at the national and regional levels, but also with everyone involved in the everyday life of the schools.*
8. ***Joined-up assessment** involves adopting an integrated approach to assessing the needs of children, including valuing parents' and children's expertise regarding their own needs and experience as they are supported to play an active partnership role in the assessment process.*
9. ***A bio-psycho-social approach** to children and young people with complex needs integrates individual biological and intra-psychic dimensions with the interpersonal and social It gives equal respect to the contributions of the different disciplines, allowing, indeed requiring, 'trans-professionalism'.*
10. *In implementing joined-up approaches to human services, several issues have to be addressed. These include: (a) resistance to change among the key players, (b) the paucity of relevant research, (c) the risk of a depersonalised approach to young people, (d) possible infringement of client privacy, and (e) possible information overload among participating professionals.*

CHAPTER THREE

WRAPAROUND: A COMPREHENSIVE ECOLOGICAL MODEL

3.1 Introduction

The previous two chapters emphasised the following points, *inter alia*:

- Families and whānau comprise systems which are, in turn, embedded in a series of other systems – schools, communities, social, health, justice, recreational, political, environmental…
- Such systems should be 'joined up', which involves both horizontal and vertical integration. Horizontal integration requires linking systems at the same level to ensure consistency and compatibility of approach. Vertical integration requires linking more immediate, or proximal, systems with the more distal systems in which they are embedded.
- The whole is greater than the sum of its parts, a principle that requires that systems within different levels work together cohesively and with common purpose.

This chapter takes the above points into account by presenting a comprehensive ecological wraparound model. It posits that in developing joined-up services for children and young persons with complex needs (indeed *all* children and young persons), it is essential to see them as being embedded in various systems: their families/whānau, classrooms, schools and communities.

The model draws upon general systems theory (von Bertalanffy, 1962) and Bronfenbrenner's ecological model of child development (Bronfenbrenner, 1979). In my earlier writings, I used both of these sources in analysing schooling (Mitchell, 1975) and for planning and evaluating special education (Mitchell, 1978) and services for persons with handicaps [sic] (Mitchell, 1986).

3.2 General Systems Theory

At its broadest level, the general systems theory, first advanced by von Bertalanffy (1962), can be seen as a theoretical model for explaining, predicting and controlling phenomena. It is presented in the current review as an elegant way of understanding the interrelatedness of the social variables involved in developing services for students with complex needs and their families.

Anderson et al. (1999) have presented a useful definition of systems as being organised wholes comprising component parts that interact in a distinct way and endure over time.

According to von Bertalanffy (1962), Greene (2002), Anderson et al. (1999), and

Norlin et al. (2002), general systems theory has the following features (implications for the present review being noted in parentheses):

- a social system can be studied as a network of unique, interlocking relationships with discernible structural and communication patterns;

  (families, classrooms, schools, health services, social welfare agencies, etc. are all social systems)
- all systems are subsystems of other, larger systems;

  (for example, classrooms are part of the wider school system, which, in turn is part of the education system, which are embedded in a wider regional, national and global society)
- boundaries of varying degrees of permeability give a social system its identity and focus as a system, distinguishing it from other social systems with which it may interact;

  (some boundaries between systems, e.g., educational and health agencies may be quite impermeable as their participants seek to maintain their distinct identities)
- there is an interdependency and mutual interaction between and among social systems;

  (it is important that in catering for students with complex needs various players recognise their interdependency and avoid silo thinking)
- a change in any one member of the social system affects the nature of the social system as a whole;

  (students with complex needs and/or their families/whānau can disrupt the wider systems to which they belong; for example, such students can be the source of major disruptions to a classroom or school system)
- social systems vary in the extent to which they are purposive, goal-directed and in constant states of interchange with their environments;

  (some social systems, e.g., dysfunctional families, appear to lack purpose and goals and lack exchanges with their environments, such as schools)
- change within or from without a social system that moves the system to an imbalance in structure will result in an attempt by the system to re-establish that balance;

  (adoption of the joined-up thinking advocated in the present review, by its very nature, creates an imbalance in the systems it impacts and may lead to efforts to retain the status quo or it may lead to efforts to create a new balance)

- systems may be open or closed, depending on the degree to which they engage in exchanges with their environment (both receiving inputs and delivering outputs); *(families, classrooms, schools can vary in the extent to which they are open)*
- systems reach a 'steady state', or equilibrium, with respect to their exchanges with the environment.

  (changing the equilibriums reached by various systems reviewed in the present document may face resistance).

3.3 Bronfenbrenner's Ecological Model

Bronfenbrenner's ecological model is well known and has been very influential in conceptualising the influences on child development (Bronfenbrenner, 1979). As will be seen below, this model forms a special case of the general systems theory. In an adapted form, it will form the basis of the remaining chapters of this review.

In essence, Bronfenbrenner argues that child development takes place through processes of progressively more complex interactions between an active child and the persons, objects, and symbols in its immediate environment over an extended period of time (Bronfenbrenner, 1998). In these processes, the child affects as well as being affected by the settings in which it spends time. In other words, 'there is reciprocal causation between the individual and the environment' (McElroy et al., 1988, p.354).

Bronfenbrenner identifies four levels of settings, which are nested rather like Russian dolls: the *microsystem* (the family or classroom), the *mesosystem* (two microsystems in interaction), the *exosystem* (external environments that indirectly influence development, e.g., parental workplace), and the *macrosystem* (the larger socio-cultural context, such as the individual's ethnicity, culture and belief systems). Figure 1 presents his original ecological model of human development, but note it does not directly portray the mesosystem. In his later writings he added a fifth system, which he called the *chromosystem*, which referred to the evolution of the external systems over time. Note, too, that in his later writings, Bronfenbrenner (1988) acknowledged that he had neglected to place the individual child at the centre of its own ecological world; the figure below takes this into account.

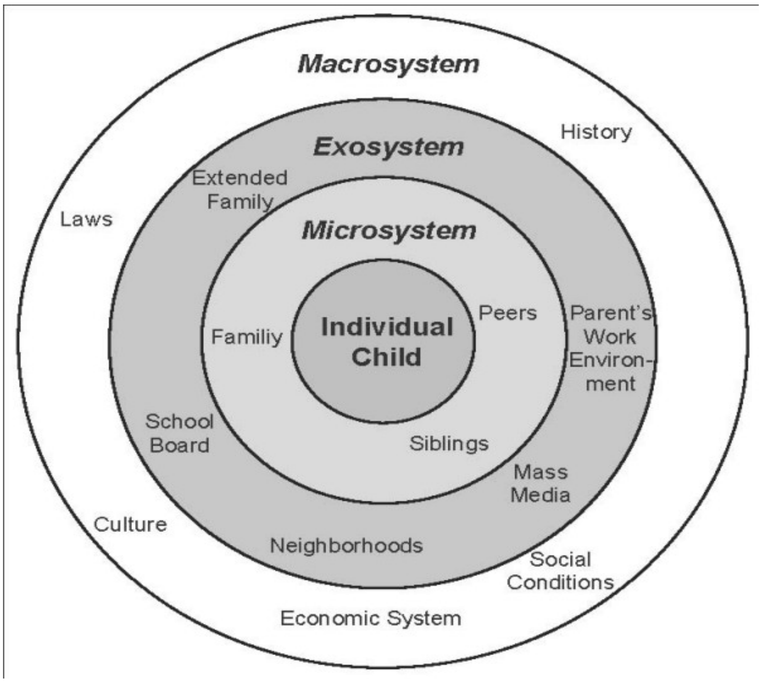
Macrosystem
History
Laws
Exosystem
Extended Family
Microsystem
Individual Child
Familiy
Peers
Parent's Work Environ-ment
School Board
Siblings
Mass Media
Culture
Neighborhoods
Social Conditions
Economic System

Figure 2. Bronfenbrenner's ecological model of child development

3.4 A Comprehensive Ecological Model for Working with Children with Complex Needs and their Families/Whānau

So far in this review, the focus has been on broad, systems-level, joined-up approaches. We turn now to what actually goes on in these approaches, i.e., their content. This analysis will be organised in the following chapters, as portrayed in Figures 2, 3 and 4:

Chapter 4: The child in the family

Chapter 5: The child in the inclusive classroom

Chapter 6: The child in the whole school

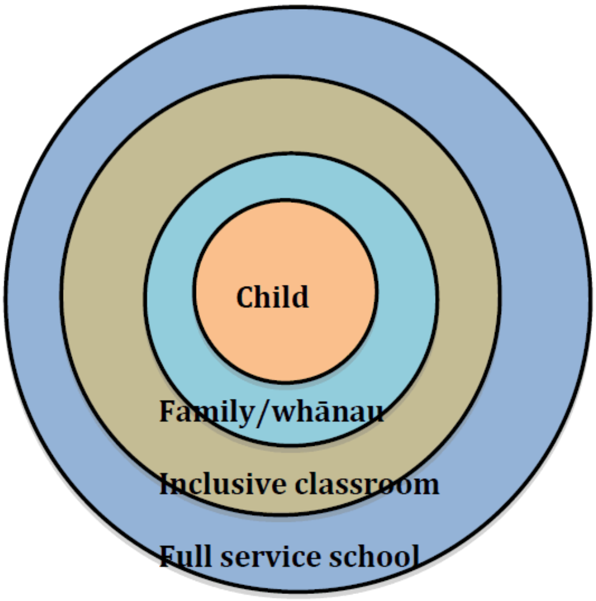
Child
Family/whānau
Inclusive classroom
Full service school

Figure 3: A comprehensive ecological model

In keeping with the joined-up philosophy adopted in this review, a more appropriate portrayal of the ecological model would be in the form of a spiral (Figure 4). This has the advantage of removing the barriers between each level of the system as portrayed in Figure 3, making for more fluid connections among the various levels of the system. It also has the advantage of reflecting the koru motif, which symbolises new life, regeneration and growth – an apt message to convey in the context of considering what is best for students with complex needs and their families/whānau in New Zealand.

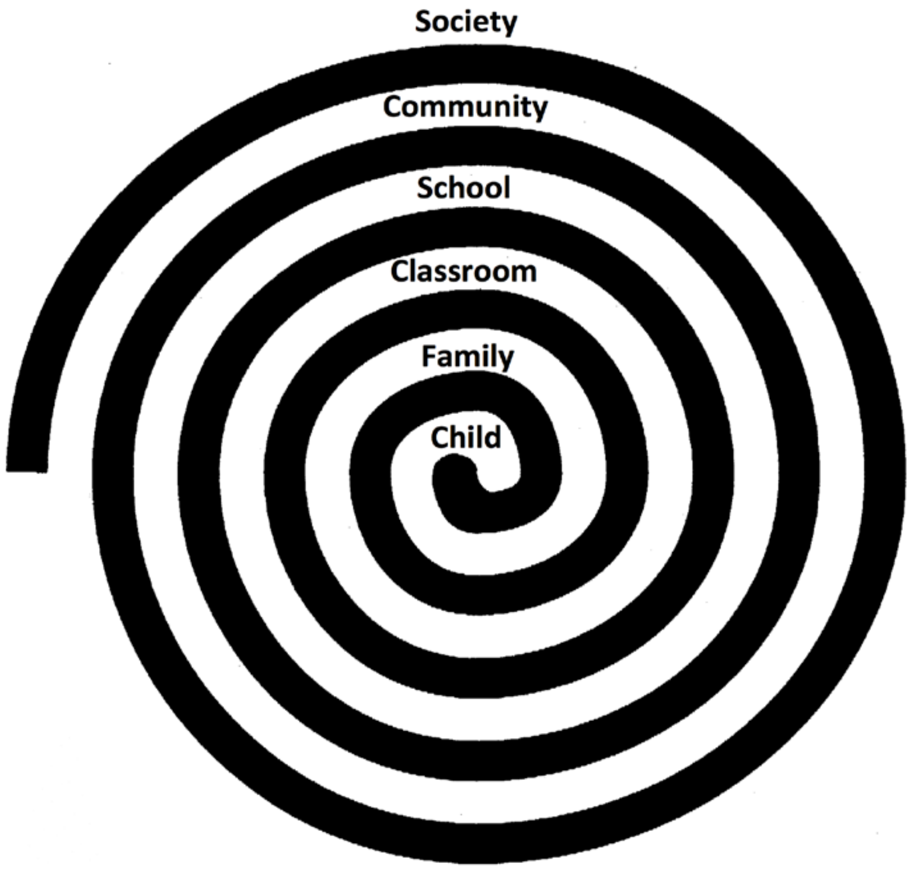

Figure 4. The spiral ecological model

In selecting material for inclusion in these chapters, the following points were taken into account:

- Students with complex needs are diverse, with varying abilities, interests, aspirations, and needs, which change over time as they mature and gain more experience.
- The ultimate aim of any programme directed at them is to enhance their quality of life as citizens and as members of their culture, to maximise their potential for education and work, and to help them achieve a satisfying balance between independence and interdependence.

- The design of services for individual children with complex needs fall on a continuum: from universal (for all children), through semi-universal (for all children with special needs), to specific (for all children falling into a particular category, e.g., complex needs), to the individual child.
- The strategies have a substantial evidence base.
- The focus will be on school-age children, although it is recognised that there should be continuity of care, right from preschool to adolescence.

The information is drawn from the international literature, including New Zealand sources. Two references were particularly relevant: my own book, *What really works in special and inclusive education: Using evidence-based teaching strategies* (Mitchell, 2008), and a recent *International review of the literature on evidence of best practice models and outcomes in the education of children with emotional disturbance/behavioural difficulties* (Cooper & Jacobs, 2011).

3.5 Summary

1. *This chapter takes into account the assumptions regarding joined-up systems as outlined in Chapter Two.*
2. *In developing joined-up services for children and young persons with complex needs (indeed all children and young persons), it is essential to see them as being embedded in various systems: their families/whānau, classrooms, schools and communities.*
3. *A general systems theory has the following features:*
    - *a social system can be studied as a network of unique, interlocking relationships with discernible structural and communication patterns;*
    - *all systems are subsystems of other, larger systems;*
    - *boundaries of varying degrees of permeability give a social system its identity and focus as a system, distinguishing it from other social systems with which it may interact;*
    - *there is an interdependency and mutual interaction between and among social systems;*
    - *a change in any one member of the social system affects the nature of the social system as a whole;*
    - *social systems vary in the extent to which they are purposive, goal-directed and in constant states of interchange with their environments;*
    - *change within or from without a social system that moves the system to an imbalance in structure will result in an attempt by the system to re-establish that balance;*
    - *systems may be open or closed, depending on the degree to which they engage in exchanges with their environment (both receiving inputs and delivering outputs); and*

- *systems reach a 'steady state', or equilibrium, with respect to their exchanges with the environment.*

4. *Bronfenbrenner identified four levels of nested settings: the microsystem (the family or classroom), the mesosystem (two microsystems in interaction), the exosystem (external environments that indirectly influence development, e.g., parental workplace), and the macrosystem (the larger socio-cultural context, such as the individual's ethnicity, culture and belief systems).*
5. *The present review adapts Bronfenbrenner's model and reviews the literature under the following headings: the child in the family, the child in the inclusive classroom, and the child in the whole school.*

CHAPTER FOUR

THE CHILD IN THE FAMILY/WHĀNAU[5]

4.1 Introduction

Parents[6i] play important, if not critical, roles in educating and supporting students with special educational needs. They are first and foremost parents, with all the rights and responsibilities of that role, but they are also sources of information, partners in designing and implementing programmes for their children, and 'consumers' of the education. As well, they may be in need of direct support, in the form of counselling or psychiatric care.

There are many reasons why professionals in wraparound services should seek to develop effective relationships with the parents of children with complex needs. Several stand out:

- Parents are most probably the only people who are consistently involved with their child's education, health and welfare.
- Parents know their child's development and the factors that may be responsible for their special educational needs. They can generally tell professionals what motivates their child and which teaching and management strategies are most effective.
- Working with parents increases the likelihood of consistency in expectations of behaviour at home and at school. It also increases the opportunities for reinforcing appropriate behaviours and increasing the range of reinforcers that are available to do this.
- By being closely involved, parents will gain a greater understanding of their children's schooling and the school's vision and goals.
- Regular contact with parents will heighten professionals’ sense of accountability.
- Children will obtain positive messages about the importance of their education if they see their parents and educators working together.

The present review confirms Church’s (2003) earlier conclusion that ‘research into parenting skills training indicates that there are a number of training programmes which are effective in helping parents to halt antisocial development and to accelerate the social development of their children' (p.4). According to Church:

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[5] This chapter draws heavily upon four main sources: Mitchell (2008), Cooper & Jacobs (2011), the Werry Centre (2010), and the Advisory Group on Conduct Problems (2011). For an extended discussion of guidelines for increasing parental involvement in education, see Hornby (2011).

[6] The term 'parent' encompasses a range of people, including natural parents, adoptive or foster parents, guardians, extended family/whānau, and caregivers. Here I will use ‘parent’ to cover all categories of such relationships.

> these programmes focus on helping parents to learn how to (a) monitor a child's whereabouts and behaviour, (b) participate actively in a child's life, (c) use encouragement, praise, and rewards to manage child behaviour at home, (d) ensure that discipline is fair, timely and appropriate to the misbehaviour, and (e) use effective, positive, conflict-resolution and problem-solving strategies. Parenting training courses have their strongest effects with the parents of young children and weaker effects with the parents of children over the age of 8 years. The effectiveness of parent training interventions is dependent in part upon the cultural competence of the parent educator who must be able to communicate with parents in their own language and who must be sufficiently trained and experienced to be able to establish a positive interpersonal relationship both with parents from a variety of different cultural backgrounds and with parents who are experiencing major problems in their personal lives (p.4).

Church's sentiments are widely echoed in the international literature. Most recently, an authoritative Cochrane review focused on behavioural and cognitive-behavioural group-based parenting programmes for early-onset conduct problems (Furlong et al., 2012). This will be discussed in detail in section 5.18 below.

4.2 Why Some Parents May Need Support

Children with special educational needs can be a source of both joy and emotional distress. However, some parents may also reject their children or be over-protective as they experience feelings of shock, denial, disbelief, anger, guilt, depression and shame at various times. These feelings may be triggered throughout the child's life, particularly at significant occasions such as birthdays and during transitions associated with schooling (Mitchell, 1986).

Parents of children who have special educational needs have extra demands on them. Some of them take on the role of advocates for their and other children, acting as agents of change for the education system as a whole. They may have to instigate inclusive school practices and manage transitions associated with schooling. They, of course, provide care for their child for a prolonged period and must ensure that other people relate to their child in a way that helps their child acquire and maintain adaptive behaviour. They must also access and maintain specialist services for their child.

Parents may also have to learn specialised skills. Since their children with complex needs may not learn important skills as naturally or independently as their siblings, parents may need to learn systematic management strategies, such as behaviour management techniques, as outlined below.

Having a child with special educational needs often affects the family itself. Parents may find it hard to get babysitters and to remain part of their church or other community organisations. Friends and family may start avoiding them, or suggest, rightly or wrongly, that their child's behaviour problems are the result of poor parental management.

Although siblings may learn to love and accept others in their family unconditionally and to develop a sense of responsibility, they may also become embarrassed about their brother or sister with special educational needs, feel left out, or resent the time that parents give him or her.

Caring for their family can be emotionally taxing for parents who have a child with special educational needs. The extent to which this occurs can be affected by:

- the amount of change imposed on the family and the seriousness of those changes. For some families, a child with complex needs will require a number of adjustments to their daily routines or dramatic changes in their earning power and lifestyle;
- the family's adaptability, a factor which is, in turn, influenced by the personal resources of each family member, particularly their level of education, their health, their self-esteem and the quality of the informal and formal social supports available to them;
- the family's internal resources, for example the size of the family, the number of parents in a family and their religious commitment.[ii]

4.3 What Helps the Development of Effective Partnerships with Parents?

Regular contact with parents helps to establish relationships within which even the smallest successes may be celebrated and any difficulties more easily anticipated and more quickly resolved. Parents may be more able to contribute in meetings if they are explicitly encouraged to do so, are clear about the nature of their contribution, and are provided guidelines to do this. Meetings with parents may be more effective if they are well structured. Individualised educational planning meetings, for instance, may include a time for building rapport, obtaining information from parents, giving information to them, summarising the information exchanged and planning a time for follow up. Conflict arises in any partnership and should be dealt with in a positive, non-threatening manner.

A recent synthesis of literature on 'hard-to-reach families' provides further guidelines (Boag-Munroe & Evangelou, 2012). This paper presents a review of 54 studies relating to hard-to-reach, or ‘hard-to-engage’ families, which have been published since 2000 in the UK, US, Canada and Australia. The purpose of the review was twofold: (a) to gain insights into understandings of the term ‘hard-to-reach’ within education, health and social services, which might be aiming to access families in order to help them improve their life chances, and (b) to explore ways in which services have been successful in engaging families. While the review has a broader focus than families of children with complex needs, its overall conclusions have applicability to such families. Some of the main points may be summarised as follows:

- Some reasons for non-engagement with services point to an issue with the family, while others point to issues with the service.
- The reasons why families who might benefit from services are often not being engaged are multiple and potentially complex.
- Services need to be alert to the complexity of reasons why families are not engaging, and to take responsibility for reaching out to them in innovative ways, using new technologies where appropriate.
- There is a need for outreach and specialist workers; careful, active, attentive listening skills; contextualised, holistic, community-based work and the provision of appropriate buildings and facilities.
- Services need to build relationships of trust with families and with each other. Such relationship building is not only time-intensive but requires adequate and sustained funding to ensure continuity of staffing and provision.
- Development of sound interagency practices that support families is a priority.
- Staff need professional development which allows them to build up and sustain complex skill sets to allow them to work on the multiple issues they confront. (pp.234-235).

4.4 How May Parents be Supported?

In the remainder of this chapter, various parent-training and family support programmes are outlined. The first four of these are programmes that have been manualised, supported by Randomised Controlled Trial (RCT) evaluations, have strong training and infrastructure to maintain fidelity of implementation, involve accreditation processes, and have strong evaluation processes within the programmes.

4.4.1 Parent Management Training
4.4.2 The Incredible Years Programme
4.4.3 Parent-child Interaction Therapy

4.4.4 Triple P-Positive Parenting Programme

Given their focus on families, but without meeting the above criteria, two other New Zealand approaches are included in this chapter:

4.4.5 Strengthening Families

4.4.6 Whānau Ora

4.4.1 Parent Management Training

In Parent Management Training (PMT), parents are typically helped to use effective behavioural management strategies in their homes. This strategy is often based on the assumption that children's conduct problems result from maladaptive parent-child interactions, such as paying attention to deviant behaviour, ineffective use of commands, and harsh punishments. Thus, parents are trained to define and monitor their child's behaviour, avoid coercive interchanges and positively reinforce acceptable behaviour by implementing developmentally appropriate consequences for their child's defiance. Such parent training is typically conducted in the context of group or individual therapy. It includes a mixture of didactic instruction, live or videotaped modelling, and role-plays. The emphasis is on teaching behavioural strategies to parents of at-risk children that concentrate on transmitting knowledge about antecedents and consequences. Reinforcement should be administered contingently (i.e., after the target behaviour), immediately, frequently and with a variety of high quality reinforcers that are meaningful to the child. As well, such techniques as shaping and prompting are used (Cooper & Jacobs, 2011; Kazdin & Weisz, 1998; McCart et al., 2006). According to Cooper & Jacobs (2011), parents learn to observe and identify child behaviours which could be defined as problematic and to reframe them in ways which may lead to insight and, ultimately, solutions to the reasons behind those behaviours, such as questions on what caused that behaviour at that time and what were its consequences.

The evidence. In a recent review, Cooper & Jacobs (2011) concluded that PMT is one of the most strongly-supported preventative interventions for children with social and emotional behaviour disorders, particularly conduct problems.

This conclusion was supported in an earlier review of 29 well-designed studies of treatments of children and adolescents with conduct disorders, covering the period from 1966 to 1995 (Brestan & Eyberg, 1998). They found that parent training was one of two treatments that were identified as being 'well-established'.

A 1996 meta-analysis of the effects of a behavioural PMT on antisocial behaviours of children yielded a significant effect size of 0.86 for behaviours in the home. There was also evidence that the effects generalised to classroom behaviour and to parents' personal adjustment. It was noted, however, that these studies compared parent management training with no training, and not with other strategies (Serketich & Dumas 1996). However, a recent meta-analysis did compare the effectiveness of two different strategies: behavioural parent training (30 studies) and cognitive-behavioural therapy (41 studies) for children and adolescents with antisocial behaviour problems. The effect size for behavioural parent training was 0.46 for child outcomes (and 0.33 for parent adjustment) compared with 0.35 for child outcomes with cognitive-behavioural therapy. Age was found to influence the outcomes of the two interventions, with behavioural parent training having a stronger effect for preschool and elementary school-aged children, while cognitive behavioural training had a stronger effect for adolescents (McCart et al., 2006).

In another study, US researchers examined changes in parent functioning as a result of participating in a behavioural PMT designed for children aged 6 to 11 with attention-deficit hyperactivity disorder (ADHD) (Anastopolous et al., 1993). The programme comprised nine sessions conducted over a two-month period. The content included (a) an overview of ADHD, (b) a review of a model for understanding child behaviour problems, (c) positive reinforcement skills (e.g., positive attending, ignoring, compliance with requests, and a home token/point system), (d) the use of punishment strategies (e.g., response cost, and time out), (e) modifying strategies for use in public places, and (f) working cooperatively with school personnel, including setting up daily report card systems. Compared with equivalent families on the waiting list for the treatment, those receiving the behavioural parent training showed significant changes in their children's psychosocial functioning, including improvements in their ADHD symptoms. As well, the parents showed less stress and enhanced self-esteem. Finally, in a summary of parent-mediated interventions involving children with autism, an overview paper concluded that parents learnt behavioural techniques to increase and decrease selected target behaviours in their children (Matson et al., 1996). Among the studies cited was one in which parents were taught to help their children follow photographic schedules depicting activities such as leisure, self-care and housekeeping tasks. The results showed increases in social engagement and decreases in disruptive behaviour among the children with autism (Kranz et al., 1993).

According to a recent review by the Werry Centre (2010), PMT programmes are effective in the treatment of disruptive behaviour disorders, in improving children's compliance with instructions, in improving parental self-esteem and in reducing parental stress. They noted that it is particularly efficacious for children under the age of 10 years and their families (Fonagy et al., 2000; Gardner et al., 2006; Hutchings et al., 2007; Wolpert et al., 2006).

A recent meta-analytic review of studies aimed to identify the components of successful PMT programmes for children aged up to eight (Kaminski *et al*, 2008). This analysis demonstrated that the three most effective were: instruction in positive interactions with their child, encouragement of emotional communication, and practising with their own child. Least effective were those involving problem-solving skills training, promoting their child's academic success and use of ancillary services. Four components were significantly positively correlated with reducing aggression in the children. These were positive interaction, time out, consistent responding and practising with their own child. The mean effect size for parenting outcomes appeared larger than that for child outcomes. Those children with internalising disorders appeared to benefit more from the interventions than those with externalising disorders.

4.4.2 The Incredible Years Programme

The Incredible Years programme is a variant of PMT, but includes programmes for children and teachers, as well as parents. Carolyn Webster-Stratton and her colleagues at the University of Washington (Webster-Stratton et al., 1988; Webster-Stratton, 1996; Webster-Stratton et al., 2008) have developed the programme, which is currently in use in New Zealand. Aimed at children aged from birth to 12 and their parents, Incredible Years comprises a series of two-hour weekly group discussions (a minimum of 18 sessions for families referred because of abuse and neglect). The programme contains videotape modelling sessions, which show 250 vignettes of approximately two minutes each in which parents interact with their children in both appropriate and inappropriate ways. After each vignette, the therapist leads a discussion of the relevant interactions and solicits parents' responses. Parents are taught play and reinforcement skills, effective limit-setting and non-violent discipline techniques, problem-solving approaches promoting learning and development, and involvement in their children's schooling (Webster-Stratton & Reid, 2012).

As well, Incredible Years has an add-on programme to facilitate parents in supporting their child's schoolwork. There is also a classroom programme, with over 60 lesson plans for all age ranges of children (Webster-Stratton & Reid, 2004), and a cognitive-behavioural programme for small groups of children with conduct problems

(Webster-Stratton & Reid, 2003). Additionally, there is a teacher-training programme in classroom management of children with externalising and internalising problems that operates similarly to that of the parent-training programme (Webster-Stratton et al., 2001).

In New Zealand, the Ministry of Education has a target of providing Incredible Years to 8,000 families by 2014/2015. It should also be noted that the programme has been extended into Positive Behaviour for Learning – Parents. This programme is aimed at helping parents to reduce challenging behaviours in their children aged three to eight years, providing them with strategies to manage such behaviours as aggressiveness, tantrums, swearing, whining, yelling, hitting and refusing to follow rules. Parents are referred to the programme on the basis of an assessment of their child as part of the B4 School Checks or through agencies such as Child, Youth and Family.

The evidence. The Werry Centre (2010) points out that Incredible Years has been extensively researched, and has been found to be more useful in the long term than other similar programmes.

As noted by Cooper & Jacobs (2011), every element of the Incredible Years programme has been the subject of research, using wait-list children as controls. A drawback of this approach is that it largely precludes the collection of longitudinal follow-up data, as control children also receive the programme after a waiting period. In the US, it has been trialled extensively with children on the Head Start scheme (Reid & Webster-Stratton, 2001, Webster-Stratton et al., 2001) with particular concentration on the programme generalising across ethnic minority cultures (Reid et al., 2002). There has been additional research in the UK (Gardner et al., 2006) producing similar positive results.

According to the US Department of Education, Institute of Education Sciences, What Works Clearinghouse (2011), in a study that ‘met its evidence standards without reservation’ (p.3), Webster-Stratton, et al. (2004) randomly assigned 159 families to one of six conditions: parent training alone (PT); child training alone (CT); parent training plus teacher training (PT+TT); child training plus teacher training (CT+TT); parent and child training combined with teacher training (PT+CT+TT); and a wait-list comparison group. The primary referral problem was oppositional defiant disorders that had been occurring for at least six months; the children were aged four to eight years. Reports and independent observations were collected at home and school. Following the six-month intervention, all treatments resulted in significantly fewer conduct problems with mothers, teachers, and peers compared to controls. Children's negative behaviour with fathers was lower in the three PT conditions than in the controls. Children showed more prosocial skills with peers in the CT conditions than in the control conditions. All PT conditions resulted in less negative and more positive parenting for mothers and less negative parenting for fathers than in the control group. Mothers and teachers were also less negative than controls when children received CT. Adding TT to PT or CT improved treatment outcome in terms of teacher behaviour management in the classroom and in reports of behaviour problems.

Again as noted by Cooper & Jacobs (2011), the Incredible Years has received endorsements of its evidence-based effect on children with social and emotional disorders from all reviews of its efficacy (Eyberg et al., 2008; Weisz et al., 2004, Nixon, 2002). Interestingly, according to research by Reid et al. (2004) the programme was as efficacious for parents of the most disadvantaged children, as well as for those parents with a higher socio-economic demographic.

A recent New Zealand study investigated the efficacy of the Incredible Years Basic Parent Programme and its cultural appropriateness (Fergusson et al., 2009). This study examined data on 214 parents who attended the programme for at least nine sessions. Pre-test and post-test comparisons showed significant improvements in behaviour and social competence scores for the children, with effect sizes ranging from 0.50 to 0.77. Parental satisfaction with the programme was high for both Māori and non-Māori parents.

As well as in New Zealand, Incredible Years has been adopted successfully in the US (where it originated), England, Wales, Ireland, Norway, Sweden, Denmark, and Russia.

4.4.3 Parent-child Interaction Therapy

This strategy is also closely related to PMT, but without the close adherence to behavioural principles. It is usually a short-term intervention programme aimed at parents of children with a broad range of behavioural, emotional or developmental problems. Its main aim is to help parents develop warm and responsive relationships with their children and develop acceptable behaviours. It includes non-directive play, along with more directive guidance on interactions, sometimes using an ear microphone (Eyberg et al., 1995; Hembree-Kigin & McNeil, 1995).

The evidence. A review of outcomes of parent-child interaction therapy concluded that it was generally effective in decreasing a range of children's disruptive and oppositional behaviours, increasing child compliance with parental requests, improving parenting skills, reducing parents' stress levels and improving parent-child relationships (McIntosh et al., 2000). A US study investigated the long-term maintenance of changes following parent-child interaction therapy for young children with oppositional defiant behaviour. This study involved interviewing 23 mothers of children aged from six to 12 years. Changes that had occurred at the end of the intervention were maintained three to six years later (Hood & Eyberg, 2003).

4.4.4 Triple P-Positive Parenting Programme

This is a multi-level parenting and family support strategy aimed at reducing children's behavioural and emotional problems by enhancing the skills and confidence of their parents (Sanders, 2008). It has also been applied to parents of children with ADHD (Hoath & Sanders, 2002). Triple P is being used in a range of countries, including Canada, Australia, Singapore, Hong Kong, UK, and New Zealand.

Triple P includes five levels of intervention of increasing strength:

(a) a universal media information campaign targeting all parents: e.g., promoting the use of positive parenting practices in the community, destigmatising the process of seeking help for children with behaviour problems, and countering parent-blaming messages in the media;

(b) two levels of brief primary care consultations targeting mild behaviour problems: (i) delivering selective intervention through primary care services such as maternal and child health agencies and schools, using videotaped training programmes to train staff; and (ii) targeting parents who have mild, specific concerns about their child's behaviour or development and providing four 20-minute information-based sessions with active skills training;

(c) two more intensive parent training programmes for children at risk for more severe behaviour problems: (i) running a 10-session programme which includes sessions on children's behaviour problems, strategies for encouraging children's development and managing misbehaviour; and (ii) carrying out intervention with families with additional risk factors that have not changed after lower levels of intervention. (Sanders, 1999)

Further details about Triple P levels 1-3 can be found at:
http://www10.triplep.net/?pid=29

As noted by Meyer & Evans (2006), the Stepping Stones Triple P (SSTP) programme has subsequently been adapted from the original Triple P model to address the needs of families with children who have developmental disabilities and challenging behaviour (Sanders et al., 2003, 2004). This programme incorporates issues relevant to these families including inclusion, community living, family supports, increased caregiving needs, and it includes behaviour change protocols for behavioural challenges such as self-injurious behaviour, pica, and stereotyped behaviours (Sanders, Mazzucchelli, & Studman, 2004).

The evidence. Sanders (1999) reports on studies of the Triple P-Positive Parenting Program administered to parents in groups. One of these involved 1,673 families in Perth, Western Australia. Parents who received the intervention reported significantly greater reductions on measures of child disruptive behaviours than parents in the non-intervention comparison group. Prior to the intervention, 42 percent of the children had disruptive behaviour, after intervention this figure was 20 percent.

According to Meyer & Evans (2006), early results for SSTP are promising regarding its effectiveness in generating positive outcomes. It also parallels strengths of Triple P in provision of a detailed and practical manual or guides for the use of SSTP by practitioners working with families outside Sanders' own clinical and research teams (Sanders et al., 2003).

4.4.5 Strengthening Families

This New Zealand programme has been available throughout the country since 1999. Its aim is 'to offer help before a family/whānau has serious problems requiring intensive statutory intervention'. It does this by promoting cooperation between community organisations, social services and government agencies. At the time of writing, a total of 11 government departments had committed to being part of Strengthening Families. These included ACC, Child, Youth and Family, Department of Corrections, Ministries of Education, Health, and Justice, and New Zealand Police. The chief executives of the Ministries of Education, Health, Justice and Social Development are responsible for the strategic direction of the service. Some 60 coordinators are located throughout the country, mostly employed in community organisations. These coordinators are supported by Local Management Groups, with members coming from government agencies, local authorities, iwi and community groups. The Family and Community Services in the Ministry of Social Development coordinates the funding and guides the overall direction of Strengthening Families.

4.4.6 *Whānau Ora*

This new programme (Taskforce on Whānau-Centred Initiatives, nd) aims at strengthening whānau[7] capabilities through an integrated approach to whānau well-being and a collaborative relationship with state agencies. As well as specifically targeting individuals, there will be 'a parallel responsibility to the whānau' (p.31). An emphasis will be placed on 'cultural integrity in the design and delivery of whānau-centred services' (p.38). A key feature of Whānau Ora will be 'integrating delivery of government services to provide a single point of contact for whānau by organisations acculturated towards whānau-centred service delivery' (p.40).

4.4.7 *Other Parenting Programmes*

In the US, several other programmes concerned with assisting parents of children with varying types of conduct disorders exist. These include the Oregon Social Learning Center's programme (Dishion & Patterson, 1996) and a parenting skills training programme, Helping the Non-compliant Child, developed by McMahon and his colleagues (Forehand & McMahon, 1981, MacMahon & Forehand, 2003). See Church (2003) for a review of both of these and the ones referred to above.

4.4.8 *Some Caveats*

According to the Werry Centre (2010), the success of parenting programmes such as those outlined above is contingent on a number of factors, which include:

- the severity or chronicity of the disorder, and the presence of co-morbidities;
- including parents who choose not to complete the programme;
- parental negativity towards the child;
- maternal psychopathology, in particular depression and life events;
- more difficult and older children above the age of eight require adjunctive treatment to parent training, to handle problems in the parental relationship;
- the accessibility and affordability of training for staff; and
- socio-economic status (SES) (low SES is associated with more limited outcomes).

This latter point, that parenting programmes appear to be least effective with economically disadvantaged families, is confirmed by Dumas & Wahler (1983) and Lundahl et al. (2006). Given that parent training is a technique most often offered to the most disadvantaged families, this is a matter of concern. Forehand & Kotchick (2002) suggest that such families can be best reached when training is delivered within the community, using neighbourhood community centres or schools and when they are delivered by agencies that the parents trust. Further, they state:

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[7] Whānau 'generally refers to Māori who share common descent and kinship, as well as collective interests that generate reciprocal ties and aspirations' (Taskforce on Whānau-Centred Initiatives, nd, p.12).

> Parents cannot fully engage in parent training until their other basic needs have been adequately addressed; thus, working with the socially isolated or highly disadvantaged families that present for assistance in managing their children's behaviour may require much more than parent training in order to be successful. (p.380).

Also, it must be noted that, as pointed out above, Reid et al. (2004) found that the Incredible Years programme was efficacious for parents of the most disadvantaged children. Possibly this was because of the use of videotapes.

4.4.9 The Need for Culturally Responsive Programmes

As indicated earlier, Church (2003) noted that:

> The effectiveness of parent training interventions is dependent in part upon the cultural competence of the parent educator who must be able to communicate with parents in their own language and who must be sufficiently trained and experienced to be able to establish a positive interpersonal relationship…with parents from a variety of different cultural backgrounds…(p.4).

Bevan-Brown (2003) expands on this notion of cultural competence, noting several factors that may influence the perception and management of Māori children with special needs. These include:

- different world views and the beliefs, values, attitudes and practices that emanate from them;
- beliefs about the cause and nature of disability;
- family structure and interpersonal relationships;
- communication and interaction styles;
- spiritual beliefs;
- language; and
- degree of acculturation (pp.2-3).

Similarly, Macfarlane (2011) argues that a culturally-informed understanding of conduct problems is critical in enabling professionals to work effectively with Māori families. This means, for example that it is necessary for professionals to find a 'balance between generic western science programmes and kaupapa Māori programmes' (p.43) and to take account of such factors as 'cultural disconnection and loss of identity, erosion of whānau wellness and the negative impacts of racism, discrimination and institutionalism' (p.44).

Although not specifically focused on students with special needs, the recently-published document *Tātaiako, Cultural competencies for teachers of Māori learners,* (Ministry of Education, 2011) is also relevant. See also the comments on Whānau Ora, above.

Meyer & Evans (2006) make several points of relevance:

- There is limited information available in the published intervention literature regarding cultural considerations in the design and implementation of effective interventions, although there is recent evidence across differing national groups.
- Virtually all intervention research is silent on the issue of cultural adaptations.
- Their meta-analysis found no significant differences by ethnicity for the effectiveness of interventions with behavioural challenges.
- It is crucial that recommended and available practices be culturally appropriate for different groups, especially Māori.

4.5 Summary

1. *Parents play important, if not critical, roles in educating and supporting students with special educational needs.*
2. *Many parents of children with special educational needs require support and training to deal with their children, especially those with complex needs.*
3. ***Parent Management Training** (PMT) involves parents being trained to define and monitor their child's behaviour, avoid coercive interchanges and positively reinforce acceptable behaviour by implementing developmentally appropriate consequences for their child's defiance. Research shows that it is one of the most strongly-supported preventative interventions for children with social and emotional behaviour disorders, particularly conduct problems.*
4. *The **Incredible Years** programme is a variant of PMT and is aimed at children aged two to seven and their parents. It utilises videotape modelling sessions with group discussions. It has been extensively researched, and has been found to be more useful in the long-term than other similar programmes.*
5. ***Parent-child Interaction Therapy** is also closely related to PMT, but without the close adherence to behavioural principles. Its main aim is to help parents develop warm and responsive relationships with their children and develop acceptable behaviours. It includes non-directive play, along with more directive guidance on interactions. Research shows it to be generally effective in decreasing a range of children's disruptive and oppositional behaviours, increasing child compliance with parental requests, improving parenting skills, reducing parents' stress levels and improving parent-child relationships.*
6. ***Triple P- Positive Parenting Programme** is a multi-level parenting and family support strategy aimed at reducing children's behavioural and emotional problems by enhancing the skills of their parents. It includes five levels of intervention of increasing strength. Research has demonstrated its efficacy.*
7. *Two New Zealand programmes, **Strengthening Families** and **Whānau Ora**, are further examples of wraparound human services that have a focus on families.*
8. *The success of parenting programmes such as those outlined above is contingent on a number of factors, which include:*
    - *the severity or chronicity of the disorder, and the presence of co-morbidities;*
    - *including parents who choose not to complete the programme;*

- *parental negativity towards the child;*
- *maternal psychopathology, in particular depression and life events;*
- *the accessibility and affordability of training for staff; and*
- *socio-economic status (low SES is associated with more limited outcomes).*

9. *The effectiveness of parent training interventions is dependent in part upon the cultural competence of the parent educator who must be able to establish a positive interpersonal relationship with parents from a variety of different cultural backgrounds.*

CHAPTER FIVE

THE CHILD IN THE INCLUSIVE CLASSROOM[8]

> *SEBD [social, emotional and behavioural difficulties] among school pupils is a unique problem within education. No other educational problem is associated with such frustration, fear, anger, guilt and blame (Cooper & Jacobs. 2011, p.32).*

5.1 Introduction

The inclusive classroom is an essential component of the comprehensive ecological approach to working with students with complex needs. In developing this theme, several assumptions are made:

5.1.1 From universal to individually tailored strategies

As pointed out in Chapter 1, section 1.4, the rationale for designing services for children with complex needs may be portrayed in the form of a Venn diagram (Figure 5). It will be recalled that this diagram indicated that there are universal needs i.e., those shared by all children (**A**); semi-universal needs, i.e., those shared by all children with special needs (**B**); and specific needs, i.e., those that are specific to all children falling into a particular category (e.g., complex needs) (**C**). It was also emphasised that each child is unique, with his or her own individual needs. I have argued elsewhere (Mitchell, 2008) that the same reasoning can be applied to the selection of teaching strategies. In other words, some strategies apply to all children, some are specific to those with special needs, others are specific to those with complex needs, while still others are specific to individual children. Therefore, in outlining teaching strategies that should be in the repertoire of teachers working with students with complex needs, it would be wrong to focus only on those that apply specifically to those students.

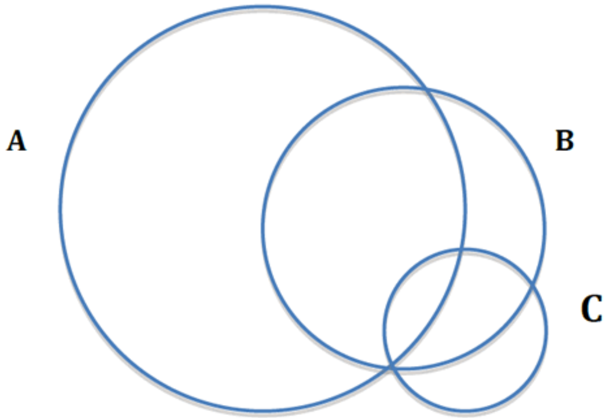

Figure 5. Design of services from universal, through semi-universal to specific

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[8] This chapter draws heavily upon Mitchell (2008, 2010), and also Cooper & Jacobs (2011), Meyer & Evans (2006), and Church (2003).

Putting it another way, elsewhere, I asked the question: do students with special educational needs require distinctive teaching strategies? My answer to this question was both 'Yes' and a qualified 'No.' Firstly, *yes*: some students – especially those with high or very high needs – do require some significantly different teaching strategies to those that educators in regular classes might usually employ. For example, some students with visual impairments are reliant on their tactile and auditory senses for learning and will require specialised techniques such as Braille and orientation and mobility training. Secondly, *no*: for the most part, students with special educational needs simply require good teaching. As some writers argue, there is little evidence to support the notion of disability-specific teaching strategies, but rather that all learners benefit from a common set of strategies, even if they have to be adapted to take account of varying cognitive, emotional and social capabilities (Kavale, 2007). What is required is the systematic, explicit and intensive application of a wide range of effective teaching strategies (Norwich, 2003).

5.1.2 Gradations of intervention

Not all of the interventions outlined in this chapter are within the capacity of regular class teachers acting alone in their classrooms. Some of the strategies call upon very intensive work undertaken by specialist personnel such as psychologists. In some cases, meeting the needs of some children with complex needs may be beyond the resources of a regular school, even with a range of specialist support services. In other words, *to take into account the severity of individual children's needs, a gradation of interventions has to be considered.* Two related approaches deal with this issue: the 'response to intervention' model employed mainly in the US, and the 'graduated response' model employed in England. Both of these will be summarised below. In a similar vein, Meyer & Evans (2006), refer to three broad categories of 'levels of support': Level 1 comprises 'placement in integrated school and community environments'; Level 2 involves 'placement in a more restrictive school setting'; and Level 3 comprises 'Level 1 or Level 2 plus wraparound child-centred services and/or parent training outside the range of the normal school day and/or school year to support families' (pp.104-105).

Firstly, I will consider **Response to Intervention** (RtI). In brief, this involves (a) tracking the rate of growth in core subjects for all students in the class; (b) identifying students whose levels and rates of performance are significantly below their peers; and (c) systematically assessing the impact of evidence-based teaching adaptations on their achievement (Shaddock et al., 2009). Above all, RtI is an approach focused on outcomes and on the evaluation of intervention; it thus integrates student assessment and instructional intervention. The RtI framework provides a system for delivering interventions of increasing intensity. Data based decision-making is the essence of good RtI practice. It is widely used in the US and Canada, but I was unable to find any significant reference to its use outside North America. The following material relating to RtI is synthesised from Ervin (2010), Gerber (2010), the National Association of State Directors of Special Education and the Council of Administrators of Special Education (2006), the National Center on Response to Intervention (2010), and Wikipedia (2010).

In the US, RtI has a statutory and regulatory foundation. Thus, the re-authorisation of Individuals with Disabilities Education Act 2004 proscribed the identification of a child with a specific learning difficulty on the basis of a severe discrepancy between achievement and intellectual ability. Instead, it favoured a process in which the child 'responds to scientific, research-based intervention' [P.L. 108-446, 614(b)(6)(B)]. Further, subsequent regulations required that prior to being referred for classification as a child with a specific learning disability, he or she should have been provided with 'appropriate high quality, research-based instruction in regular education settings', and that 'data-based documentation of repeated assessments of achievement at reasonable intervals, reflecting formal assessment of student progress during instruction' be provided. Only then, if the child has not made adequate progress after an appropriate period of time, could the child be referred for an evaluation to determine if special education should be provided. It must be emphasised that RtI is not limited to students with learning disabilities, but is intended for all those who are at risk for school failure, and those with behaviour disorders.

According to the National Association of State Directors of Special Education and the Council of Administrators of Special Education (2006), there are three key components of RtI:

High-quality instruction/intervention, defined as instruction or intervention matched to student need that has been demonstrated through scientific research and practice to produce high learning rates for most students. Individual responses are assessed in RtI and modifications to instruction/intervention or goals are made depending on results with individual students.

Learning rate and level of performance are the primary sources of information used in ongoing decision-making. Learning rate refers to a student's growth in achievement or behaviour competencies over time compared to prior levels of performance and peer growth rates. Level of performance refers to a student's relative standing on some dimension of achievement/performance compared to expected performance (either criterion- or norm-referenced). Decisions about the use of more or less intense interventions are made using information on learning rate and level. More intense interventions may occur in general education classrooms or pull-out programmes supported by general, compensatory or special education funding.

Important educational decisions about the intensity and the likely duration of interventions are based on an individual student's response to instruction across multiple tiers of intervention. Decisions about the necessity of more intense interventions, including eligibility for special education, exit from special education or other services, are informed by data on learning rate and level.

What follows is a more detailed explanation of the 'multiple tiers of intervention', referred to in the last of the above points, and sometimes described as 'levels'. Most writers identify three tiers, but sometimes four are described. Each tier provides progressively more intense and individualised intervention, with the aim of preventing, as far as possible, serious and continuing learning difficulties or behavioural problems, or reducing or eliminating them.

Tier I: Core classroom instruction. Sometimes referred to as 'primary prevention', this is the foundation of RtI and contains the core curriculum (both academic and behavioural). The core curriculum should be effective for approximately 80-85 percent of the students. If a significant number of students are not successful in the core curriculum, RtI suggests that instructional variables, curricular variables and structural variables (e.g., building schedules) should be examined to determine where instruction should be strengthened. Tier I interventions focus on in-class support and group interventions for all students and are characterised as preventive and proactive. The teaching programme should comprise evidence-based instruction and curriculum and should be the responsibility of the general education teacher. At this level, there should be careful monitoring of all students' progress and universal screening to identify at-risk students. A small minority of students with complex needs may respond to this level

Tier II: Supplemental instruction. Sometimes referred to as 'secondary prevention', interventions at this level are of moderate intensity and serve approximately 15-20 percent of students (some writers go as high as 30 percent) who have been identified as having continuing difficulties and who have not responded to normal instruction. Interventions at this level comprise targeted small group interventions (two to four students) for about an additional hour per week. Instruction is both more extensive and intensive than at Tier I and there should be weekly progress monitoring of target skills to ensure adequate progress (and that the intervention is working). Students at Tier II continue to receive Tier I instruction in addition to Tier II interventions. Based on performance data, students move fluidly between Tier I and Tier II. This tier is still the responsibility of the general education teacher, but with the assistance of a relevant specialist. Some students with complex needs may respond to interventions at this level.

Tier III: Instruction for intensive intervention. Sometimes referred to as 'tertiary prevention', this tier serves approximately 5-10 percent (some say as few as 2 percent) of students and is targeted at those with extreme difficulties in academic, social and/or behavioural domains who have not responded adequately to Tier I and Tier II efforts. The goal at this level is remediation of existing problems and the prevention of more severe problems. Students at this tier receive intensive, individual and/or small group interventions, with daily monitoring of progress in critical skills. Special education programmes are designed to supplement and support Tier I and Tier III instruction. At this level, a trained specialist would be involved. Once students reach their target skills levels, the intensity and/or level of support is adjusted. These students also move fluidly among and between the tiers. It is expected that the majority of students with complex needs will require intervention at this level

If Tier III is not successful, a student is considered for the first time in RtI as being potentially disabled. These three tiers are sometimes referred to as 'universal' (Tier I), 'targeted group' (Tier II), and 'individual' (Tier III).

To these three tiers, Gerber (2010) adds a fourth to encompass students with 'extraordinary needs', who require 'highly specialized methods'. This tier is of particular relevance when considering students with complex needs.

A caveat should be entered at this point: there should be a mechanism through which students with severe or significant academic, social-emotional of behavioural problems (e.g., those with complex needs) which would allow them to be 'triaged' directly into Tier III (or IV), rather than requiring them to go through Tiers I and II.

For RtI to be effectively implemented, several conditions have to be met:

- effective assessment procedures – for screening, diagnosis and progress monitoring have to be put in place;
- evidence-based teaching strategies should be employed;
- a structured, systematic problem-solving process should be implemented;

- it is important to see RtI as a flexible and fluid model, based on student need and not premised on particular labels or special education programmes;
- there should be school-wide responsibility for all students, including SWSEN (see Chapter Six);
- teachers, principals and specialists should receive appropriate pre-service training and in-service professional development on RtI;
- adequate resources need to be made available;
- parents should be involved in the decision-making processes in RtI (see also Chapter Four of this review); and
- exemplar RtI models should be developed before RtI is fully implemented.

Finally, as Madalaine & Wheldall (2009) pointed out, there is an enormous amount of support for RtI in the literature but, while it makes very good conceptual sense, there is relatively little scientific evidence about its effectiveness as yet in comparison to other models of identification and remediation (p.9). However, what research has been reported is encouraging. For example, VanDerHeyden et al. (2007) found that students responded positively to RtI and that African-American students responded more quickly than other ethnic groups. Similarly positive findings have been reported by Marston (2001), who attributed RtI to a drop over a three-year period in the percent of African-American students placed in special education from 67 percent to 55 percent (considering that 45 percent of the student population was comprised of African-American students).

Secondly, consideration should be given to the **Graduated Response Model** in England. It has marked similarities with the RtI model, particularly with regard to the notion of three tiers and a concern for monitoring student outcomes. As outlined in the *Code of Practice* (Department for Education and Skills, 2001):

> In order to help children who have special educational needs, schools in the primary phase should adopt a graduated response that encompasses an array of strategies. This approach recognises that there is a continuum of special educational needs and, when necessary, brings increasing specialist expertise to bear on the difficulties that a child may be experiencing. However the school should, other than in exceptional cases, make full use of all available classroom and school resources before expecting to call upon outside resources (p.48).

As in Tier I in the RtI model, in the Graduated Response approach it is assumed that classroom teachers should do all they can to provide an appropriate education for all their students through differentiated teaching, with additional action being taken only for those whose progress continues to cause concern. In addition to the assessment data that all schools record for all students, the pupil record for a student with special educational needs should include more detailed information about his or her progress and behaviour. This record should provide ‘information about areas where a child is not progressing satisfactorily, even though the teaching style has been differentiated’ (p.51). From this, the teacher may feel that his or her teaching strategies are not resulting in the child learning as effectively as possible and will consult with the school’s Special Education Needs Coordinator (SENCO) to review the strategies currently being used. Following this consultation, it may be determined that the child requires help over what can be provided by the teacher. In that case, consideration may then be given to helping the child through *School Action* (roughly equivalent to Tier II in the RtI). In *School Action* the class teacher or the SENCO identifies a child as having special education needs and will ‘provide interventions that are *additional* to or *different* from those provided as part of the school’s usual differentiated curriculum’ (p.52, emphasis in the original). The triggers for *School Action* include (a) the child making little or no progress even when teaching approaches are targeted at his or her areas of weakness, and (b) the child presenting persistent emotional or behavioural difficulties which are not ameliorated by the behaviour management techniques usually employed in the school. The SENCO and the child’s class teacher then decide on the nature of the intervention needed to help the child to progress. This may include the deployment of extra staff to enable individual tuition, the provision of different learning materials or special equipment, and staff training, all to be recorded in an Individual Education Plan (IEP).

Should further help be required, a request for external services is likely, through what is referred to as *School Action Plus*. This would follow a decision taken by the SENCO and colleagues, in consultation with parents, at a meeting to review the child’s IEP. The triggers for School Action Plus usually involve the child, despite receiving an individualised programme and concentrated support, (a) continues to make little or no progress in specific areas, (b) continues to work at National Curriculum levels substantially below that expected of children of a similar age, and/or (c) has emotional or behavioural difficulties which substantially interfere with the child’s own learning and that of the class group. This review would result in a new IEP which sets out fresh strategies for supporting the student’s progress, which are usually implemented in the normal classroom setting.

The next step in the process is for the school to request a statutory assessment. This requires evidence that the child has ‘demonstrated significant cause for concern’ and that ‘any strategy or programme implemented … has been continued for a reasonable period of time without success and that alternatives have been tried…’ (p.56).

5.1.3 Evidence-based teaching strategies

As I have noted in previous writing (Mitchell, 2008, 2010), educators are increasingly expected to be responsible not only for helping students to achieve the best possible outcomes, but also for using the most scientifically valid methods to achieve them. Indeed, in the US, the No Child Left Behind 2001 law requires teachers to use ‘scientific, research-based programs’, defined as: ‘(1) grounded in theory; (2) evaluated by third parties; (3) published in peer-reviewed journals; (4) sustainable; (5) replicable in schools with diverse settings; and (6) able to demonstrate evidence of effectiveness’.

Briefly, evidence-based teaching strategies may be defined as ‘clearly specified teaching strategies that have been shown in controlled research to be effective in bringing about desired outcomes in a delineated population of learners’ (Mitchell, 2008, p.1).

A similar definition is presented by Cooper & Jacobs (2011) in their review of the education of children with social, emotional and behavioural difficulties:

> ‘Evidence based outcomes for the child’…We consider this phrase refers to the need to identify the most valid and reliable research-based empirical evidence of interventions effective in improving a child’s social and emotional competence and educational performance. Validity and reliability are established through analysis of the methodological rigour of individual sources drawn, primarily, from peer-reviewed sources (p.10).

Cooper & Jacobs refer to a hierarchy of study types to differentiate between studies in terms of quality, with well-conducted, large-scale randomised-controlled trials providing the strongest form of generalisable evidence. The following hierarchy of study types (based on Nathan & Gorham, 2002) was employed to differentiate between studies:

Type 1: randomised prospective trials with control/comparison groups
Type 2: clinical trials with some type 1 characteristics missing
Type 3: prospective ‘naturalistic studies’ with control/comparison groups
Type 4: prospective ‘naturalistic studies’ without control/comparison groups
Type 5: retrospective studies; pilot studies
Type 6: reviews with secondary data analysis/meta analyses
Type 7: reviews without secondary data analyses
Type 8: case studies
Type 9: audits; essays; opinion papers.

Their review focuses on Type 1 studies, i.e., rigorous, large-scale random controlled trials, because they provide the strongest form of evidence of success that is generalisable across different settings and maintained over time.

5.1.4 Inclusive education

It is beyond the scope of the present review to undertake a complete analysis of the research into inclusive education. Suffice to say that, as I have stressed in other writing, inclusive education goes beyond simply placing children in age-appropriate neighbourhood schools. Several other features must be present: a vision, adapted curriculum, adapted assessment, adapted teaching, acceptance, access, support, resources and leadership (Mitchell, 2008). Also, as noted in Chapter One, section 1.6.2, the Government's policy is to achieve a fully inclusive education system by 2014. The strategies outlined in the remainder of this chapter are therefore those that have been found to be successful in regular classrooms.

5.1.5 Academic, as well as socio-emotional goals

As with all students, those with complex needs should be provided with an education that enables them to acquire academic skills such as literacy and numeracy, as well as maximising their emotional well-being and positive social functioning. This chapter focuses on how these goals can be facilitated by ensuring that these students are actively and positively engaged in learning in the classroom environment. The next chapter will address school-wide intervention.

Bearing the preceding points in mind, the following strategies and programmes will be described:

5.2 Adapted curricula
5.3 Assessment
5.4 Cooperative group teaching
5.5 Peer tutoring and peer support
5.6 Classroom climate
5.7 Social skills training
5.8 Cognitive strategy instruction
5.9 Self-regulated learning
5.10 Behavioural approaches
5.11 Functional behavioural assessment
5.12 Cognitive behavioural therapy
5.13 FRIENDS programme
5.14 Review and practice
5.15 Formative assessment
5.16 Feedback
5.17 Social and emotional learning programmes
5.18 Early intervention
5.19 The Hei Āwhina Matua project
5.20 Multi-component programmes

5.2 Adapted Curricula

Making appropriate adaptations or modifications to the general curriculum is central to inclusive education and is probably the biggest challenge to educators, particularly those teaching students with complex needs.

The curriculum in an inclusive classroom has two main features:

- It is a single, common core curriculum that is, as far as possible, accessible to *all* learners, including those with special educational needs. (Conversely, special educational needs are created when a curriculum is not accessible to all learners.)
- It includes activities that are age-appropriate, but are pitched at a developmentally appropriate level.

Within an inclusive classroom, it is therefore likely that there will be learners who are functioning at two or three levels of the curriculum. Some will be working at their age level, some will be working a year or more ahead, and some will be working at an earlier age level. This means that teachers should be prepared to use multi-level teaching or, at a minimum, make adaptations to take account of the diversity within their classrooms.

In a wide-ranging analysis of what should constitute an appropriate curriculum for students with disabilities, Browder et al. (2004) commenced by recognising that ‘curriculum, the content of instruction, has been one of the most controversial areas in education because determining what students will learn in school reflects both educational philosophy and societal values’ (p.211). They go on to trace the evolution of different approaches to the curricula for students with disabilities.

The first approach was the *developmental model*, which emerged in the 1970s after PL94-142 (Education of All Handicapped Children Act) established the right for all students with disabilities to have a free, appropriate education. In this model, educators adapted existing infant and early childhood curricula, on the assumption that the educational needs of students with severe disabilities could best be met by focusing on their mental age.

The second was the *functional model*, which was based on what was required to function in the daily life of a community. By the late 1980s, a strong consensus had emerged that curricula should focus on age-appropriate functional skills. This typically involved selecting from a range of such skills those which best fitted a particular student – hence the IEP.

The third model was described as an *additive model*, initially reflecting a focus on including students with severe disabilities in general education classrooms and with a strong emphasis on social inclusion and student self-determination, Browder et al. noted that with the continued efforts to promote inclusive education, this additive curriculum focus became extended to embrace ways of enabling students with disabilities to participate in the general education curriculum.

It is this third, and current, model that forms the basis of the following analysis by Browder et al.:

> An *accommodation* is a change made to the teaching or testing procedures in order to provide a student with access to information and to create an equal opportunity to demonstrate knowledge and skills. Accommodations do not change the instructional level, content, or performance criteria for meeting standards. Examples of accommodations include enlarging the print, providing oral versions of tests, and using calculators.
>
> A *modification* is a change in what a student is expected to learn and/or demonstrate. A student may be working on modified course content, but the subject area remains the same as for the rest of the class. If the decision is made to modify the curriculum, it is done in a variety of ways, for a variety of reasons, with a variety of outcomes. Again, modifications vary according to the situation, lesson or activity. The four most common ways are listed here:
>
> *Same, only less* – The assignment remains the same except that the number of items is reduced. The items selected should be representative areas of the curriculum.
>
> *Streamline the curriculum* – The assignment is reduced in size, breadth, or focus to emphasize the key points.
>
> *Same activity with infused objective* – The assignment remains the same, but additional components, such as IEP objectives or skills, are incorporated. This is often done in conjunction with other accommodations and/or modifications to ensure that all IEP objectives are addressed.
>
> *Curriculum overlapping* – The assignment for one class may be completed in another class. Students may experience difficulty grasping the connections between different subjects. In addition, some students work slowly and need additional time to complete assignments. This strategy is especially helpful for both of these situations (p.157).

In a similar vein, Clayton et al. (2006) described a four-step process for enabling students with significant cognitive disabilities to access the general curriculum. Step 1 involves identifying the appropriate content standard and what is the most basic concept or critical function that the standard defines. The second step is to define the learning outcome of instruction in a particular unit for all students and then consider the ways in which the complexity of what is required may be adjusted for students with significant cognitive disabilities. Step 3 involves identifying the instructional activities, ensuring that students with significant cognitive disabilities have equitable access to instruction and the curriculum provided to other students. The final step requires the targeting of specific objectives from the IEP for instruction within the unit. Clayton et al. noted that in addition to grade-level curriculum standards, students with significant cognitive disabilities often need instruction in such areas as basic communication, motor skills, and social skills. They argued that 'by embedding these skills within the context of general education activities, the teacher gives students access to the curriculum as required by Individuals with Disabilities Education Act 2004 and No Child Left Behind 2001, while still providing ongoing instruction on those essential basic skills' (p.25).

With particular reference to the unique needs of students with intellectual impairment in accessing the general curriculum, it involves three levels of action (planning, curriculum, and instruction), three levels relating to the scope of instruction (whole school, partial school, and individualised), and three levels of curriculum (adaptation, augmentation, and alteration). At one extreme, this model suggests that some students have extensive needs for support, significant alterations to the general curriculum, and individual teaching; at the other extreme, some have only intermittent needs for support, and require minor adaptations to the general curriculum and a school-wide implementation of high quality instructional strategies.

Other writers who have examined ways in which students with special educational needs can access the general curriculum include Wehmeyer et al. (2002), who presented a multi-step, multi-level decision-making model; Udvari-Solner (1996), who described a process for designing curricular adaptations; Udvari-Solner & Thousand (1996), who outlined ways of creating responsive curricula for inclusive schools; and Janney & Snell (1997), who looked at curricular adaptations for students with moderate and severe disabilities in regular elementary classes.

Ensuring that students with special needs can access the general curriculum, while at the same time having their essential needs met, is far from being unproblematic. In their recent review of special education in the Australian Capital Territory, Shaddock et al. (2009), for example, noted that several submissions to the review pointed out that 'what a student with a disability learns when participating in a lesson or course may not be what they actually need to learn' (p.66). This becomes particularly evident when the gap between such students' performance and that of their peers is too great, when the students lack the necessary skills to keep pace with the rest of the class, and when the focus of the teacher is more on getting through the course than on the mastery of essential content by all students.

5.3 Assessment

Just as it is essential to have an adapted curriculum to suit students with complex needs, so too is it necessary to make appropriate adjustments to assessment. It is essential that assessment serve educational purposes by promoting learning and guiding teaching. In other words, it should be as much ‘assessment for learning’ as ‘assessment of learning’. It should provide the best possible account of what a learner knows, can do, or has experienced.

In an inclusive classroom, assessment should meet the following criteria:

- It should assist teachers to adapt the curriculum and their teaching methods to all learners. In other words, when it shows that learners have not mastered a particular task, it should allow a teacher to diagnose why this occurred and then to re-design learning opportunities. This is referred to as the *formative* purpose of assessment.
- It should provide feedback to learners and parents.
- It should focus on identifying what has or has not been achieved (i.e., *criterion-referenced assessment*, rather than putting learners in some sort of order of merit (i.e., *norm-referenced assessment*). However, there is still a place for the latter, provided it is interpreted sensitively with students with complex needs.

A second approach to assessment focuses on its diagnostic purposes, which is critically important for determining suitable programmes for students with complex needs. To quote Meyer & Evans (2006):

> Sound assessment continues to be a core value for any professional intervention programme. Unless we understand the dynamics of the problem behaviour it is not possible to effect change. These dynamics include the inter-relationships within the individual child’s repertoire, how it influences and is maintained by the external environment, and how these complex environments, or systems, further regulate the behaviour. Within this model it also becomes apparent that the meaning attached to the behaviour, how it is defined and represented by the stakeholders or the adults in the child’s environment is also a critical consideration. Challenging behaviours are not always easily identified and agreed-upon entities. They are social constructed and socially defined, and so systems need to change, not simply the target behaviour of the target child. Once the behaviour itself is better understood, decisions can be made about how it might be modified (p.34).

5.4 Cooperative Group Teaching

Effective teachers use a mix of whole class, group and individual activities. Cooperative group teaching (sometimes referred to as *cooperative learning*) involves learners working together in small learning groups, helping each other to carry out individual and group tasks. It is a particularly effective strategy for teaching learners with special educational needs, especially in mixed ability groups.

Cooperative group teaching is based on two main ideas about learning. Firstly, it recognises that when learners cooperate, or collaborate, it has a synergistic effect. In other words, by working together they can often achieve a result that is greater than the sum of their individual effects or capabilities. Secondly, it recognises that much of our knowledge is socially constructed; that is, we learn from others in our immediate environments – our families, our friendship groups and our workplaces. Thus, cooperative group teaching is a ’natural’ way of teaching and learning.

The evidence. There is a huge literature on the effects of cooperative learning on achievement and social interactions in general education, as well as in classrooms including learners with special educational needs. For example, a comprehensive study researched the effects of cooperative learning on the reading achievement of elementary students with learning disabilities. A total of 22 classes with 450 3rd and 4th grade learners, including those with learning disabilities, were involved in the study. Teachers in nine of the classes used an approach called Co-operative Reading and Composition (CIRC) to foster comprehension and metacognitive strategies. The other 13 classes formed the controls. In the CIRC classes learners worked in heterogeneous groups on activities including partner reading, examining story structures, learning new vocabulary, and re-telling stories. Significant results were reported in favour of those in CIRC classes on standardised reading and writing tests (Stevens et al., 1987).

To bring about successful group learning, teachers need to attend to four main issues: (1) Develop appropriate group tasks: designing activities that are suitable for all members of the group, especially those with special educational needs, is critical. (2) Teach group process skills and closely monitor their use: these include such things as listening, making eye contact, communicating clearly, asking questions, providing leadership, building trust, making decisions, and managing conflict. (3) Deal effectively with any problems that arise: perhaps the most difficult problems that can occur in groups are the challenge of dealing with ‘loners’, ‘dominators’, aggressive or disruptive learners and passive learners. (4) Take care in selecting members of groups that include learners with special educational needs, especially those with emotional and behaviour problems. Its effectiveness with such learners is uncertain at this stage of our knowledge.

5.5 Peer Tutoring and Peer Support

According to Cooper & Jacobs (2011), 'the student peer group performs a powerful role in influencing the quality of student behaviour in schools. If not harnessed effectively, it can be a negative force. They cite the work of Barth et al. (2004), who examined 65 classrooms in 17 schools with a high proportion of students with social, emotional and behavioural difficulties. These writers concluded that peers can serve as reinforcers and models, and that disruptive students could promote negative behaviours, especially if they came to be seen as role models. They also cite two interventions that may alleviate social rejection and discourage negative feedback from peers about unacceptable behaviour. The first involved 'positive peer reporting' in which students were given the opportunity to earn tokens for noticing another child's positive behaviour and reporting it aloud in an end-of-day session (e.g., Moroz & Jones, 2002). The second involved 'tootling', which does not target an individual child as a focus of peer support, but instead, offers all children the opportunity to stop telling tales ('tootling') and begin praising rather less noticeable prosocial behaviour (Skinner, 2002).

In my earlier writing (Mitchell, 2008, 2010), I advocated the employment of peer tutoring, in which one learner (the 'tutor') provides a learning experience for another learner (the 'tutee'), under a teacher's supervision. Peer tutoring can accelerate learning by giving students more frequent opportunities to respond (Hall et al., 1982). It is best used to promote fluency through practicing or reviewing skills or knowledge, rather than as a means of initially teaching skills or knowledge. In other words, it is used as a supplement to other methods. It is based on the principle that students learn a great deal from each other. It often occurs spontaneously in schools, neighbourhoods, and in homes. Much human activity centres on the reciprocal relationship of giving and receiving. Properly handled, it can be of benefit to both tutees and tutors.

Peer tutoring can take many forms, with pairs comprising different combinations according to age and ability level. A common pattern is for a more able learner to tutor a less able learner of roughly the same age. A variant of it, which occurs when an older learner tutors a younger learner, is sometimes referred to as *cross-age tutoring*. Another variant is *class-wide peer tutoring*, in which all learners in a class would be paired and undertake the roles of both tutors and tutees

Evidence. A meta-analysis of studies evaluating peer-assisted learning strategies (PALS) with elementary school students, reported by Rohrbeck et al. (2003), produced positive effect sizes of 0.59, indicating increases in achievement. These interventions were most effective with vulnerable students, including younger, low-income, and minority students. The authors attribute these findings to two major categories of peer influence: (a) peers serve as natural teachers to stimulate cognitive development, and (b) peers contribute to task orientation, persistence, and motivation to achieve.

In a study of the effects of PALS on students' reading achievement in 22 US elementary and middle schools, 20 teachers implemented the programme for 15 weeks and 20 control teachers did not. It was found that all three groups of learners (low achievers with and without disabilities and average achievers) demonstrated greater reading progress (Fuchs et al., 2002).

A peer tutoring and a 'special friends' programme in a high school involved learners with severe mental retardation, moderate mental retardation, autism and deaf/blindness. Learners without disabilities who participated in the programme increased their social interactions with the learners with disabilities, compared with a control group who were not involved in the programme (Haring et al., 1987).

In a class-wide peer tutoring programme (CWPT) in a regular elementary school classroom, learners with autism (*and* their tutors) showed improvements in reading fluency and comprehension. As well, both groups showed increased social interactions during their free time (Kamps et al., 1994).

Cooper & Jacobs (2011) point out that CWPT has received the 'proven' certification from the US Promising Practices Network (www.promisingpractices.net), which noted that various project evaluations have found that, *inter alia:*

- When students began peer tutoring in the first grade, by the end of the fourth grade they scored more than 11 percentage points higher than control groups on a nationally standardised test in both reading and maths (40 percent versus 29 percent in reading, and 49 percent versus 38 percent in maths) after test scores were adjusted for differences between the two groups that were determined in the first grade (for example, measured IQ).
- Children were 20 to 70 percent more likely to stay on task, remain engaged with their lessons and respond to the teacher during peer tutoring than before the programme.
- An experimental group in elementary schools in economically depressed areas

performed almost as well as a comparison group of children from higher socio-economic groups and performed significantly better than a control group of students from other elementary schools in economically depressed areas who did not receive peer tutoring.

5.6 Classroom Climate

The classroom climate is a multi-component strategy comprising the psychological features of the classroom, as distinct from its physical features. It reflects, but is not limited to, features of the school culture outlined in Chapter Six.

There is clear evidence that the quality of the classroom climate is a significant determinant of learners' achievement. They learn better when they have positive perceptions of the classroom environment, particularly of the teacher.

Students with complex needs often experience the emotions associated with failure. All too often, they have been the recipients of rejection and even hostility from others. Many have learned either not to trust their learning environment or their own ability to survive in it. They are thus at risk for lowered self-concepts, depression, anger, anxiety, and fear. In turn, these emotions negatively affect their learning…and so on. This vicious cycle can be arrested if teachers:

- understand students' emotions and how they facilitate or hinder their motivation to learn;
- set up learning environments that emphasise positive emotions and reduce negative ones as far as possible;
- recognise that students come to school each day with different emotions, and that these will confuse some of them;
- seek to harness the power of positive emotions in the learning process;
- provide environments characterised by stability and repetition, security, warmth, empathy, affirmation, support, a sense of community, and justice and peace.

Evidence. There is a substantial body of research on various aspects of classroom climate and how they impact on academic achievement and affective learning. Unfortunately, I have not been able to find any research that focuses on learners with special educational needs, let alone those with complex needs, although I am confident that the findings are relevant to that group of learners.

In a 1994 analysis of 40 studies, associations were found between a range of classroom environment measures and a variety of cognitive and affective outcome measures across grade levels in several countries (Fraser, 1994).

An early meta-analysis looked at 12 studies carried out in four countries. Higher achievement on a range of outcome measures was found among learners in classes rated as having greater cohesiveness, satisfaction and goal direction and less disorganisation and friction (Haertel et al., 1981). Another, more recent, meta-analysis found that classroom climate was one of the most important factors to affect pupil achievement (Wang et al., 1997).

An OECD study of teaching in 11 countries found that creating a positive classroom climate was a prime characteristic of quality teachers (OECD, 1994).

A Dutch study found that educators who were perceived to be understanding, helpful and friendly and show leadership without being too strict, enhanced learners' achievement and affective outcomes. Those who were seen as being uncertain, dissatisfied with their students and admonishing were associated with lower cognitive and affective outcomes (Wubbels et al., 1991).

An ongoing New Zealand research project, entitled *Kotahitanga* (unity), investigated Māori secondary school students' perceptions of what was involved in improving their educational achievement. The most important influence to emerge centred on the quality of the in-class face-to-face relationships and interactions between them and their teachers. These findings led to the development of an Effective Teaching Profile, which then formed the basis of a professional development intervention[9]. When implemented with a group of 11 teachers in four schools, this was associated with improved learning, behaviour and attendance outcomes for Māori students. It was noted that deficit theorising by teachers is the major impediment to Māori students' educational achievement for it results in teachers having low expectations, which creates a self-fulfilling prophecy of school failure. Unfortunately, the study did not specifically identify learners with special educational needs, let alone those with complex needs, although, as a group, Māori students' overall academic achievement levels are low, their rate of suspension from school is three times that of non-Māori and they tend to leave school with fewer formal qualifications than do their non-Māori peers (38 percent compared to 19 percent respectively) (Bishop et al., 2003). In a second study, Bishop et al. (2006) reported that gains in students' numeracy achievement yielded effect sizes of 0.76 for those whose teachers participated in Kotahitanga, compared with 0.52 for those whose teachers were not involved in the project.

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[9] According to Bishop (2010), 'In practice these mean that teachers: care for and acknowledge the mana of the students as culturally located individuals; have high expectations of the learning for students; are able to manage their classrooms so as to promote learning (which includes subject expertise); can reduce their reliance upon transmission modes of education so as to also engage in a range of discursive learning interactions with students or enable students to engage with others in these ways; know and use a range of strategies that can facilitate learning interactively; promote, monitor and reflect on learning outcomes that in turn lead to improvements in Māori student achievement and share this knowledge with the students so that they can reflect on and contribute to their own learning' (p.61).

From the above, it is clear that teachers have a considerable impact on student outcomes. This is borne out in studies of teachers' negative and positive influences. Firstly, a recent study by Myers & Pianta (2008) draws attention to teachers with a negative influence. They reported a long-term intensification of problem behaviours in children who had a negative relationship with a teacher. Conversely, McDonald et al. (2005) and Cooper & McIntyre (2011) show that teachers' warmth and supportiveness are associated with desirable academic outcomes. Further, Cooper & Jacobs observe that 'Students were most socially and academically engaged when they felt supported and respected by – and when they expressed a sense of trust in – their teachers' (p.61).

5.7 Social Skills Training

Most children quite easily acquire the social skills that are appropriate to their culture, but some do not and must be explicitly taught them. Some have poor social perception and consequently lack social skills; this is particularly true of those with autism and emotional and behavioural disorders (McGrath, 2005). It is also true of learners with severe disabilities, many of whom have difficulty in forming friendships (Wilson, 1999).

The goal of social skills training should be to establish a range of behaviours so that students can select what is appropriate for them in various social contexts (e.g., conversations, conflict situations, games, and group activities). It is unrealistic to expect that such training will always lead to close friendships between all members of the class. Relationships are based on a whole host of other factors, including mutual interests, compatibility, contacts in the neighbourhood, family connections, and so on.

In general, social skills training involves teaching students how to:

- formulate goals for social interaction;
- decode or interpret the most important cues in a social context;
- decide on behaviours that would best meet the social goals for the situation;
- perform the behaviour; and
- judge if the behaviour was effective in meeting the goals (Collett-Klingenberg & Chadsey-Rusch, 1991).

In recent years, a good deal has been written about the notion of 'theory of mind', particularly in relation to teaching social skills to learners with autistic spectrum disorders. Briefly, this refers to the ability to understand that other people have beliefs, desires and intentions that are distinct from one's own and to form hypotheses as to what these are (see http://en.wikipedia.org/wiki/Theory_of_mind). If students do not understand that other people have different thoughts to themselves, they will experience problems in relating and communicating with them. In other words, there are deficits in social cognition, or empathy, relative to mental age (Baron-Cohen, 2004). This has led to the development of intervention programmes to assist learners with theory-of-mind problems to 'mind-read', i.e., to recognise emotions and other people's perspectives (see, for example, Howlin et al., 1999).

Evidence. Research into the outcomes of social skills training with students with special needs has yielded generally positive, if modest, results.

A US study reviewed the results of 64 single-subject studies that examined the effects of social skills interventions with learners who had emotional or behavioural disorders. The average age of the participants was 9.8 years and 72 percent were boys. In the studies surveyed, social skills training usually focused on direct instruction of specific skills and included modelling, role-playing, reinforcement and self-control strategies. The authors concluded that although the effects of social skills training were positive, they were modest. Delinquent students seemed to benefit more than those with autism or emotional/behaviour disorders (Mathur et al., 1998).

In a second review, the same team carried out a meta-analysis of social skills training for learners with emotional or behavioural disorders, this time carrying out a meta-analysis of 35 studies. A mean effect size of 0.2 was produced, which means that the average learner would be expected to gain only a modest 8 percentile points after participating in a social skills training programme. Slightly greater effect sizes were found for interventions that focused on specific social skills such as cooperating or social problem-solving, compared with more general interventions (Quinn et al., 1999).

In another review of several meta-analyses involving social skills training, effect sizes ranged from 0.2 (see the previous item) to 0.87, with an average of 0.44. At least in part, this range was attributed to the 'resistance to intervention' shown by some groups of learners with special educational needs (Gresham et al., 2001).

A recent UK study found that two social skills training interventions directed at primary school learners at risk for social exclusion had positive effects on their social skills and social inclusion (Denham et al., 2006).

Cooper & Jacobs (2011) review several studies of social problem-solving and anger management, two of which will be summarised here. Firstly, Battistich et al.

(1989) studied the effects of a classroom-based social problem-solving programme on students (n=342) from kindergarten through to fourth grade in three US elementary schools over five years. Students from three similar schools where the programme was not followed were used as comparisons. The intervention set out to promote ‘a caring environment’ in classrooms and involved a range of teacher-led components, including:

- Cooperative activities, where small groups of children worked together toward common goals on academic and non-academic tasks. Fairness, consideration and social responsibility were emphasised. Students were trained in group interaction skills and engaged in reflection and discussion on these.
- The internalisation of prosocial norms and values, and the development of self-control were fostered through the building of positive interpersonal relationships. The children set rules and made decisions in their class.
- Activities promoting social understanding such as discussion of classroom events where social cooperation issues were relevant.
- Highlighting prosocial values through discussion of everyday events.
- Helping activities where students were encouraged to help each other in various ways, participate in peer tutoring and ‘buddying’ activities, and engage in community-based charitable activities and helping activities in the school at large.

Findings showed that the treatment group became significantly better at cognitive problem-solving skills (interpersonal sensitivity, consideration of others’ needs and means-ends thinking), and used significantly more prosocial resolution strategies than comparison children. They were also more competent in applying these to hypothetical situations. The findings were replicated with a second cohort.

Secondly, Cooper & Jacobs describe anger management as being an application of cognitive behavioural, self-regulation strategies to dysfunctional anger. They illustrate this with a case study by Kellner et al. (2001), who conducted a repeated measures design, control group study in a US day special school with a class of early adolescents with serious emotional or behavioural problems. The ten-session intervention employed a whole-class format, introducing students to self-monitoring (including logs) and self-regulatory techniques specifically focused on anger. Booster sessions aimed to help students maintain positive gains. After participation, students were less likely to engage in fighting with peers, more likely to talk problems through with a counsellor when angry and more likely to use anger logs. At the four-month follow-up, students who had booster sessions continued to make more use of the log than controls.

Finally, extensive research has been reported on the effects on academic and social learning of the *Responsive Classroom* approach. This intervention uses developmentally appropriate teaching strategies to integrate social and academic learning in the classroom, with the goal of helping children ‘to thrive academically, socially, and emotionally’ (Rimm-Kaufman, 2006, p.3). The approach rests on assumptions such as giving equal weight to social and academic curricula; recognising that social interaction facilitates cognitive growth; and recognising that helping children to learn cooperation, assertion, responsibility, empathy, and self-control will facilitate social and academic success. Rimm-Kaufman (2006) reports on the outcomes of studies of the Responsive Classroom approach, including one she and her colleagues carried out in the US. This quasi-experimental study involved comparing the outcomes of three schools participating in the Responsive Classroom approach and three conducting ‘business as usual’. The student body in both sets of schools comprised approximately 50 percent minority children, 30 percent who spoke English as a second language, and 30 percent from poor families. The findings favoured the teachers and students in the Responsive Classroom condition: (1) children showed greater increases in reading and maths; (2) the teachers felt more effective and more positive about teaching; (3) the children had better prosocial skills, felt closer to teachers, were less fearful, and felt more positive about schools, teachers, and peers.

See also Gresham et al. (2006) for how social skills training can be utilised for teaching replacement behaviours to remediate acquisition deficits in at-risk students.

5.8 Cognitive Strategy Instruction

Cognitive strategy instruction (CSI) refers to ways of assisting learners to acquire cognitive skills, or strategies. It does this by helping them to (a) organise information so that its complexity is reduced, and/or (b) integrate information into their existing knowledge (Ashman & Conway, 1997). It involves teaching students skills such as visualisation, planning, self-regulation, memorising, analysing, predicting, making associations, using cues, and thinking about thinking (i.e., metacognition).

Most students develop efficient and effective cognitive skills through their life experiences, with minimal teaching of how to go about the process of learning. Others, however, don't appear to use good techniques or strategies to help them learn. They either don't know what strategies to use, or they use the wrong ones, or they don’t spontaneously use strategies (Sugden, 1989). At the heart of CSI is the challenge of developing positive ‘habits of mind’. Teachers can help their students acquire these habits by curbing impulsivity, encouraging reflection, organising and activating prior knowledge, approaching tasks in an effective and efficient manner, making key cognitive steps more concrete, and helping them to self-regulate these processes (Ellis, 1993).

Evidence. Two studies will serve to illustrate CSI. Firstly, in a Canadian study of 166 students, aged seven to 13 years, with developmental reading disabilities, three groups were identified: (a) those with deficits in phonological awareness, (b) those with deficits in visual naming speed (i.e., word recognition speed), and (c) those with both deficits. A metacognitive phonics programme resulted in improvements, especially for learners with only phonological deficits. This programme instructed the learners in the acquisition, use, and monitoring of four-word identification strategies. These included, for example, a 'compare/contrast' strategy in which the learners were taught to compare an unfamiliar word with a word they already knew (Lovett et al., 2000).

Secondly, based on an extensive review of research into teaching strategies for students with learning disabilities, a major conclusion was that a model that combines direct instruction and CSI was an effective procedure with that category of learners. Whereas direct instruction alone and CSI alone both yielded substantial effect sizes (0.68 and 0.72, respectively), the combined strategy effect size was 0.84 (Swanson, 2000).

5.9 Self-regulated Learning

One of the features of maturity and a good quality of life in most societies is the ability to take personal responsibility for one's own actions. In free, democratic societies, people expect and are expected to exercise autonomy by making choices and taking decisions over most aspects of their lives. Of course, this is not absolute freedom as we also expect to have a degree of interdependence as we adjust to the needs and wants of others around us. It follows from this that a major objective of education should be to assist all learners to be increasingly involved in making decisions about their own learning and to act on these decisions, whilst at the same time taking account of their interdependence. Self-regulated learning (SRL) aims at helping learners to define goals for themselves, to monitor their own behaviour, and to make decisions and choices of actions that lead to the achievement of their goals (Zimmerman, 2000).

Evidence. In a meta-analysis of 99 studies that used interventions to decrease disruptive classroom behaviour, self-management strategies yielded an effect size of

1.00. In other words, there was a reduction of disruptive behaviour for about 85 percent of the students treated by this method (Stage & Quiroz, 1997).

In a descriptive review of research conducted up to the early 1990s, 27 studies pertaining to the use of self-monitoring for behaviour management purposes in special education classrooms were analysed. It was found that self-monitoring can be used with learners with special educational needs of various ages in various settings to increase (a) attention to tasks, (b) positive classroom behaviours, and (c) some social skills (Webber et al., 1993).

In another US study, a Self-Determined Learning Model of Instruction was used This approach involved teaching learners (a) setting their own goals based on their preferences and needs, (b) developing and implementing action plans to achieve those goals, (c) self-evaluating their progress toward achieving their goals, and (d) revising their goals or action plans accordingly (Agran et al., 2000). This model was used in a field test by 21 teachers with 40 students with a mean age of 17 years. The students had a range of disabilities, including intellectual impairment, learning disabilities, and emotional or behaviour disorders. The results showed that the students receiving instruction in the model attained educationally relevant goals, showed enhanced self-determination, and communicated their satisfaction with the process. Teachers also indicated their satisfaction and suggested that they would continue to use the model (Wehmeyer et al., 2000).

5.10 Behavioural Approaches

Behavioural approaches focus on how events that occur either before or after students engage in a verbal or physical act affects their subsequent behaviour. These events are referred to as antecedents and consequences, respectively. As described by Church (2003):

> During the pre-school and primary school years, contingency management procedures appear to be the most effective procedures for halting antisocial development and accelerating prosocial development. They also have the strongest research support. Contingency management procedures involve (a) the selection of specific behaviour change goals, (b) the teaching of any missing skills which the child needs in order to achieve the goal, (c) the identification of rewards (e.g. small privileges) which will provide the child with a strong motivation to achieve the goal, (d) the use of a small and predetermined penalty (such as a 3-minute time out or privilege loss) for antisocial behaviour and (e) the careful monitoring and recording of child achievements and antisocial responses from hour to hour…Contingency management schemes which include both rewards for socially appropriate behaviour and a small penalty for antisocial behaviour motivate a

> more rapid transition to socially appropriate behaviour than schemes which provide only a reward for appropriate behaviour (p.4).

In the US, behavioural approaches (specifically applied behaviour analysis) have received official recognition, the Surgeon General stating in 1999 that it is the treatment of choice for autism: ‘Thirty years of research demonstrated the efficacy of applied behavioural methods in reducing inappropriate behavior and in increasing communication, learning, and appropriate social behavior’ (US Department of Health and Human Services, 1999).

Citing the work of Carr et al. (1999, 2002), Meyer & Evans (2006) describe how a better understanding of behaviour analysis in natural environments, has led to the formulation of a set of approaches and procedures that have become known as Positive Behavioural Support (PBS). They consider that this orientation has now emerged as the most well-developed and carefully evaluated package for implementing positive behaviour change: ‘what might now be considered the third generation of behavioural interventions’ (p.22). They point out that PBS ‘has moved progressively from interventions focussed solely on the individual with disabilities to establishing the conditions needed to ensure that natural environments – home, family, school – support safe behaviour for all as well as provide a context for meeting individual needs’ (pp.22-23). Such a model, they argue:

> shifts the emphasis from directly modifying the challenging behaviour – as though it were an illness that can be eradicated – to seeing the challenging behaviour as a reflection of a mismatch between the characteristics and needs of the child and the characteristics and needs of the systems within which that child is expected to function (p.30).

Even so, Meyer & Evans sound a note of caution, which may well apply to many of the strategies reviewed in the present document:

> …positive behavioural support concepts, having been developed almost exclusively in the United States and applied primarily in Anglo-European countries (e.g., Ireland, Canada), do not fully recognise the cultural perspectives that need to be considered when working with more diverse communities or within specific settings such as bicultural Aotearoa New Zealand, where indigenous and other cultural traditions may vary significantly from dominant cultures in European nations (p.23).

Evidence. Research studies have shown convincingly that behavioural approaches work successfully with a wide range of learners with special educational needs. There is an enormous literature on this strategy, the following just being a sample.

In a comprehensive review of meta-analyses involving 20 different intervention strategies, behaviour modification came out with the third highest effect size (after mnemonic strategies, reading comprehension and just ahead of direct instruction). The effect size of 0.93 for behaviour modification represented the average of effect sizes for social outcomes (0.69) and academic outcomes (1.57) (Forness, 2001).

A review of research on behavioural interventions for learners with autism aged eight years and younger published between 1996 and 2000 concluded there were grounds for significant optimism. The authors noted that the five existing summaries of research in this area showed that the early use of behavioural interventions can result in the reduction of problem behaviours in this group of learners by 80-90 percent in 50 percent of the studies. Their own analysis of nine studies showed that nearly 60 percent of the comparisons reported 90 percent reduction in problem behaviour (Horner et al., 2002).

Finally, in their review of evidence for teaching students with social, emotional and behavioural difficulties, Cooper & Jacobs (2011) strongly advocate the employment of the Good Behaviour Game, which was first developed by Barrish et al. (1969). They claim that it ‘stands out as one of the most powerful applications of behaviourist principles’ for improving student behaviour in school settings (p.71). Further, they point out that the approach has been ‘enjoying significant demonstrable success in Europe and North America since the 1960s’ and that ‘Evidence indicates that it is particularly effective for a wide range of social, emotional and behavioural difficulties and in a wide range of educational settings with students aged four to 18’ (p.71). It is therefore worth describing in some detail.

Briefly, the Good Behaviour Game is played between teams of students and is based on each member of a team being rewarded for the aggregate behavioural performance of their team. This means that each group member must try to regulate his or her own behaviour in accord with a set of class rules and help fellow team members do the same in order to gain the reinforcement. Students get a cross on the blackboard if a team member breaks an agreed rule. Teams with four or fewer ticks at the end of the game are awarded token reinforcements (small gifts such as stickers or choice of an activity).

As noted by Cooper & Jacobs, the largest randomised control trial on the Good Behaviour Game was conducted in Baltimore public schools in 1985-88. This preventative intervention programme aimed at reducing risk behaviours with both externalising aggressive behaviour and anxious internalising behaviours being targeted. It was carried out over a period of two years for each cohort of 808 boys and 796 girls, who were randomly assigned to three groups. The first was the control group, which received no additional intervention save those typically applied within the school management system. The second was assigned to a cognitive intervention, mastery learning, and the third to the Good Behaviour Game. The students were interviewed annually for eleven years, from age eight or nine. The data were continually analysed for a variety of outcome measures. The short- and long-term findings include:

- Teachers of those in the Good Behaviour Game group rated their pupils significantly lower for aggression and shyness following six months of intervention. The greatest reductions were for those who had exhibited the most aggression and disruption. Peer ratings agreed, but the reductions for girls were not significant.
- In adolescence, Good Behaviour Game participants maintained their initial gains, particularly those most highly rated for aggression at age six. But some boys who had not displayed aggression at school intake had developed aggressive and disruptive behaviour by adolescence, despite having taken part in the game.
- The biggest improvements at adolescence involved those placed in classrooms for the most aggressive at first grade.
- Where the Good Behaviour Game was compared to a parental-training and support scheme, it was found that both sets of pupils had a lower likelihood than did control students of being diagnosed with conduct disorder in adolescence or to have been suspended from school. This study suggested that even more positive results may be obtained from combining the two interventions.
- Boys who took part in the game at age five or six, were less likely to smoke than controls by age 14, and less aggressive boys in the initial intervention group were less likely to smoke than their more aggressive peers. This protective outcome did not apply to girls.

5.11 Functional Behavioural Assessment

Functional behavioural assessment (FBA), sometimes referred to as functional assessment or functional behavioural analysis or functional analysis refers to the procedures used to determine the function or purpose of a learner’s repeated undesirable behaviour. As expressed by Meyer & Evans (2006), ‘a fundamental principle for understanding challenging behaviour is the functional analysis: determining the function that the challenging behaviour achieves for the individual’ (p.32). In other words, FBA examines why a learner acts in a specific way, and what he or she obtains or avoids when acting this way. This information is then used as a basis for substituting more desirable behaviour in a behaviour support plan (Zirpoli & Melloy, 1997; Sugai et al., 2000).

According to Church (2003), a functional assessment of a child with severe behaviour difficulties is a diagnostic assessment that is designed to accomplish four things:

- To identify what the child can do. This is the *strengths analysis.* This analysis is needed in order to identify the skills which will be extended and built upon.
- To identify what the child *cannot* yet do. This is the *needs analysis.* It asks "What does this child need to learn next?" This analysis must be undertaken in order to identify teaching goals.
- To identify any environmental conditions (at home and at school) which are functioning to maintain inappropriate responses. This is the *functional analysis.* It asks "What are the functions served by this behaviour for this child in this context?" A functional analysis of misbehaviour is based on the assumption that "problem behaviors are performed instead of desired or appropriate behaviors because the former behaviors successfully compete with the latter because they are more *reliable*... and more *efficient*" (Gresham, Watson & Skinner, 2001, p.165).
- To identify the conditions which are operating to prevent the acquisition and mastery of critical alternative behaviours and skills. This is the *ecological analysis.* It asks "What is it that is missing from this child's home and/or classroom experiences which is preventing the child from learning and using an appropriate, prosocial, alternative response?" (pp.68-69).

Evidence. Several studies have demonstrated the utility of FBA with students with special educational needs, including those with complex needs.

In an early application of FBA, the functions of self-injurious behaviour for learners with severe developmental disabilities were shown to include attention, self-stimulation and demands. These assessments led to successful interventions, resulting in the reduction of self-injurious behaviour (Iwata et al., 1982).

More recently, in a review of FBA, 22 studies focused on learners with or at risk for emotional and behavioural disorders. These studies comprised a mix of antecedent-based interventions, consequence-based procedures and a combination of the two interventions. Regardless of the type of intervention, 18 of the 22 studies showed positive results, with clear reductions of problem behaviours and/or increases of appropriate behaviours (Heckaman et al., 2000).

In another comprehensive analysis of school-based FBA, it was shown that this approach was useful for (a) ascertaining the factors that control high frequency problem behaviours in learners with low-incidence disabilities and (b) designing effective interventions for those behaviours. A total of 100 studies were reviewed, with most (69 percent) of them manipulating both antecedents and consequences. In descending order, the most common functions of target behaviours were to (a) escape from task demands, (b) gain adult attention, (c) gain an object/activity, (d) gain sensory stimulation, and (e) gain peer attention. In nearly a quarter of all participants in the studies, multiple functions were indicated. In all but two of the 148 intervention cases reported, outcome data showed that the intervention was successful (Ervin et al., 2001).

In contrast with these positive results, Cooper & Jacobs (2011) sound a note of caution. They cite research that found (a) practical barriers to the efficient use of FBA, with school-based personnel who were more likely to select negative and exclusionary strategies as a response to challenging behaviour; (b) serious flaws in the drawing up of plans, even after training sessions; (c) many school teams failing to link the function of the behaviours noted by the analysis in deciding on interventions; and (d) plans containing generalised lists of responses to behaviour, without reference to particular student needs. These weaknesses suggest the need for thorough training in the implementation of FBA.

5.12 Cognitive Behavioural Therapy

Cognitive Behavioural Therapy (CBT) is an active process of changing a person’s negative thinking patterns, which in turn leads to changes in behaviour and, ultimately, to a reduction or elimination of feelings of anxiety or depression. It is a brief, systematic form of psychotherapy that teaches people to change the way they think about themselves and act. It is based on the assumption that it is our thinking (hence *cognitive)* that causes us to feel and act (hence *behavioural)* the way we do. Therefore, if we are experiencing unwanted or destructive feelings and behaviours, we must learn how to replace the thinking that leads to them with more realistic or helpful thoughts that lead to more desirable behaviours (see National Association of Cognitive-Behavioral Therapists: http://www.nacbt.org/whatiscbt.htm and Wikipedia: http://en.wikipedia.org/wiki/Cognitive_therapy)

Originally developed for adults with depression or anxiety conditions, CBT has successfully been extended to children and adolescents in recent years. As with adults, it has also been used to treat depression and anxiety disorders, as well as aggressiveness, school refusal, and post traumatic stress disorders resulting from such events as sexual and physical abuse, divorce in the family, violence and natural disasters.

*Evidence***.** CBT is one of the most widely researched therapies for children and young people.

Of particular importance for educators, a meta-analysis of school-based studies was reported in 1999. This study surveyed 23 investigations of the effect of CBT on learners with hyperactivity-impulsivity and aggression. The mean effect size across all the studies was 0.74, with 89 percent of the studies reporting that those in treatment groups experienced greater gains than those in control groups. In all bar one of the studies, the children were treated in self-contained special classes in regular schools or in regular classes. All of the studies incorporated strategies designed to assist children increase self-control, mostly by using covert self-statements to regulate their behaviour (Robinson et al., 1999).

A recent English review reported similarly positive results for CBT (Pattison & Harris, 2006). This review reported on the research evidence on the outcomes of four approaches to counselling children and young people: CBT, person-centred, psychodynamic and creative therapies. More high quality evidence was found for the effectiveness of CBT than the other approaches. In a breakdown of the studies reviewed, CBT was found to be an effective therapy for the following problem areas: (a) behavioural and conduct disorders, (b) anxiety, school-related issues, self-harming practices, and sexual abuse.

In an earlier comprehensive summary of 14 meta-analyses of CBT carried out between 1983 and 1991, the effect size ranged from 0.15 to 0.99, with a mean of 0.66 (Lipsey & Wilson, 1993). A more recent meta-analysis, carried out by Dutch researchers, reviewed the outcomes of CBT for antisocial behaviour in children, as reported in 30 studies. The mean effect size was 0.48 at the end of treatment and 0.66 at follow-up (12 studies only reporting on this). There was a positive relationship between children’s age and effect size, suggesting that CBT is more effective with older children. Given the cognitive requirements of CBT, this is not altogether surprising. The researchers also commented that since the outcomes for CBT for children with antisocial behaviour appeared to be smaller than those achieved with parent management training, CBT might be more useful as a component of a multi-modal approach. They also mentioned that it could be combined with medication, which falls outside the coverage of the present review (van de Weil et al., 2002).

In their review, Cooper & Jacobs (2011) reported on research on the effects of CBT on children with anxiety disorders, which they referred to as ‘acting-in’ disorders as distinct from ‘acting-out’ disorders. Two studies they reviewed are particularly noteworthy:

Firstly, Schoenfeld & Janney (2008) completed a research review of school-based CBT for anxiety disorders and concluded as follows:

> The results of this intervention research are unequivocal: school-based intervention for anxiety disorders is effective. Students with anxiety disorders who participate in cognitive behavioural intervention at school emerge with fewer anxious symptoms than nonparticipants, and show similar effects to school-based cognitive-behavioural therapy as do peers who participate in off-campus interventions (p.598).

Secondly, Kendall (1994) illustrated the efficacy of clinic-based CBT for children with anxiety disorders in a randomised control study on the application of such an intervention on children aged nine to 13. Clinical psychology doctoral students conducted the interventions on a one-to-one basis over 16 sessions and included the following assisting the child to (a) recognise anxious feelings and somatic reactions to anxiety; (b) clarify cognition in anxiety-provoking situations (unrealistic or negative attributions and expectations); (c) develop a plan to help cope with the situation (modifying anxious self-talk into coping self-talk, as well as determining what coping actions might be effective); and (d) evaluating performance and administering self-reinforcement as appropriate. The intervention lasted eight weeks. The study findings indicated that children who underwent the intervention showed significantly better performance than controls on a battery of standardised tests that measured various dimensions, including self-reported depressive symptoms, negative affectivity, and ability to cope with stressful situations. These improvements maintained at follow-up after one year.

Cooper & Jacobs (2011) emphasise that these studies are clinic-based, not school-based, although they are accessible to school-based personnel.

5.13 FRIENDS Programme

Although CBT in general is probably of greater relevance to psychologists and counsellors than teachers, there is a notable exception: the FRIENDS programme, pioneered in Australia by Barrett and her colleagues (Barrett & May, 2007; Barrett et al., 1999), is an example of CBT. The FRIENDS acronym stands for:

F = feeling worried (self-monitoring skills)
R = relax and feel good (self-control skills)
I = inner helpful thoughts (self-management skills)
E = explore plans (skills for identifying options and making choices)
N = nice work, reward yourself (self-reinforcement skills
D = don’t forget to practice (maintenance skills)
S = stay calm for life (extended maintenance skills)

Barrett & May (2007) describe the FRIENDS programme as being:

> about preventing childhood anxiety and depression through the application of firm cognitive behavioural principles and the building of emotional resilience. It aims to reduce the incidence of serious psychological disorders, emotional distress and impairment in social functioning by teaching children and young people how to cope with, and manage, anxiety, both now and in later life (p.4).

It is both a treatment and a preventative programme and is employed with individuals or groups, directed at children and young people aged seven-16 years. As of 2007, FRIENDS was being used in over 300 schools and in more than 200 hospitals and area health services in Australia. As well, it has been taken up in several European countries, the US, the UK, Canada and Mexico.

Evidence. As noted by Cooper & Jacobs (2011), Barrett et al. (2006) describe a randomised control trial study. The main findings indicated significant reductions in anxiety symptoms that were maintained at 12-, 24- and 36-month follow-ups. Initially the effects on girls were significantly higher than for boys though this difference disappeared after 36 months. In another Australian investigation, Lowry-Webster et al. (2001) studied 594 students aged 10-13 attending seven secondary schools. The students were randomly-allocated by class group to either the FRIENDS programme embedded in the school curriculum or a comparison condition in which students had no exposure to the programme. Results showed children receiving the FRIENDS intervention reported fewer anxiety symptoms, regardless of their risk status, when compared to the comparison group. Similar positive findings were reported by Bernstein et al. (2005) in a study carried out with pupils aged seven-11 (n=453) from three USA schools who undertook the FRIENDS programme. They showed significantly decreased anxiety levels than controls, while those who underwent an enhanced version of FRIENDS, which included a parent training component, showed the best outcomes.

In another study, evidence reported by Barrett & Turner (2001) found no differential effect on student outcomes for students who received the FRIENDS intervention led by teachers compared with those led by psychologists. Cooper & Jacobs' (2011) conclusion is worth quoting at length:

> The findings from these robust studies indicate that the FRIENDS intervention is extremely effective for students with anxiety problems aged seven to 13. It is particularly effective for those with clinically-significant anxiety problems and low self-esteem, but has also been shown to be effective in improving the emotional coping skills of children and young people in the general population. In this sense FRIENDS can be seen to combine the best qualities of a therapeutic programme with a general life skills intervention that can be incorporated into the regular curriculum for all students. One of its many advantages is that it allows for vulnerable students to receive direct support without their having to be singled out and possibly stigmatised (Lowery-Webster, 2001).

5.14 Review and Practice

Review and practice require planning and supervising opportunities for students to encounter the same skills or concepts on several occasions, preferably in different contexts. This is to ensure that they become readily available in their primary memory and/or their long-term memory. A basic assumption of this strategy is that 'one-shot' learning is a rare occurrence. Rather, for much of our learning we require repeated experiences of the skill or the concept for it to be grasped and retained.

Evidence. In a comprehensive meta-analysis of 93 intervention studies targeting adolescents with learning disabilities, the single most important strategy was found to be explicit practice, defined as 'treatment activities related to distributed review and practice, repeated practice, sequenced reviews, daily feedback, and/or weekly reviews' (Swanson & Hoskyn, 2001). Similarly, a recent synthesis examined 24 studies of effective interventions for building reading fluency with elementary students with learning disabilities. One of the main factors that emerged was multiple opportunities to repeatedly read familiar text independently and with corrective feedback. This led to improvements in the automatic processing of text and, hence, to improved speed and accuracy (i.e., fluency) (Chard et al., 2002).

5.15 Formative Assessment

There is a tension between the need for schools to ascertain students' level of achievement for accountability and reporting purposes and the need to take account of what is best educationally for the students (Bauer et al., 2003). This distinction is sometimes referred to 'assessment *of* learning' (or summative assessment), compared with 'assessment *for* learning' (or formative assessment) (Harlen, 2007; Watkins &

D’Alessio, 2009). If the purpose is to compare students against pre-determined standards, then the former is best suited; if the purpose is to improve learning, the latter should be used. However, sometimes assessment serves both summative and formative purposes. How one classifies the two types depends on the extent to which assessment leads to feedback that enables learners to improve their performances. The more it does this, the more justified is its classification as formative assessment.

Evidence. There is evidence to suggest that formative assessment has a positive effect on learning outcomes for students with special educational needs. Three US studies will serve as examples of such research. Firstly, in an early meta-analysis of 21 studies of the effects of formative evaluation, an effect size of 0.70 was obtained. However, when formative evaluation was combined with positive reinforcement for improvement (i.e., feedback), the effect size was even higher at 1.12 (Fuchs & Fuchs, 1986). Secondly, a study using a formative evaluation system with low-achieving students in a large urban school system resulted in significant gains in math achievement (Ysseldyke, 2001). Thirdly, there is evidence to show that teachers trained in formative assessment are more open to changing their instructional strategies to promote learners’ mastery of material (Bloom et al., 1992). Furthermore, it has been shown that without formative assessment, teachers’ perceptions of learners’ performances are often erroneous (Fuchs et al., 1984).

5.16 Feedback

The other side of the formative assessment coin is feedback. Indeed, the whole point of formative assessment is to provide feedback to students, as well as to the teacher. It is important that teachers convey a sense that feedback is intended to be helpful, not embarrassing, and that it is part of the joint search for success. For this reason, errors can be tolerated as they provide good information on learners’ current levels of understanding and misunderstanding. The purposes of feedback are to motivate learners, to inform them how well they have done, and, above all, to show them how they could improve. To achieve these purposes, feedback should be: timely, explicit, and focused on strategy use, rather than on the student’s ability or effort.

Evidence. After synthesising a large number of studies on the effects of a wide range of influences on learner achievement, Hattie (2003) found 139 that focused on feedback. With an effect size of 1.13, this was the most powerful of all the influences on achievement. He concluded that ‘the simplest prescription for improving education must be ‘dollops of feedback’ – providing information how and why the child understands and misunderstands, and what directions the student must take to improve'. Although Hattie's meta-analysis was not focused on students with special educational needs, let alone those with complex needs, the results are highly likely to apply to such learners.

5.17 Social and Emotional Learning Programmes

A range of programmes fall under the broad rubric of social and emotional learning (SEL) programmes. Durlak et al. (2011) cite the following: Elias et al. (1997) defined SEL as the process of acquiring core competencies to recognise and manage emotions, set and achieve positive goals, appreciate the perspectives of others, establish and maintain positive relationships, make responsible decisions, and handle interpersonal situations constructively. SEL programmes aim to foster the development of five interrelated sets of cognitive, affective, and behavioural competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Collaborative for Academic, Social, and Emotional Learning, 2005). These competencies, in turn, should provide a foundation for more positive social behaviours, fewer conduct problems, less emotional distress, and improved test scores and grades (Greenberg et al., 2003). Further, over time, mastering SEL leads to a shift from being predominantly controlled by external factors to acting increasingly in accord with internalised beliefs and values, caring and concern for others, making good decisions, and taking responsibility for one's choices and behaviours (Bear & Watkins, 2006). Through systematic instruction, SEL skills may be taught, modelled, practiced, and applied to diverse situations so that students use them as part of their daily repertoire of behaviours (Ladd & Mize, 1983; Weissberg et al., 1989). In addition, many programs help students apply SEL skills in preventing specific problem behaviours such as substance use, interpersonal violence, bullying, and school failure (Zins & Elias, 2006).

In the mid-1990s, a Collaborative for Academic, Social, and Emotional Learning (CASEL) was formed in the US, with the goal of establishing high-quality, evidence-based SEL as an essential part of preschool through high school education. CASEL's 39 Guidelines for Educators cover four primary domains: (1) life skills and social competencies, (2) health promotion and problem-prevention skills, (3) coping skills and social support for transitions and crises, and (4) positive contributory service (see Elbertson et al., 2010; Elias et al., 1997).

As noted by Durlak et al. (2011), in the US the Academic, Social, and Emotional Learning Act authorises the Secretary of Education to establish a National Technical Assistance and Training Center for Social and Emotional Learning to, inter alia, identify, promote, and support evidence-based SEL standards and programming in elementary and secondary schools. An example of the uptake of SEL is provided by Illinois, which became the first state to require every school district to develop a plan for implementing SEL programmes in their schools.

Parallel developments have also occurred in the UK. For example, Humphrey et al. (2008) recently reported on their evaluation of the Primary Social and Emotional Aspects of Learning (SEAL) work, which, at the time of writing, was being used in more than 80 percent of primary schools across England. They described SEAL as being ‘a comprehensive, whole-school approach to promoting the social and emotional skills that are thought to underpin effective learning, positive behaviour, regular attendance, and emotional well-being’ (p.5). It is delivered in three ‘waves of intervention’. The first wave centres on whole-school development work designed to create the ethos and climate in which social and emotional skills can be promoted. The second wave involves small group intervention for children who are thought to need additional support to develop their social and emotional skills. The third wave involves one–to-one intervention with children who have not benefitted from the previous two waves. These may include children at risk of or experiencing mental health issues.

A third example of a SEL programme is described by Brackett et al. (2010) in their description of the RULER Feeling Words Curriculum (RULER refers to Recognise emotions in oneself and in other people, Understand the causes and consequences of a wide range of emotions, Label emotions using a sophisticated vocabulary, Express emotions in socially appropriate ways, and Regulate emotions effectively). RULER helps students to learn these skills by integrating formal lessons and opportunities to practice them into regular classroom instruction. As with all SEL programmes, it is assumed that the ability to process emotional information enhances cognitive activities, promotes well-being, and facilitates social functioning.

Evidence. A recent comprehensive meta-analysis carried out by Durlak et al. (2011), involved 213 school-based SEL programmes involving 270,034 kindergarten through high school students. They concluded that ‘compared with controls, SEL participants demonstrated significantly improved social and emotional skills, attitudes, behaviour, and academic performance that reflected an 11-percentile-point gain in achievement’ (p.405).

In a second study, Humphrey et al. (2008) reported on their evaluation of the second wave of SEAL (see above). They found that there was statistically significant evidence that the small group work in primary-level SEAL had a positive impact on, for example, children's overall emotional literacy; staff-rated self-regulation; pupil-rated empathy, self-regulation and social skills. As well, there were reductions in pupil-rated and staff-rated peer problems.

However, a recently published UK study of secondary social and emotional aspects of learning (SEAL), a programme that was launched in 2007, gives pause for thought (Wiggelsworth et al., 2012). The aim of this study was to examine the impact of SEAL on outcomes such as social and emotional skills, behaviour and mental health difficulties. The study utilised a quantitative, quasi-experimental design with a sample of 22 schools (approximately 2,360 pupils) implementing the SEAL programme, and 19 matched comparison schools (approximately 1,991 pupils), selected on the basis of similar school-level characteristics. A cohort of pupils in these schools completed annual self-rated assessments of their social and emotional skills, mental health difficulties and prosocial behaviour over a two-year period. After controlling for a range of school- and pupil-level characteristics, analysis using multi-level modelling indicated marginal, non-significant effects of the SEAL programme on students' social and emotional skills and mental health difficulties, and no significant effect on their prosocial behaviour. The study's findings are discussed in relation to existing evidence about the effectiveness of the SEAL programme and the broader SEL evidence base. Several reasons for the discrepancy between this UK study and the mainly positive US studies are put forward. Firstly, there is the issue of cultural transferability. Secondly, a distinction can be drawn between the US studies, which have mainly been 'efficacy' studies, i.e., well-controlled, well-supported studies, compared with the Wigglesworth et al. study, which was an 'effectiveness' study, i.e., carried out in real-life settings with limited resources. Thirdly, the UK study, in comparison with most other studies, had a superior control of a large number of variables. Their conclusion is pertinent not only to SEAL, but to many other interventions outlined in the present review: it is essential that there be a rigorous collection and use of empirical evidence through randomised controlled trials before programmes are brought to scale.

Another study investigated the impact of a 30-week implementation of the RULER programme (see above) with 5th and 6th grade students in three US schools (Brackett et al., 2010). It was found that students in classrooms in which the RULER programme was integrated had higher end-of-year grades and higher teacher ratings of social and emotional competence compared to students in the comparison group.

5.18 Early Intervention[10]

In 2011, a report from the Prime Minister's Chief Science Advisor, Sir Peter Gluckman, included the following:

> The evidence shows that the risk of impulsive and antisocial behaviour is greatly increased by experiences earlier in life. It is now clear that early childhood is the critical period in which executive functions such as the fundamentals of self-control are established. Children who do not adequately develop these executive functions in early life are more likely to make poor decisions during adolescence, given the inevitable exposures to risk in the teenage years. It is very clear from our review of the literature that more can be done to improve socialisation and executive function development by reorientation of early childhood programmes. Further, while all children will benefit from these programmes, the evidence is compelling that targeting intensive but costly interventions towards the higher-risk sections of the community has a high rate of social and economic return. Hence the critical importance of adopting a life-course approach to prevention (p.1).

And, further:

> Social investment in New Zealand should take more account of the growing evidence that prevention and intervention strategies applied early in life are more effective in altering outcomes and reap more economic returns over the life course than do strategies applied later. This will require long-term commitment to appropriate policies and programmes (p.2).

As well, in New Zealand, the policies, *Ka Hikitia – Managing for Success: The Māori Education Strategy 2008-2012* and the *Pasifika Education Plan 2008–2012* both indicate a strategic focus on earlier identification of and intervention for children with specific barriers to learning.

The above sentiments are widely echoed in the international literature. Most recently, an authoritative Cochrane review focused on behavioural and cognitive-behavioural group-based parenting programmes for early-onset conduct problems (Furlong et al. 2012). It is worth quoting at length:

> This review includes 13 trials (10 RCTs and three quasi-randomised trials), as well as two economic evaluations based on two of the trials. Overall, there were 1078 participants (646 in the intervention group; 432 in the control group). The results indicate that parent training produced a statistically significant reduction in child conduct problems, whether assessed by parents or independently assessed. The intervention led to statistically significant improvements in parental mental health…and positive parenting skills, based on both parent reports. Parent training also produced a statistically significant reduction in negative or harsh parenting practices according to both parent reports and independent assessments….Moreover, the intervention demonstrated evidence of cost-effectiveness. When compared to a waiting list control group, there was a cost of approximately $US2500 (GBP 1712; EUR 2217) per family to bring the average

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[10] For the purposes of this review, early intervention is defined as intervening as soon as children manifest complex needs or are considered to be at risk for conduct problems at the beginning of their school career. It is beyond the scope of the review to investigate the period from birth to school entry.

> child with clinical levels of conduct problems into the non-clinical range. These costs of programme delivery are modest when compared with the long-term health, social, educational and legal costs associated with childhood conduct problems. Conclusion: Behavioural and cognitive-behavioural group-based parenting interventions are effective and cost-effective for improving child conduct problems, parental mental health and parenting skills in the short term. Further research is needed on the long-term assessment of outcomes.

In a further review, Buckley (2009), from the US Department of Education's Institute of Education Science, concluded that 'a substantial body of research has shown that the early onset of behavioural and mental health problems during elementary school is associated with an increased risk for subsequent severe behaviour and academic problems' (p.195). Buckley goes on to note research that shows that 'in the absence of effective intervention, many students who exhibit serious behavior problems in the early elementary grades…develop more significant antisocial and disruptive behavior patterns by the upper elementary or middle school grades' (p.195).

In a similar vein, one of Church's (2006) major conclusions in his review was that 'in order to prevent antisocial children growing up to become antisocial adults, it is desirable that such children be identified as early as possible and as soon as the first signs of antisocial development begin to appear' (p.50). He went on to note that 'improvements in our ability to detect antisocial development probably means that we could identify, by about age 5 if not sooner, a majority of those children who, without suitable intervention, are likely to be at high risk of life-course persistent antisocial behaviour problems' (p.66). He cites research by Fergusson et al. (1993) to the effect that antisocial behaviour early in a child's school career is the single best predictor of delinquency in adolescence.

Church reviews several early intervention programmes targeting 'antisocial' children, some based in New Zealand. These will not be reviewed here, but suffice to note some of his key conclusions:

- The research reviewed in this report indicates fairly clearly that it is possible to identify children with early onset antisocial development prior to school entry. This means that early intervention designed to prevent further antisocial development is demonstrably feasible.
- The research reviewed in this section indicates that home and school interventions are more effective in halting and reversing antisocial development than interventions in the home only or the school only.
- The research reviewed in this section suggests that well designed home and school interventions, which reach the child before the age of 7, may succeed in returning the antisocial child to a normal developmental trajectory in 70 to 80 per cent of cases. (p.94)

- Schools should identify their antisocial children as early in their school career as possible. This is because the task of reversing antisocial development becomes increasingly difficult the older the child becomes (p.114).

In his estimate of the financial impact of delaying treatment, Church concluded that the cost of halting antisocial development and returning the child to a normal developmental pathway at each age level increases from $5,000 at age 5 to $12,000 at age 10 and then to $60,000 at age 15. He recognised that these were estimates only and that more detailed analyses were needed. 'Nevertheless', he stated, 'it does seem highly likely that the costs of halting and reversing antisocial development will be found to fall on an exponential curve over the ages three to 17 years' (p.156).

A similar position to Church's regarding the importance of early intervention is taken by Meyer & Evans & (2006) in their review of the literature on interventions with children with developmental disabilities. They refer to the UK work of Murphy et al. (2005). According to Meyer & Evans, this research 'presented perhaps the most powerful evidence available to date of the consequences for a child, the family and the community if challenging behaviour at a young age is ignored or allowed to escalate into the middle childhood years' (p.16). In their investigation of challenging behaviour in those with severe intellectual disabilities and/or autism, Murphy et al. followed up a large sample of children aged 15 years or younger twelve years later. Children who were labelled socially impaired in the earlier period later evidenced significantly greater abnormal behaviour. Later high levels of abnormal behaviour were predicted by the earlier presence of one or more of the following factors: a diagnosis of autism/autistic spectrum disorders, social impairment, limited expressive language, and abnormal behaviour. Meyer & Evans conclude that 'Their evidence supports systematic and early intervention with young children who present these factors as a priority, particularly given the pervasive impact of challenging behaviours on the child and his/her family' (p.17).

5.19 The Hei Āwhina Matua project

This project is an example of an approach targeting Māori children and youth who have developmental disorders and serious challenging behaviours. It focuses on developing positive and effective behaviour management strategies and educational resource materials to address the needs of Māori children of all ages in a culturally appropriate way (Berryman & Glynn, 2004).

5.20 Multi-component Programmes

A few studies have investigated the impact of two or more teaching strategies on learners' academic achievement and social behaviours, without giving them a programme name, such as in those mentioned above. Many of them have combined cognitive strategy instruction with another type of intervention, including direct instruction (Swanson, 2000), information and communications technology (Woodward & Rieth, 1997), phonological training (Lovett et al., 2000), and cooperative group teaching (Swanson, 2000). One Canadian study looked at the combination of three strategies: cooperative group teaching, teacher collaboration and parent involvement (Saint-Laurent et al., 1998).

Recent UK evidence shows that teachers who are effective in teaching disadvantaged learners demonstrate skills in a 'bundle' of strategies, many of which have already been referred to. They:

- Have *excellent organisational skills*: teachers have clear learning objectives for lessons and make sure their learners understand them. They also organise their resources well and have clear, well-established and smooth classroom routines.
- Establish a *positive classroom climate*: teachers have positive relationships with their learners and create happy classrooms with mutual respect and positive expectations for achievement.
- *Personalise their teaching:* teachers are sensitive to the needs and interests of their pupils and provide a variety of resources to suit individual pupils.
- Use *dialogic teaching and learning*: pupils work collaboratively, receive evaluative feedback from their teachers (and from their peers) and spend more time learning.
- Make more frequent *use of the 'plenary'*: teachers use whole class methods to provide feedback and to allow further discussion.

5.21 Summary

1. *The inclusive classroom is an essential component of the comprehensive ecological approach to working with students with complex needs.*
2. *There are universal needs i.e., those shared by all children; semi-universal needs, i.e., those shared by all children with special needs; specific needs, i.e., those that are specific to all children falling into a particular category (e.g., those with complex needs); and needs that are unique to each individual child.*
3. *All students, including those with special needs, benefit from a common set of strategies, even if they have to be adapted to take account of varying cognitive, emotional and social capabilities. What is required is the systematic, explicit and intensive application of a wide range of effective teaching strategies.*

4. *Response to Intervention (US) and Graduated Response (England) models involve consideration of an individual student's response to instruction across multiple (three or four) tiers of intervention:*

   Tier I: core classroom instruction.

   Tier II: supplemental (or secondary) instruction.

   Tier III: instruction for intensive intervention (tertiary).

   Tier IV: highly specialised intervention.

5. *Educators are increasingly expected to be responsible not only for helping students to achieve the best possible outcomes, but also for using the most scientifically valid methods to achieve them.*
6. *Evidence-based teaching strategies may be defined as 'clearly specified teaching strategies that have been shown in controlled research to be effective in bringing about desired outcomes in a delineated population of learners.'*
7. *As with all students, those with complex needs should be provided with an education that enables them to acquire academic skills such as literacy and numeracy, as well as maximise their emotional well-being and positive social functioning.*
8. *Strategies and programmes that have a strong evidential base include:*
   - *Adapted curricula*
   - *Assessment*
   - *Cooperative group teaching*
   - *Peer tutoring and peer support*
   - *Classroom climate*
   - *Social skills training*
   - *Cognitive strategy instruction*
   - *Self-regulated learning*
   - *Behavioural approaches*
   - *Functional behavioural assessment*
   - *Cognitive behavioural therapy*
   - *Review and practice*
   - *Formative assessment*
   - *Feedback*
   - *Social and emotional learning programmes*
   - *Early intervention*
   - *The Hei Āwhina Matua project*
   - *Multi-component programmes.*

CHAPTER SIX

THE CHILD IN THE WHOLE-SCHOOL

6.1 Introduction

So far, we have looked at the child in the context of the microsystem of the family and the exosystem of the inclusive classroom. We now turn to an extension of the exosystem, the school as a whole.

This chapter will consider the following whole-school approaches to working with children with special educational needs, particularly those with complex needs:

6.2 School culture
6.3 School-wide Positive Behaviour Support
6.4 Success for All
6.5 Check and Correct
6.6 Wraparound (See Chapter Two)
6.7 The full-service school (see Chapter Two)
6.8 Health-promoting Schools (see Chapter Two)

6.2 School Culture[11]

Creating a positive school culture, or *ethos*, involves developing and implementing goals for the school. These goals will reflect the shared values, beliefs, attitudes, traditions and behavioural norms of its members, particularly those who are in leadership positions. In terms of inclusive schools, this means (a) developing a strong commitment to accepting and celebrating diversity, (b) developing a sensitivity to cultural issues, and (c) setting high, but realistic, standards of achievement and behaviour.

The idea that individual schools have unique cultures is a relatively recent arrival on the educational scene. Drawn from anthropological and organisational research, and the social psychology of schooling, it provides a powerful tool for understanding and influencing many of the behaviours that take place in schools. Sometimes, a school’s culture is expressed in a formal vision statement, in other school documents, or in pronouncements of school leaders. Mostly, however, it is unspoken and is shown in the interactions that take place in classrooms, in the playground during recesses, in the staffroom, and in the community. In general, a school’s culture is a characteristic of the school as an organisation and not of the accumulation of individual personalities (i.e., the whole is greater than the sum of the parts), although all members of the school community contribute to forming its culture (Lindsay & Muijs, 2006).

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[11] Based on Mitchell (2008).

Evidence. A recent British study investigated the ways in which schools in a local education authority addressed underachievement in boys, focusing on three groups causing most concern: black Caribbean, black African and white UK boys. Three primary and three secondary schools that were producing results above expectation were studied. The results showed that these successful schools stressed (a) an inclusive ethos; (b) overall school effectiveness; (c) a broad, diverse curriculum; (d) monitoring of individual performances; (e) high, but realistic expectations; and (f) strong connections with parents (Lindsay & Muijs, 2006).

In a qualitative study of a US elementary school, the relationship between school culture and inclusion was analysed. The researchers found three underlying characteristics of the school's culture to be related to the success of its inclusion programme: (a) an inclusive leader, who employed a democratic approach and had a clear set of values; (b) a broad vision of the school community, shown by including families as well as the wider community in every aspect of the school; and (c) shared language and values, shown, for example, in widespread use of the phrase, 'a school for everyone' (Zollers et al., 1999).

In another qualitative study, three US schools were studied over a school year, with the aim of examining leadership in inclusive education for a range of learners with severe disabilities. The study looked at who carried out six leadership functions: (a) providing and selling a vision, (b) providing encouragement and recognition, (c) obtaining resources, (d) adapting standard operating procedures, (e) monitoring improvement, and (f) handling disturbances. The results showed that multiple individuals, including those who did not have formal authority in the schools, carried out these leadership roles (Mayrowetz & Weinstein, 1999).

See also Gregory et al. (2007) for a review of how 'school climate' can facilitate the implementation of preventative intervention.

6.3 School-wide Positive Behavioural Support[12]

School-wide Positive Behaviour Support (SW-PBS) is a behaviourally-based, proactive approach to building an entire school community's capacity to deal with the wide array of behavioural challenges. It is widely implemented in the US (in over 13,000 schools as of 2010, according to Simonsen et al., 2011). As well, it is currently being implemented in 200 New Zealand schools, with plans to expand it to at least another 200 schools in the next two years.

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[12] Based on Mitchell (2008).

SW-PBS is a systems approach, which emphasises (a) the prevention and reduction of chronic problem behaviour, (b) active instruction of adaptive skills, (c) a continuum of consequences for problem behaviours, and (d) interventions for learners with the most intractable problem behaviours (Horner et al., 2005). As such, it is a cluster of effective strategies, centring on the school as an organisation, and aimed at enhancing the quality of life of all its members (Carr et al., 2002).

There is a growing body of evidence that by developing a proactive, school-wide system that incorporates these strategies, SW-PBS can be effective in decreasing the level of problem behaviour. Such an approach recognises that a school has its own unique culture, as described above, and is a complex organisation comprising (a) people of varying ages, abilities and authority, (b) environments ranging from classrooms to cafeterias, (c) policies, (d) routines, and (e) procedures, all of which must function as a coordinated whole (Sprague et al., 2001).

A core feature of SW-PBT is that it is a team-based systems approach, with a school-wide plan. It is as much concerned with fixing problem contexts as problem behaviours. This requires all members of the school staff (including bus drivers, caretakers/janitors, etc.) to work together on a common agenda of goals and approaches to learners' behaviour. To achieve this, several factors are very important: school leadership, administrative support, on-site professional development for staff, and consistency across all staff members. It is a good idea to set up a school-wide support team to guide and direct the process.

It is important that one of the main roles of SW-PBT be seen as preventing problem behaviours from occurring or from becoming more serious, chronic conditions. Within this prevention theme a three-tiered approach is typically taken (Freeman et al., 2006); OSEP Technical Assistance Center on Positive Behavioral Interventions and Support; Lewis & Sugai, 1999). Derived from models of delivering health services in the community, this involves setting up a continuum of behaviour support practices in a school, with three levels: primary, secondary and tertiary prevention. *Primary or universal prevention strategies* have the goal of creating a positive social culture and preventing new cases of problem behaviour from occurring. It does this by involving all students and all adults within all school settings. It does not require individual students to be identified. Approximately 80 percent of the student population are targeted at this level. *Secondary prevention strategies* recognise that primary prevention does not work for all students. They are aimed at identifying and supporting about 15 percent of individual students who are at risk of engaging in more serious problem behaviour before they reach that stage. *Tertiary prevention strategies* focus on the smaller number of students (about 5 percent) who engage in serious and chronic problem behaviour and who require intensive, individualised intervention. Put another way, the three levels equate with universal support, group support and individual support, respectively. It should be noted that in SW-PBS learners who receive group or individual support also participate in universal support programmes (Horner et al., 2005; Turnbull et al., 2002; Bambara & Lohrman, 2006).

Evidence. A range of research has been carried out into outcomes of SW-PBS. All of the following studies were conducted in the US:

A recent randomised controlled study reported on its effectiveness in 37 elementary schools over a five-year period (Bradshaw et al., 2010). It was found that schools trained in SW-PBS implemented the model with high fidelity and experienced significant reductions in student suspensions and discipline referrals.

An earlier study carried out in a rural middle school catering for 6th, 7th and 8th grade students evaluated a SW-PBS programme designed to define, teach, and reward appropriate behaviour. In the beginning of the first year of the programme the students were taught school expectations. Throughout the year, they received rewards for appropriate behaviour and office referrals for infractions. Results showed a 42 percent reduction in office referrals compared with the previous year when no interventions were carried out (Taylor-Greene et al., 1997).

A third study reported on a project aimed at assisting elementary and middle schools to implement a school-wide discipline plan based on the Effective Behaviour Support model (Sugai & Horner, 1994) and the Second Step violence prevention curriculum (Grossman et al., 1997) with all students in the school. Nine treatment and six comparison schools were studied. The results showed greatly reduced office referrals for unacceptable behaviour and improved social skills knowledge for learners in the treatment schools (Sprague et al., 2001).

The purpose of a fourth study was to explore the effects of a proactive school-wide discipline approach on the frequency of problem behaviour exhibited by elementary students. Specifically, the study was designed to explore the impact of a social skill instruction programme, combined with active supervision and direct intervention on problem behaviours, across three specific school settings: cafeteria, recess, and a hallway transition. Results showed that educators reduced the rate of problem behaviours across each targeted setting (Lewis et al., 1998).

In the context of the present review, it is noteworthy that little evaluation research has been carried out on the effects of SW-PBS on the behaviours of individual students with the most significant disabilities (Freeman et al., 2006).

Also, there appears to be little work carried out into how SW-PBS can be integrated with cultural responsiveness. Vincent et al. (2011) have addressed this issue, proposing an expansion of SW-PBS to facilitate culturally responsive behaviour support programmes. They suggest '(a) systematically promoting staff members' cultural knowledge and self-awareness, (b) commitment to culturally relevant and validating student support practices, and (c) culturally valid decision-making to enhance culturally equitable student outcomes' (p.219). Vincent & Tobin (2011) have actually carried out an investigation into the relationship between the implementation of SW-PBS and disciplinary exclusions of students from various ethnic backgrounds. They found that whereas SW-PBS in the classroom was associated with decreased exclusions in elementary schools, its implementation in non-classroom settings appeared to be associated with decreased exclusion in high schools. They note that 'although overall exclusions decreased, white students appeared to benefit the most from this decrease, whereas African American students remained over-represented in exclusions, in particular long-term exclusions' (p.217).

6.4 Success for All

According to Slavin & Madden (2007), Success for All is widely used: as of Fall 2006 it was in use in more than 1,200 schools in 47 states in the US, as well as in schools in Britain, Canada, and Israel. They claim that 'it is by far the largest research-based, whole-school reform model ever to exist' (p.1). Slavin & Madden go on to describe Success for All in the following terms:

> Success for All is built around the idea that every child can and must succeed in the early grades, no matter what this takes. The idea behind the program is to use everything we know about effective instruction for students at risk to direct all aspects of school and classroom organization toward the goal of preventing academic deficits from appearing in the first place; recognizing and intensively intervening with any deficits that do appear; and providing students with a rich and full curriculum to enable them to build on their firm foundation in basic skills (p.4).

The major elements of Success for All may be summarised as follows:

- *A school-wide reading curriculum:* during reading periods, students are regrouped across agelines so that each reading class contains students at the same reading level;

- *Tutors:* In grades 1-3, specially trained teachers and paraprofessionals work one-to-one with any students who are failing to keep up with their classmates in reading. Tutorial instruction is closely coordinated with regular classroom instruction. It takes place 20 minutes daily;
- *Quarterly assessments:* Information is obtained on reading progress, which is then used to suggest alternative teaching strategies, changes in reading group, the provision of tutoring, etc.;
- *Solutions team:* A Solutions Team works in each school to help support families in ensuring the success of their children, focusing on parent education, parent involvement, attendance, and student behaviour.
- *Facilitator:* A programme facilitator works with teachers to help them implement the reading program, manages the quarterly assessments, assists the Solutions Team, makes sure that all staff are communicating with each other, and helps the staff as a whole make certain that every child is making adequate progress. (Slavin & Madden, 2007, p.38)

Evidence. According to Slavin & Madden (2007):

> Success for All is arguably the most extensively evaluated school reform model ever to exist. Experimental-control comparisons have been made by researchers at eighteen universities and research institutions …, both within the U.S. and in five other countries. Taken together, more than 50 studies have compared Success for All and control schools on individually administered standardized tests and on state accountability measures (pp.16-17).

A meta-analysis of research on 29 comprehensive school reforms by Borman et al. (2003) listed Success for All among three models with the strongest evidence of effectiveness.

Borman and his colleagues have carried out other research, most recently a US Department of Education-funded evaluation involving 41 Title I schools throughout the US (Borman et al., 2005; Borman et al., 2007). Schools were randomly assigned to use Success for All or to continue with their existing reading programmes in grades K-2. At the end of the three-year study, children in the Success for All schools were achieving at significantly higher levels than control students on measures of reading, with effect sizes ranging from 0.21 to 0.38.

In an earlier study, Slavin & Madden (1993) found that for students in general, effect sizes in favour of Success for All averaged around half a standard deviation at all grade levels. Importantly for the present review, they reported that effect sizes for students in the lowest 25 percent of their grades were particularly positive, ranging from ES=+1.03 in first grade to ES=+1.68 in fourth grade.

Cooper & Jacobs (2011) point out that there has been considerable interest in Success for All in the UK as it ‘echoes and addresses many of England’s National Literacy Strategy (NLS) requirements’ (p.90). They describe a two-year pilot scheme carried out in Nottingham in 1997 in five primary and one secondary school in an area of considerable deprivation (Hopkins et al., 1999). In years one to three, these students performed considerably better than expected, although impressive gains waned in each of the following three years. In addition, behavioural improvements were noted in the intervention schools. Cooper & Jacobs describe a further two small-scale studies in the UK, noting that while they ‘suggested persuasively that the programme was efficient, especially in the early years and especially in literacy, they were limited in scope and design and there were no randomised controlled trials’ (p.90).

Cooper & Jacobs cite other critiques of Success for All. For example, Pogrow (2002) argued that such programmes are too costly and too prescriptive, while Walberg & Greenberg (1999) and Jones et al., (1997), challenge the evidence base, methodology and outcomes of Success for All. Despite the critics, however, Cooper & Jacobs observe that other more recent independent comparative studies (Correnti & Rowan, 2007) are more forgiving and supportive.

6.5 Check and Connect

Check and Connect is a dropout prevention programme developed by Sandra Christensen and her colleagues at the University of Minnesota. It is currently being used in some New Zealand schools.

The programme has some similarities with Success for All, as can be seen in the following description. Check and Connect relies on close monitoring of students’ school performance, as well as mentoring and case management. The ‘Check’ component is designed to continually assess students’ engagement through close monitoring of their performance. The ‘Connect’ component involves the programme staff giving individual attention to students, in partnership with school personnel, family members, and community service providers. Each student in the programme is assigned a ‘monitor’, who functions as a mentor, regularly reviewing their performance and behaviour, and intervening when problems are identified. Intensive intervention focuses on three areas: problem-solving (including social skills development), academic support (through homework assistance and tutoring, for example), and recreational and community service exploration. As well, Check and Connect includes family outreach, with frequent contact and collaboration between home and school.

Evidence. According to the US Department of Education's What Works Clearinghouse (US Department of Education, 2006), one study of Check and Connect met its evidence standards. This was a randomised controlled trial that included 94 high school students from Minnesota schools with learning, emotional, or behavioural disabilities. The students were randomly assigned to treatment and control groups, both groups receiving Check and Correct in the 7th and 8th grades, but only the treatment group continued to receive these services in the 9th grade. The results were in favour of the Check and Connect group in the two domains of interest: staying in school and progressing in school (Sinclair et al., 1998).

No other studies of Check and Correct, apart from those carried out by Christenson and her colleagues were identified in preparing this review.

Since Chapter Two presented detailed analyses of other 'joined-up', whole-school approaches, it will be sufficient to summarise them here:

6.6 Wraparound

Wraparound refers to a system-level intervention that quite literally aims to 'wrap' existing services around children and young people and their families to address their problems in an ecologically comprehensive and coordinated way.

6.7 Full-service Schools or Community Schools

These are 'one-stop' schools that integrate education, medical, social and/or human services to meet the needs of children and youth and their families on school grounds or in locations that are easily accessible. They necessitate information sharing between agencies, the appointment of a lead professional, developing common assessment frameworks, and creating a common core of training for the professionals involved. They vary in character according to the nature of the communities they serve and the availability and commitment of various agencies. They require consideration of such issues as (a) management of the programme, (b) establishing mechanisms for collaboration, (c) building from localities outwards; (d) avoiding the potential for schools to 'colonise' the system, (e) avoiding undue reliance on the medical model, (f) determining the financing model, and (g) evaluating outcomes.

6.8 Health-promoting Schools

These schools engage health and education officials, teachers, students, parents and community leaders in efforts to promote health through strengthening schools' capacities as healthy settings for living, learning and working. As with other variants of joined-up approaches, health-promoting schools are concerned with establishing partnership and collaboration not only between different sectors at the national and regional levels, but also with everyone involved in the everyday life of the schools.

6.9 Student Support Committees

In order to manage their responses to students with special educational needs, including those with complex needs, schools need to set up a management structure of some kind. Finland provides a good model for such a structure with its Student Support Groups in all schools. These groups are chaired by the school principal and contain the school's special education personnel, as well as local authority representatives. The groups are responsible for monitoring the progress of all students with special educational needs and for making recommendations regarding any out-of-school placements (Hautamaki, et al., 2008). Similar committees also exist in many New Zealand schools.

6.10 Summary

1. *This chapter examines how the whole school and its wider community can be harnessed to provide a comprehensive range of services for all children, particularly those at risk, including those with complex needs.*
2. *The culture of the school as an organisation plays a critical role in determining the philosophy of care and education for students with special educational needs.*
3. ***School-wide Positive Behaviour Support** is a systems-oriented, proactive approach to building an entire school community's capacity to deal with the wide array of behavioural challenges. It is widely implemented and well founded in research.*
4. ***Success for All** is a widely used, research-supported programme aimed at preventing school failure or intervening when deficits occur. It focuses on reading, and includes regular assessments, a solutions team to support parents, and a facilitator to work with teachers.*
5. ***Check and Connect** is a drop-out prevention programme that relies on close monitoring of students' school performance, as well as mentoring and case management.*
6. ***Wraparound** refers to a system-level intervention that quite literally aims to 'wrap' existing services around children and young people and their families to address their problems in an ecologically comprehensive and coordinated way. (See Chapter Two.)*
7. ***Full-service** or **community schools** are 'one-stop' schools that integrate*

education, medical, social and/or human services to meet the needs of children and youth and their families on school grounds or in locations that are easily accessible. They necessitate information sharing between agencies, the appointment of a lead professional, developing common assessment frameworks, and creating a common core of training for the professionals involved. They vary in character according to the nature of the communities they serve and the availability and commitment of various agencies. (See Chapter Two.)

8. ***Health-promoting schools** engage health and education officials, teachers, students, parents and community leaders in efforts to promote health through strengthening schools' capacities as healthy settings for living, learning and working. (See Chapter Two.)*
9. ***Student Support Committees** should be set up in all schools to monitor the progress of all students with special educational needs, including those with complex needs.*

CHAPTER SEVEN

THE CHILD IN SPECIAL/OUT-OF-HOME PLACEMENTS

7.1 Introduction

As noted by Lane et al. (2008), ‘students with emotional and behavioral disorders (EBD) commonly engage in behaviors (e.g., verbal and physical aggression; social skills acquisition and performance deficits) that negatively influence both their ability to successfully negotiate peer and adult relationships and their educational experience’ (p.44). These behaviours are often deemed to be beyond the capacity of teachers to manage in regular classrooms, and often beyond the capacity of their parents, as well. Thus, in the US (and probably many other countries), students with EBD are more likely to be placed in restrictive, or exclusionary settings than students in any other category, with close to 77,000 such students being educated in separate day treatment or residential settings at the time of writing (US Department of Education, 2002).

However, despite these figures, and the growing number of such placements, ‘little information is available concerning the quality of education they receive while enrolled and the supports provided as they return to their public or home school’ (Gagnon & Leone, 2005, p.141). What research that is available is not very encouraging, Gagnon & Leone claiming that in the US, it shows a history of inadequate educational services during both entrance to and exit from such facilities.

This chapter will examine various specialist provisions, including residential placement for students with complex needs. The following will be discussed:

7.2 Special units and special classes
7.3 Residential schools
7.4 Nurture groups
7.5 Multidimensional treatment foster care
7.6 Teaching family homes

7.2 Special Units, Special Classes, and Special Day Schools[13]

If the student with complex needs cannot be managed in a regular class, next on the continuum of programmes is the special unit (roughly equivalent to ‘pupil referral units’ in England) or a special class within the school, and then a special day school. Here the student may spend a short or long time before being considered for re-integration into the regular class, or being placed in a residential school (see next section).

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[13] Apart from most of the material on pupil referral units, this section is summarised from Cooper & Jacobs (2011). For a detailed review of pupil referral units, see Colley (2011).

In England and Wales, as part of their duty under section 19 of the Education Act 1996, local authorities set up and run pupil referral units (PRUs) to provide education for children of compulsory school age who cannot attend school, or who have been excluded from school (Department for Education and Skills, 2005). Since September 2010, PRUs are legally referred to as ‘Short Stay Schools’ (in England, but not Wales), but in this review the term PRU will be retained. Some 14,000 children are currently enrolled in PRUs.

Local authorities operate different models of PRU provision, developed to meet local circumstances and in line with local policies. Models of provision include: provision on a single site, provision on several sites under a single management structure, Peripatetic Pupil Referral Services (particularly in rural areas), and e-learning provision using ICT and web-based resources. PRUs may provide full- or part-time education. Many PRUs work jointly with mainstream schools to support vulnerable pupils and pupils at risk of exclusion; they may do so through out-reach support to individual pupils in their mainstream school by PRU staff or through dual registration of pupils, who may attend a PRU on a part-time or full-time basis. A single management committee may cover two or more PRUs to ensure better coordination of education of children out of school. Members of a management committee might include: head teachers from maintained schools within the local authority, local authority officers with knowledge or experience of working with young people with behavioural difficulties, social services representatives with knowledge and responsibility for children’s services, representatives from local health services, the teacher in charge of the PRU, Special Educational Needs Coordinators, parents of pupils currently or previously attending the PRU, and representatives of voluntary or community organisations.

PRUs cater for a wide range of pupils – those who cannot attend school because of medical problems, teenage mothers and pregnant schoolgirls, pupils who have been assessed as being school phobic, pupils who have been excluded or who are at risk of exclusion. Some PRUs cater for particular kinds of pupils, while others will have a mix of different kinds. For most pupils, the main focus of PRUs is on getting them back into a school.

Many PRUs also work with schools to support vulnerable pupils and those at risk of exclusion. They may do this through outreach support to pupils within the schools, or by dual registration, where a pupil stays on the register of their school but is also registered with, and attends, the PRU.

Evidence. In their recent review, Cooper & Jacobs (2011) note that special units/classrooms/pupil referral units have 'limited evidence supporting their use' (p.4), though they also point out that the nature and diversity of this range of provision makes it difficult to make meaningful generalisations about their overall effectiveness. Unfortunately, where useful case study evidence exists, this has not been followed up by further larger-scale studies.

According to a recent report by Charlie Taylor, the UK Government's Expert Adviser on Behaviour, there is a wide variation in the set up, objectives and ethos of PRUs nationally, but the best share some common characteristics (Taylor, 2012). These include the following:

- They have strong, authoritative leaders who are respected partners of their mainstream colleagues. Their PRUs are seen as a resource locally where the expertise of staff is used to help mainstream schools to improve their practice.
- Good PRUs are able to be responsive when a difficult behaviour problem develops in a school and provide appropriate support. They assess the needs of such students and provide personalised programmes for each one which, when possible, leads to a return to their mainstream school.
- They have the capacity to help pupils with serious emotional difficulties and improve behaviour at the same time as achieving high academic standards.

On the other hand, according to Taylor, some PRUs are of poor quality:

- Once placed there, children rarely get back to mainstream school.
- The curriculum is narrow.
- The teaching is poor and pupils do not achieve academic success.
- Rather than improving behaviour, the atmosphere of the worst PRUs feeds pupils' behaviour problems. Some of the most vulnerable children, with a range of differing needs, end up in bleak one-size-fits-all provision.
- Schools described difficulties working with PRUs, such as a labyrinthine referral process that takes months to get children a place, a poor relationship between them and other schools and a service that seemed to be operating in the interests of the staff rather than schools or children.

A recent Ofsted (2007) review commenced with the following statement:

> Although there is a wide variety of PRUs, they face similar barriers in providing children and young people with a good education. These may include inadequate accommodation, pupils of different ages with diverse needs arriving in an unplanned way, limited numbers of specialist staff to provide a broad curriculum

> and difficulties reintegrating pupils into mainstream schools. The success of PRUs depends on their responses to these challenges and the support they receive from their local authority (LA). In 2005/06 over half the PRUs inspected nationally were good or outstanding, but one in eight was inadequate. (p.4)

The review then went on to focus on 28 PRUs concerned with the age group 11-18 whose overall effectiveness had been judged to be good or outstanding in the previous two years. These PRUs had much in common, including the following features:

- Shared purpose and direction: staff conveyed to pupils that they were offering a 'second chance' or a 'fresh start'; they had high expectations, set challenging tasks for them and anticipated what support they would need.
- A well-designed curriculum that allowed pupils to improve basic skills where necessary and re-engage them in learning through interesting experiences.
- Emphasis on personal and social development: it was integrated into all lessons and activities, as well as being taught well at discrete times.
- Well-managed provision for pupils with behavioural, emotional, social and medical difficulties included appropriate plans for the next steps for each pupil, clearly defined timescales and systems to put planning into action. All these enabled the timely and systematic reintegration of pupils into mainstream schooling.

In an even more recent review, Ofsted (2011) examined the use of nurture groups and related provision in a small sample of 29 infant, first and primary schools. The following were the key findings and recommendations:

- When the nurture groups were working well, they made a considerable difference to the behaviour and the social skills of the pupils who attended them. Through intensive, well-structured teaching and support, pupils learnt to manage their own behaviour, to build positive relationships with adults and with other pupils and to develop strategies to help them cope with their emotions.
- At its best, the nurture group was part of a genuinely 'nurturing' school, where all members were valued, but where this value was imbued with a rigorous drive for pupils to achieve their very best.
- The schools that were the most effective at 'nurturing' had a clearly defined, positive but firm approach to the way in which they spoke to pupils, gave them clear boundaries, praised them for their efforts and achievements, ensured that they made academic progress, and worked with their parents. They saw each pupil as an individual and planned and implemented additional support accordingly.

- The nurture groups gave parents practical support, including strategies that they could use at home with their children. Parents felt more confident about being able to help their children and they valued the nurture groups highly.
- All the schools visited judged the success of the group in terms of the pupils' successful reintegration to their main class. However, ensuring that the pupils made progress in their academic learning often did not have as high a profile as the development of their social, emotional and behavioural skills. Almost all the schools saw this as part of their purpose to some extent, but its prominence varied.
- The effectiveness with which literacy, numeracy and other academic skills were taught varied. Occasionally, it was seen as acceptable to put academic learning 'on hold' while the pupils were in the nurture group. This led to them falling further behind.
- Daily informal communication between the class teacher and the nurture group staff was common and helped staff to know how well the nurture group pupils were doing on a daily basis. However, communication about pupils' academic progress was not as strong as about their social and behavioural progress.
- Where pupils in the nurture group were receiving a coherent and balanced curriculum, leaders, class teachers and nurture group staff had agreed where and by whom each element of the curriculum would be taught. Where curriculum planning was not clear, gaps emerged in the pupils' learning but were not always noticed.
- All the nurture group pupils in the schools surveyed retained at least some contact with their mainstream classes and with the rest of the school. The extent to which a sense of 'belonging' was retained depended on the attitudes of the school and the systems for communication. If these elements were positive, the pupils remained a clear and visible part of their mainstream class even when they attended the nurture group for most of the time.
- The pupils' transition back to their mainstream class full time was planned particularly carefully in 14 of the schools. In the best practice, it was given a high priority and planned well in advance and included targeted support back in the class.
- Thirteen schools tracked the academic and the social, emotional and behavioural progress of the nurture group pupils thoroughly. These schools were able to

demonstrate clear evidence about the progress made in each of these areas and knew where and why progress had not been made.

- The schools' evidence indicated that over a third of the 50 case study pupils who were attending the nurture groups at the time of the survey were making substantial progress with behavioural, social and emotional skills. Nearly all were making at least some progress.
- Academic progress was not as strong, though it was very good for some. For nine pupils, their progress in reading, writing and mathematics had accelerated since joining the nurture group. Twenty pupils had started to make at least some progress in reading, writing, and mathematics since joining the nurture group, having previously made none or very little.
- No school had evaluated thoroughly the progress of the former nurture group pupils as a separate cohort in order to analyse the long-term impact of this intensive intervention. However, all could provide case studies that showed considerable success.
- Almost all the schools recognised that the nurture group could not be the complete solution to the support that the pupils needed. They put in place a range of targeted support for these and other pupils, particularly when pupils left the group.

Recommendations

The Department for Education and local authorities should:

- take into account the substantial value of well-led and well-taught nurture groups when considering policies and guidance on early intervention and targeted support for pupils with behavioural, emotional and social needs.

Schools should:

- ensure that all intensive interventions enable pupils to make academic as well as social and emotional progress;
- ensure that communication between senior leaders, nurture group staff and class teachers is frequent and systematic, and concentrates on the academic as well as the social progress that pupils are making;
- systematically track and evaluate the social, emotional and academic progress of the pupils after they leave the nurture group or other intensive intervention in order to ascertain long-term impact and establish whether other support is needed (pp.6-8).

In a small-scale study of 92 children in north-west England aged 13 to 16 in pupil referral units, Solomon & Rogers (2001) gave them questionnaires covering their perceptions of this placement. Contrary to the expectation that placement in these units would allow children access to a therapeutic environment where they could develop more effective coping strategies and contrary to the expectation that these students found difficulties in accessing the full curriculum, the students did not reject the curriculum nor had they found coping strategies within the units. The researchers concluded: ‘Interventions designed to assist disaffected pupils need to be located within the context of regular schooling itself…effective interventions need to recognise the limits of [a counselling-type environment] and seek to relocate referred pupils into mainstream’.

In a study of a special unit in a Cypriot school, Angelides & Michailidou (2007) noted that educating students with special needs in such a unit can lead to marginalisation. Interviewing 14 of these children, and comparing their social lives to those of a matched group of 14 educated in regular classrooms, the authors discovered that the former had little opportunity to mix with their peers and their school lives were dominated by children and adults involved in special education. They identified as important friends those who were in their home network, whereas those typically-educated children identified as their important friends others within their class or school.

In two US studies comparing children with emotional and behavioural difficulties educated in self-contained classrooms with those educated in specialist separate schools, Lane et al. (2005) discovered that little distinguished such children in special schools from those educated within a self-contained classroom in mainstream schools. Academic improvement in either setting was limited, as was progress in social or behavioural domains. The only observed difference was that those in special schools referred to as having more ‘severe’ difficulties were more likely to have externalising disorders than internalising disorders. Although the study aimed to question why some children were referred for education in more restrictive settings (special schools) the results must point additionally to there being little social and emotional advantage in being placed in a segregated classroom within a mainstream school.

In Sweden, children showing signs of significant disturbance or thought to be at risk are withdrawn to spend time in a day special school. Here their emotional and mental health is monitored in small classes where they receive some social skills training. Svedin & Wadsby (2000) conducted a follow-up study of 104 children, most with disruptive behaviour, who were referred to Swedish day special schools at some time in their school career. Of these, 88 percent had returned to mainstream schooling after an average placement of two years. There were significant improvements in their mental health and 60 percent were symptom-free or had only mild symptoms. Their academic progress remained slow, however, and even after placement they were considered more disturbed than typical children. Most (53 percent) had been diagnosed with oppositional defiant disorder and 21 percent with conduct disorder. It was this group who still displayed the most obvious problem behaviours.

7.3 Residential Schools

> *'Residential schools for students with SEBD [social, emotional, and behavioural difficulties] have been described as the 'dinosaurs' of special educational provision. … Unlike dinosaurs, however, these residential schools have shown remarkable resilience in the face of intense efforts to kill them off ...' (Cooper & Jacobs, 2011, p.117)*

Despite the worldwide trend towards inclusive education, residential schools are still widely utilised to provide full-time care and education for children with complex needs/SEBD. These are usually children who pose the most severe challenges to their schools and families.

Evidence. After his extensive search for relevant New Zealand research, Church identified no controlled evaluations of the effectiveness of residential school programmes.

With regard to international research (mainly conducted in the US), Church quotes from Curry (1991), who pointed out that research into the outcomes of residential treatment lags behind research in related areas, and suffers from numerous methodological shortcomings. Notwithstanding these problems, Curry noted that many early studies found that the amount of improvement made by students in residential schools did not predict their level of functioning in the years following discharge.

Church (2003) located one meta-analysis of the effects of residential treatment, carried out by Garrett (1985). This was a review of 126 studies of the effects of residential treatments for delinquents. Of these studies, 84 involved some kind of control group, 34 included some kind of measure of subsequent offending, and 19 made use of a 'rigorous design'. Taken together, the residential programmes evaluated by Garrett had an average effect size on subsequent offending of only about 0.1, which means that, on average, they were probably producing reductions in offending over the follow-up period of about 10 percent. Garrett also found that the studies with control groups had the smallest effect sizes.

In their review of research into residential schools, Cooper & Jacobs (2011) comment that although researchers have neglected them, particularly in recent years, ‘the limited research evidence that does exist offers important food for thought’ (p.117). They note that such evidence as does exist, points to the residential experience being characterised, at its best, by its restorative qualities. In a qualitative study of two residential special schools for boys aged nine to 17 with emotional and behavioural difficulties (n=77), Cooper (1989, 1993) found three consistent themes in the students’ accounts of their experiences. The first was respite from negative influences and unsatisfactory relationships in their home settings and former schools and the sense of safety and emotional security afforded by the residential setting. Second was their experience of positive, warm and supportive relationships shared with the residential staff. Third was their experience of resignification where, as a result of these positive experiences and relationships the students could forge more positive self-identities, replacing the negative and deviant identities they often held on entry to the schools.

In a study of children (n=67) attending four contrasting residential schools, Grimshaw & Berridge (1994), found the children and their families reflected the findings of Cooper’s study. Families and students also spoke positively about the effect residential placement had on students’ emotional and social development and, as a result, the quality of family relationships.

In a recent study in Germany, Harriss et al. (2008) interviewed students aged eight to 12 (n=13) who had attended a residential school for children with SEBD for an average of three years. The students attributed the following positive effects to their residential experience:

- an improved ability to trust others;
- improved ability to cope with ‘difficult feelings’;
- improved classroom engagement and ability to remain in classrooms during lessons; and
- improved behaviour and relationships at home.

Parents and residential staff echoed these findings, although teachers observed positive developments in pupils’ academic engagement and progress while parents expressed concerns that it was often unsatisfactory.

However, as Cooper & Jacobs (2011) point out, it is also the case that the few published follow-up studies that exist tend to reveal poor social and personal outcomes. For example, Farrell & Polat (2003) tracked down only 26 out of 172 former pupils from a residential SEBD school in England. They were aged 17 to 25 and had spent on average four years and three months in the school. They were all under-qualified educationally and only 13 had full-time, largely menial jobs. They expressed concerns about their lack of financial security and tended to have negative expectations for the future. In a similar study in New Zealand by Hornby & Witte (2008) a group of former residential SEBD school students (n=29) who had attended the school when aged ten to 14 years prior to the study, were interviewed. Outcomes here were worse than those in the UK study. Only nine interviewees had full-time work, mostly earning only marginally above the statutory minimum wage. Four ex-pupils were in prison. The researchers assessed the ex-students' 'community adjustment' on the basis of information about their interpersonal relationships, living conditions and engagement in community activities, and found comparatively low levels of performance in these areas. Somewhat contrary results were reported by Townsend & Wilton (2006), in their New Zealand study of former students (N=34) of a residential school for students with emotional-behavioural difficulties. They reported that 'Following reintegration into mainstream schools, or work, the majority of the former students were reported as coping at least adequately with the social and academic demands of their lives (p.145). Moreover, parents held similarly positive perceptions.

In conclusion, somewhat disappointing life outcomes contrast sharply with conclusions drawn from studies of the processes and experiences associated with residential placements. To Cooper & Jacobs (2011), this suggests that 'the positive achievements of these placements can be undermined when continuity in support and care for individuals after they leave residential provision is absent' (p.119). This draws attention to Pfeiffer & Strzelecki's (1990) point that what seems to affect long-term outcomes is the level of therapeutic support available to the students following discharge from residential schools. In other words, there should be well-thought-out treatment plans for reintegrating students into regular schools and classes. As expressed by Hornby & Witte (2008), 'more attention needs to be paid to this transition and to the maintenance of the gains made during the time spent in residential school throughout the remainder of the students' time in mainstream schools' (p.90).

7.4 Nurture Groups[14]

Nurture groups were originally set up by Marjorie Boxall, an Inner London Education Authority educational psychologist, in the 1960s. There are examples of nurture groups now in early years settings, primary and secondary schools, special schools and alternative settings, and they are supported by organisations such as Barnardos.

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[14] Much of this section is based on Cooper & Jacobs (2011) and The Nurture Group Network.

According to The Nurture Group Network (http://www.nurturegroups.org), a nurture group comprises a small group of six to 10 children/young people, usually based in a mainstream educational setting and staffed by two supportive adults. They offer a short-term, focused, intervention strategy, which addresses barriers to learning arising from social/emotional and or behavioural difficulties. Children continue to remain part of their own class group and usually return full time within four terms. Building trusting relationships are core to the approach. Individual and group plans are formulated, with all targets thoroughly discussed with all involved, including the pupils themselves. Nurture groups adhere to the following six principles:

1. children's learning is understood developmentally;
2. the classroom offers a safe base;
3. nurture is important for the development of self-esteem;
4. language is a vital means of communication;
5. all behaviour is communication; and
6. transition is important in children's lives (Lucas et al., 2006).

Cooper & Jacobs (2011) refer to nurture groups as comprising a ‘learning community-within-a-school’ (p.112). These operate by taking some students, usually those with SEBD characteristics, out of their mainstream classes for part of the day for an intensive and supportive adjunct to their social and emotional learning in order to enable their return as soon as is feasible (Bennathan & Boxall, 1996). Children are selected on recommendations from social workers, health workers, from pre-school educators and observations within the first term of the child’s schooling. Group balance is important and teachers are careful not to overwhelm the group with too high a proportion of those who act out or those who act in. Parents are consulted throughout the process as their agreement is seen as primary and crucial.

A classic nurture group would reflect the following principles (Cooper & Whitebread, 2007):

- They are located on the site of a mainstream primary or infant school, but can be located in a secondary school.
- They cater for children aged ten to 12.
- Two adults staff them: a teacher and a full-time learning support assistant.
- They operate for nine out of ten half-day sessions in the school week.
- Nurture group pupils remain on the roll of a mainstream class, register daily with this class and spend curriculum time in it when not attending the group.

- Full-time placement in a mainstream class is the main object of a nurture group placement.
- The nurture group provides a holistic curriculum, incorporating the UK national curriculum with one designed to address social, emotional and behavioural factors underpinning academic learning.

Evidence. In a study of 308 children placed in nurture groups during 1984-98 in one London borough, Iszatt & Wasilewska (1997) found that 87 percent were returned to the mainstream after a placement of under one year. In 1995 this group was revisited and found to have a very high proportion (83 percent) of the original cohort still in mainstream placements with only 4 percent requiring special education needs support beyond the schools' standard range of provision.

As noted by Cooper & Jacobs (2011), the positive performance of most nurture group cohorts tallied with studies of staff perceptions of the effects of this placement. Several studies have found that staff reported improvements in pupils' self-management behaviours, social skills, self-awareness and confidence, skills for learning and approaches to learning (Doyle, 2001; Cooper & Lovey, 1999).

O'Connor & Colwell (2003) assessed the performance of 68 children aged five placed in three nurture groups for a mean period of 3.1 terms. They found statistically significant mean improvements in cognitive and emotional development, social engagement and behaviours indicative of secure attachment.

In a subsequent publication, Cooper & Whitebread (2007) explored the effects of nurture groups on children (n=356) enrolled in such groups (n=27) compared to four groups matched to members of the enrolled groups on various dimensions but who were not enrolled in nurture groups (n=190). Participants were followed over two years. The results provided quantitative evidence indicating greater improvements for the nurture group children's social, emotional and behavioural functioning than those who did not attend. Cooper & Jacobs note that it was particularly striking that students with SEBD in schools with nurture groups, but who did not attend them, improved in their functioning to a statistically significant degree when compared to students with SEBD who attended schools without them. This was interpreted to indicate that nurture groups could have a whole-school effect.

Cooper & Jacobs describe a substantial naturalistic prospective control group study carried out in Glasgow (Reynolds et al., 2009), which focused on pupils (n=221) aged five to seven with SEBD attending primary schools (n=32). The intervention group (n=117) attended nurture groups in 16 schools while the rest (n=104) attended matched schools (n=16) without nurture groups. Nurture group pupils made significant improvements in self-esteem, self-image, emotional maturity and attainment in literacy when compared to those attending the schools without the provision.

7.5 Multidimensional Treatment Foster Care

Liberty et al. (2010) describe Multidimensional Treatment Foster Care (MTFC) (Hahn et al., 2004) as being an effective programme. In brief, MTFC involves children with severe behavioural difficulties being placed with specially trained foster parents who are provided with ongoing support by a team of trained therapists. Placements typically last for nine-12 months. The programme involves a structured behaviour management system for the child, supplemented with family therapy and support for the child's birth family. MTFC is currently being implemented in six counties in California and in over 40 other locations throughout the US, as well as in Sweden, Norway, The Netherlands, and the UK.

According to the MTFC website (http://www.mtfc.com), the programme is a cost-effective alternative to regular foster care, group or residential treatment, for children and youth who have problems with chronic disruptive behaviour**.** Its goal is 'to decrease problem behavior and to increase developmentally appropriate normative and prosocial behavior in children and adolescents who are in need of out-of-home placement'. Treatment goals are accomplished by providing:

- close supervision;
- fair and consistent limits;
- predictable consequences for rule breaking;
- a supportive relationship with at least one mentoring adult, and
- reduced exposure to peers with similar problems

Again according to the website, four key elements of treatment are targeted during placement and aftercare: '(1) providing the child with a consistent reinforcing environment where he or she is mentored and encouraged to develop socially, emotionally, and academically, (2) providing daily structure with clear expectations and limits, with well-specified consequences delivered in a positive, supportive, teaching-oriented manner, (3) providing close tracking of the child's behaviour and emotional adjustment in family and school settings and with peers, and (4) helping the child to develop positive attachments to adults and to peers'.

The programme relies on intensive, well-coordinated, multi-method interventions conducted in the MTFC foster home, with the child's aftercare family, and with the child through skills coaching and academic support. A programme supervisor (with a caseload of 10) oversees and coordinates the interventions that are implemented across multiple settings (e.g., home, school, community). Involvement of each child's family or aftercare resource is emphasised from the outset of treatment in an effort to maximise training and preparation for post-treatment care for the children and youth and their families.

Children referred to the children’s version of MTFC are between the ages of seven and 11 and are in need of an out-of-home placement due to serious emotional, behavioural or mental health problems. Families of the MTFC children participate in the family therapy component of treatment and should be engaged in services immediately upon placement in the programme.

Programme supervisors serve as consultants to the foster parents, provide support and supervision in the form of weekly meetings and daily telephone contact, and are available for support, consultation, and backup 24 hours a day. Foster parents are screened, selected, and trained before they receive a placement then are supervised and supported throughout treatment through daily telephone calls and weekly foster parent groups conducted by the programme supervisor. Involvement of the biological family or aftercare family is emphasised throughout treatment. Families are taught parenting skills that are practiced during home visits and are provided with 24-hour backup and consultation by the family therapist and programme supervisor.

Evidence. According to its website, MTFC has been shown to be an effective and viable method of preventing the placement of children and adolescents in institutional or residential settings. Studies have found that placement in MTFC can prevent escalation of placement disruptions, emotional problems, delinquency and other problem behaviours such as violence. Cost-effectiveness analyses have found that placement in MTFC is more economical and more effective than placement in group care. An example of a study is afforded by a Swedish investigation by Westermark et al. (2010). These researchers examined 24-months post-baseline outcomes for 35 Swedish antisocial youths who received either treatment in MTFC or treatment as usual. This study is the first randomised control study outside the US. The youth treated in the MTFC programme consistently showed some statistically significant positive treatment effects compared to the control group. The results suggest that MTFC might be an effective method in treating youth with severe behaviour problems in a Swedish context.

7.6 Teaching Family Homes

As noted by Liberty et al. (2010), Teaching Family Homes provide out-of-home treatments for children with severe conduct problems. In these homes, up to six children are placed with specially trained foster parents who act as therapists who teach the children a range of behavioural skills, including social skills, problem solving, emotional control and related skills (Kirgin et al., 1982).

7.6 Summary

1. *A range of placements is typically available for students with complex needs if they cannot be managed in the regular classroom. Such students are more likely to be placed in restrictive or exclusionary settings than students in any other category.*
2. *This field is under-researched.*
3. *Special units or special classes yield mixed results, with some evidence from Sweden showing day special schools improved students' mental health, but other research indicating special class placements can lead to marginalisation and not to the learning of coping strategies. In England and Wales, pupil referral units vary in quality but the best of them have such features in common as strong, authoritative leaders; responsiveness to behaviour problems that develop in schools; capacity to help students with emotional and behavioural difficulties while at the same time helping them academically; a shared purpose and direction; and a well-designed curriculum.*
4. *Residential schools have been little researched. Limited evidence points to very small effects on behaviour after the students leave residential facilities. On the positive side, some studies point to residential schools having restorative value, offering respite from negative influences, and providing opportunities for resignification. Follow-up studies are quite discouraging.*
5. *Nurture group comprises a small group of 6 to 10 children/young people, usually based in a mainstream educational setting and staffed by two supportive adults. They offer a short-term, focused, intervention strategy, which addresses barriers to learning arising from social/emotional and or behavioural difficulties. There is evidence that nurture groups yield improvements in students' self-management behaviours, social skills, self-awareness and confidence, skills for learning and approaches to learning.*
6. *Multidimensional Treatment Foster Care involves children with severe behavioural difficulties being placed with specially trained foster parents who are provided with ongoing support by a team of trained therapists. Placements typically last for 9-12 months. The programme involves a structured behaviour management system for the child, supplemented with family therapy and support for the child's birth family. It has been shown to be an effective and viable method of preventing the placement of children and adolescents in institutional or residential settings.*
7. *Teaching Family Homes provide out-of-home treatments for children with severe conduct problems. In these homes, up to six children are placed with specially trained foster parents who act as therapists who teach the children a range of behavioural skills.*

CHAPTER EIGHT
CONCLUSIONS

Key Findings

1. **Students with complex needs should be provided with an education that enables them to acquire academic skills such as literacy and numeracy, as well as maximising their emotional well-being and positive social functioning.**

2. **Since there is no one model of provisions for children with complex needs that suits every country's circumstances, caution must be exercised in importing particular models from overseas. While New Zealand can, and should, learn from other countries' experiences, it is important that it gives due consideration to its own social-economic-political-cultural-historical singularities.**

3. **Local solutions, to reflect community resources and interests, should be explored.**
4. **Policies and practices relating to students with complex needs should be evidence-based and data-driven.**
5. **A continuum of provisions should be developed, with a gradation of intervention.**
6. **There should be a focus on retaining students with complex needs in regular schools with wraparound support services as far as possible. Where they must be withdrawn from their home schools, it is critical to develop reintegration plans.**
7. **Early intervention with children manifesting complex needs, or at risk for them, should be emphasised, with a focus on supporting families/whānau.**

8.1 Scope of Review (Refer Section #1.2)

This review was commissioned by the Ministry of Education to assist in building its knowledge about what would be the ideal model of practice if students with complex needs were to be moved from residential services to non-residential services or into a hybrid option.

It is a 'desk review' of the international literature and is not intended to be a full review of the existing provisions in the Severe Behaviour Initiative in general or provisions for students with complex needs in particular. It was beyond the terms of reference of the review to consult with stakeholders.

The review focuses on primary and intermediate-age children.

It excludes consideration of the effects of medication.

Reflecting the fact that students with complex needs represent a very small minority of the student population, the research literature relating directly to provisions for them is quite sparse. Therefore, the review net was widened to include overlapping categories, such as conduct disorders, antisocial behaviours, and social and emotional behaviour disorders.

8.2 Aims of Provisions for Children with Complex Needs (Refer Section #1.5)

The ultimate aims of any programme directed at children with complex needs should be to enhance their quality of life as citizens and as members of their culture. As with all students, those with complex needs should be provided with an education that enables them to acquire academic skills such as literacy and numeracy, as well as maximising their emotional well-being and positive social functioning.

8.3 The Policy Context (Refer Section #1.6)

The New Zealand policy context of particular relevance to provisions for children with complex needs includes the UN *Convention on the Rights of Persons with Disabilities*, the policy on special education – *Success for All* – and, when they are determined, the outcomes of decisions on the recent *Green Paper for Vulnerable Children*. The focus on inclusive education and inter-agency coordination are of particular significance.

8.4 The New Zealand Cultural Context (Refer Sections #1.7 and #4.4.9)

Since there is no one model of provisions for children with complex needs that suits every country’s circumstances, caution must be exercised in importing particular models from overseas. While New Zealand can, and should, learn from other countries’ experiences, it is important that it gives due consideration to its own social-economic-political-cultural-historical singularities. The challenge is to determine how far New Zealand’s indigenous philosophies, ideologies and practices should be encouraged, respected, challenged, overthrown or blended with those from 'outside'. Particular attention should be given to ensuring that programmes are culturally responsive.

8.5 Local Solutions within National Frameworks (Refer Section #6.7 and others throughout)

Communities vary considerably in terms of their size, demographics, ethnic and cultural identities, wealth, resources, histories, politics and aspirations. While it is essential that there be national legislation, guidelines and funding, it is clear that services for children with complex needs (and for other categories of special educational needs) should take these variations into account; a one-size-fits-all model is not appropriate. Further, it must be noted that local communities provide the contexts for students and staff.

8.6 Evidence-based, Theoretically Coherent Programmes and Strategies (Refer Section #5.1.3)

Educators and other human services professionals are increasingly being expected to use programmes and strategies that are evidence-based and theoretically coherent. Further, their implementation and evaluation of programmes and strategies are expected to be carried out through data-driven processes.

8.7 Joined-up Approaches (Refer Chapters 2, 3 and 6)

Increasingly, in the past two decades or so, both overseas and in New Zealand, there has been a distinct trend towards 'joined-up thinking' in providing human services. This trend calls for radical, transforming systems change manifested in the move from fragmentation to coordinated or integrated intervention and from narrowly-focused and specialist-oriented, 'silo' services to comprehensive, general approaches. In implementing joined-up approaches to human services, several issues have to be addressed. These include: (a) resistance to change among the key players, (b) the paucity of relevant research, (c) the risk of a depersonalised approach to young people, (d) possible infringement of client privacy, and (e) possible information overload among participating professionals.

8.8 The Spiral Ecological Model (Refer Section #3.4)

In developing joined-up services for children and young persons with complex needs (indeed *all* children and young persons), it is essential to see them as being embedded in various systems: their families/whānau, classrooms, schools and communities. Compared with Bronfenbrenner's ecological model, one that portrays a system in the form of a spiral has the advantage of removing the barriers between each level of the system, making for more fluid connections among its various levels.

8.9 A Bio-psycho-social Approach (Refer Section #2.7)

A bio-psycho-social approach to children and young people with complex needs integrates individual biological and intra-psychic dimensions with the interpersonal and social. It gives equal respect to the contributions of the different disciplines, allowing, indeed requiring, 'trans-professionalism'.

8.10 Prevention and Early Intervention (Refer Section #5.18)

There is clear evidence in New Zealand and internationally that the early onset of complex needs, especially behavioural and mental health problems, during elementary school is associated with an increased risk for subsequent severe behaviour and academic problems. Further, in the absence of effective intervention, many students who exhibit serious behaviour problems in the early years of school go on to develop more significant antisocial and disruptive behaviour patterns by the upper primary or intermediate school.

8.11 Needs Shared by All, Many, Some or No Other Children (Refer Section #5.1.1)

The rationale for designing services for children with complex needs may be portrayed in the form of a Venn diagram, which indicates that there are universal needs i.e., those shared by all children; semi-universal needs, i.e., those shared by all children with special needs; and specific needs, i.e., those that are specific to all children falling into a particular category (e.g., complex needs), with each child being unique, with his or her own individual needs.

8.12 Gradations of Need and Intervention (Refer Section # 5.1.2)

In order to take into account the range of severity of individual children's needs, a four-level Gradation of Need and Intervention model should be considered. This is based on the 'Response to Intervention' approach in the US and the 'Graduated Response Model' in the UK. Four levels of support can be identified *Level 1,* sometimes referred to as 'primary prevention', comprises core classroom instruction and support, with careful monitoring and screening to identify at-risk students. *Level 2,* sometimes referred to as 'secondary prevention', involves providing more extensive and intensive intervention for those students who have not responded to Level 1 support. *Level 3,* sometimes referred to as 'tertiary prevention', is targeted at those with extreme difficulties in academic, social and/or behavioural domains who have not responded adequately to Levels 1 or 2 efforts. Students at this level receive intensive, individual and/or small group interventions. *Level 4* encompasses students with extraordinary needs, who require highly specialised methods. The latter two levels are of particular relevance when considering students with complex needs. These amount to a continuum of response.

8.13 The Child in Family/Whānau (Refer Chapter Four)

Parents play important, if not critical, roles in educating and supporting students with special educational needs. Many parents of children with special educational needs require support and training to deal with their children, especially those with complex needs. Several programmes directed at parents have a sound evidential base. These include Parent Management Training, the Incredible Years programme, Parent-Child Interaction Therapy, and the Triple P-Positive Parenting Programme. As well two New Zealand programmes, Strengthening Families and Whānau Ora, are further examples of wraparound human services that have a focus on families and have potential for helping parents/whānau of children with complex needs.

8.14 Evidence-based Teaching Strategies (Refer Chapter Five)

Evidence-based teaching strategies may be defined as clearly specified teaching strategies that have been shown in controlled research to be effective in bringing about desired outcomes in a delineated population of learners. A range of such strategies has been identified as having ‘worked’ with students with special educational needs. Some of these are particularly appropriate for students with complex needs (e.g., behavioural approaches, functional behavioural assessment, cognitive behavioural therapy, social and emotional learning programmes), while others will need some adaptations and close monitoring to be suitable for such students (e.g., cooperative group teaching, peer tutoring, self-regulated learning, formative assessment and feedback).

8.15 Whole-school Approaches (Refer Chapter Six)

The whole school as an organisation and its wider community can be harnessed to provide a comprehensive range of services for all children, particularly those at risk, including those with complex needs. An important consideration here is the establishment of a supportive school culture. Well-researched, school-wide programmes include School-wide Positive Behaviour Support, Success for All, and Check and Connect. Full-service or community schools are promising approaches to bringing about an integration of various agencies who work with children with complex needs, as well as other children with special educational needs. Student Support Committees in schools could play a valuable role in monitoring the progress of all students with special educational needs, including those with complex needs.

8.16 Special and Out-of-home Placements (Refer Chapter Seven)

Children with complex needs often manifest ‘acting out’ or ‘acting in’ behaviours that teachers feel are beyond their capacity to manage in regular classrooms, even with specialist support. Often, too, parents feel that these behaviours are beyond their capacity to manage in the home. Thus, a range of special placements is often put in place. Although residential schools have been little researched, there is some evidence that they have restorative value for some children with complex needs and offer a sense of safety and security. On the other hand, studies tend to show poor social and personal outcomes, in both the short and long term. In contrast, some forms of special classes or special units have shown more positive outcomes, for example Pupil Referral Units and nurture groups in the UK. Multidimensional Treatment Foster Care and Teaching Family Homes are promising alternatives to family living for children with complex needs.

8.17 Workforce Training

In order to fully implement the findings contained in this review, the relevant workforce in the various ministries and agencies need to be adequately trained, both before entering the workforce and during their service. Given the emphasis on joined-up provisions, professionals with different roles should receive some of the training jointly and should also be trained for their new transdisciplinary roles.

8.18 An Action Plan

As will be seen in this review, developing a policy on children with complex needs is itself a complex process, involving many stakeholders and leading to potentially radical reforms in the organisation and management of human services at both the national and local levels. The result of this process should lead to a coherent policy and to an Action Plan for its implementation.

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