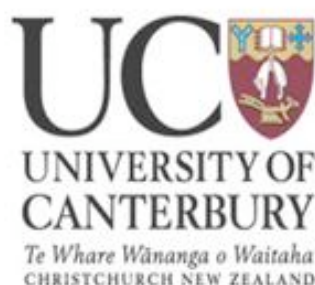# EDUCATION THAT FITS:
REVIEW OF INTERNATIONAL TRENDS IN THE EDUCATION OF STUDENTS WITH SPECIAL EDUCATIONAL NEEDS

FINAL REPORT

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS

EXECUTIVE SUMMARY

Chapter One: Introduction

1. *The purpose of this review is to outline international trends in the education of students with special educational needs, with the aim of informing the Ministry of Education's current review of special education.*

2. *The review does not include early childhood or post-school sectors, behaviour services or giftedness, as these fall outside the scope of the current review of special education for which the current review is intended to be a companion piece.*

3. *This review examines 15 issues, ranging from paradigms of special educational needs through the administration of special education, to school and classroom policies and practices.*

4. *Throughout the review, the term 'students with special educational needs' (abbreviated as SWSEN) will generally be employed.*

5. *Developments in special and inclusive education show similar trajectories across countries, especially those in the developed western world.*

6. *Broadly, there are four main sources of convergence of policies and practices: international conventions, the dissemination of influential legislation especially from the US and UK, the research literature and, more recently, the Internet.*

7. *In many ways, special education is a microcosm of education more generally and, indeed, of society as a whole.*

Chapter Two: Paradigms of special educational needs

1. *During its history, the broad field of special education has been the site of quite different paradigms, or models, which posit certain relationships between individuals with disabilities and their environments.*

2. *This chapter examined the three most dominant paradigms:*
   (a) *the psycho-medical paradigm, which focuses on the assumption that deficits are located within individual students,*
   (b) *the socio-political paradigm, which focuses on structural inequalities at the macro-social level being reproduced at the institutional level, and*
   (c) *the organisational paradigm, in which special education is seen as the consequence of inadequacies in mainstream schools.*

3. *While most countries have a mix of paradigms underlying their educational provisions for SWSEN, the preponderant paradigm remains the psycho-medical model, which still retains its adherents even when other paradigms that place an emphasis on the environment have gained traction in recent years.*

Chapter Three: Definitions, categorisation and terminology

1. *There is no universal agreement as to how SWSEN should be referred to, how they should be defined and what, if any, categories they should be divided into.*

2. *Differences in definitions and categorisation influence the structure and function of special education services and how they are funded.*

3. *This diversity reflects a variety of factors, including different philosophical positions; the history of organisations/systems; local traditions within school districts; legal foundations; and fiscal policies and constraints.*

4. *In order to deal with this diversity, the OECD obtained agreement across countries to re-allocate their national categories into three types:*

   Category A: Disabilities: students with disabilities or impairments viewed in medical terms as organic disorders attributable to organic pathologies; their educational need is considered to arise primarily from problems attributable to these disabilities.

   Category B: Difficulties: students with behavioural or emotional disorders, or specific difficulties in learning, arising primarily from problems in the interaction between the student and the educational context.

   Category C: Disadvantages: students with disadvantages arising primarily from socio-economic, cultural, and/or linguistic factors, and whose educational need is to compensate for the disadvantages attributable to these factors.

5. *In category A, the number of national sub-categories in OECD countries varied from two to 19, with most countries having 12 or 13 sub-categories and nine sub-categories being found in virtually every country.*

6. *Countries differed the most in relation to category C.*

7. *Some countries have adopted an anti-category approach, although none have abandoned them entirely and some are returning to a limited form of categorisation.*
8. *In the US, the President's Commission on Excellence in Special Education (2002) was very critical of what it referred to as 'the proliferation of categories and assessment guidelines that vary in their implementation, often with little relation to intervention'.*
9. *Several problems with classifications based on disability categories have been identified:*
   a   *they mask the role that constraining educational systems may play in creating failure,*
   b   *they wrongly suggest homogeneity within various diagnostic categories,*
   c   *many SWSEN do not manifest demonstrable disabilities,*
   d   *studies show that instruction based on disability categories is of limited utility,*
   e   *they require some judgement to be exercised about the relevant cut-off points for special educational purposes,*
   f   *issues of category boundaries arise through the co-occurrence of various disabilities, and*
   g   *disability categories may militate against seeing the student holistically.*
10. *As well as the diversity of categories outlined above, there are differences in the way the broad field of provisions are described internationally. There are three main divisions: 'special education', 'inclusive education', and hybrids of the two.*

Chapter Four: Disproportionality in Special Education
1. *Disproportionality, or disproportionate representation, is generally defined as the representation of a particular group of students at a rate different than that found in the general population.*
2. *There is an irony in considering over-representation to be a problem if students are purportedly gaining the advantage of special education.*
3. *There is clear international evidence of disproportionality of students from ethnic minority backgrounds in special education.*
4. *However, some caveats have been entered regarding the evidential basis of ethnic disproportionality– at least that coming out of the US.*
5. *The consistent overlap of race and poverty in the US has led some to suggest that race is simply a proxy for poverty and that ethnic disproportionality in special education is in large measure an artefact of the effects of poverty. However, the evidence suggests that where poverty makes any contribution to explaining disproportionality, its effect is primarily to magnify already existing racial disparities.*
6. *There is an extensive literature on how schools can prevent underachievement and failure at the school level, thus obviating the need for special education placement.*
7. *There is clear international evidence of a gender imbalance in the incidence of disabilities, special education enrolments and academic achievement.*
8. *Since the 1960s, the overall male to female ratio in special education has been between 2:1 and 3:1.*
9. *Some writers portray the gender imbalance as reflecting either or both an over-identification of males and an under-identification of girls.*
10. *In addressing the question of the over-representation of males in special education and the corollary phenomenon of more underachievement among boys, a range of reasons have been advanced. These include:*
   a   *biological factors*
   b   *unacceptable behaviour patterns*
   c   *peer influences*
   d   *learning strategies*
   e   *under-identification of girls*
   f   *school factors*
   g   *ethnicity*
   h   *students' age*
11. *Educators should recognize that, in general, boys are biologically at higher risk than girls for certain disabilities and should accommodate their teaching to take any associated learning difficulties into account.*
12. *In the case of students whose special educational needs are more clearly associated with environmental factors, schools should carefully evaluate their policies and procedures to deal with these factors.*
13. *Schools and those responsible for assessing students' needs for special support should re-examine their criteria to ensure that problems that girls may have are not overlooked.*

Chapter Five: Response to Intervention and Graduated Response

1. *Response to Intervention (RtI) focuses on student outcomes and the evaluation of intervention.*

2. *In the US, RtI has a statutory and regulatory foundation, IDEA 2004 favouring a process in which the child 'responds to scientific, research-based intervention'. This arose from a recommendation of the President's Commission on Excellence in Special Education in 2002.*

3. *The National Center on Response to Intervention in the US defines RtI as '[The integration] of assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavior problems. With RtI, schools identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness, and identify students with learning disabilities'.*

4. *Important educational decisions about the intensity and the likely duration of interventions are based on an individual student's response to instruction across multiple (usually three) tiers of intervention:*

    Tier I: core classroom instruction. This contains the core curriculum (both academic and behavioural), which should be effective for approximately 80% -85% 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 needs to be strengthened, while at the same time addressing the learning needs of the students not being successful. The teaching programme should comprise evidence-based instruction and curriculum and should be the responsibility of the general education teacher.

    Tier II: supplemental (or secondary) instruction. Interventions serve approximately 15-20% of students (some writers go as high as 30%) who have been identified as having continuing difficulties and who have not responded to normal instruction. This tier is still the responsibility of the general education teacher, but with the assistance of a relevant specialist.

    Tier III: Instruction for intensive intervention (tertiary). This tier serves approximately 5-10% (some say as few as 2%) of students and is targeted at those with extreme difficulties in academic, social and/or behavioral domains who have not responded adequately to Tier I and Tier II efforts. Students at this tier receive intensive, individual and/or small group interventions for an additional hour per day, with daily progress monitoring of critical skills. At this level a trained specialist would be involved. If Tier III is not successful, a student is considered for the first time in RtI as being potentially disabled.

5. *For RtI to be effectively implemented, several conditions have to be met. These include:*
    a   *effective assessment procedures should be in place;*
    b   *evidence-based teaching strategies should be employed;*
    c   *a structured, systematic problem-solving process should be implemented;*
    d   *teachers, principals and specialists should receive appropriate pre-service training and in-service professional development on RtI;*
    e   *adequate resources need to be made available; and*
    f   *parents should be involved in the decision-making processes.*

6. *Although there is relatively little evidence as to the effectiveness of RtI, what research has been reported is encouraging.*

7. *In England, the system of 'Graduated Response' bears a close similarity to RtI. This approach recognises that there is a continuum of special educational needs and brings increasing specialist expertise to bear. The first level assumes that the classroom teachers do all they can do to provide an appropriate education for their students through differentiated teaching. If this is not succeeding, the second level, 'School Action', is implemented. This involves providing interventions that are additional to or different from those provided as part of the school's differentiated curriculum. Should further help be required, a request for external services is likely, through what is referred to as 'School Action Plus'. The next step in the process is for the school to request a statutory assessment.*

Chapter Six: The Educational Context

1. *Policies and practices relating to the education of SWSEN must take account of the general educational context, especially those aspects that are derived from such neo-liberal philosophies as marketisation, decentralisation/devolution, choice, competition, and the setting of accountability criteria such as standards and high-stakes testing.*

2. *In most countries, the direction of the shifts in administration has been centrifugal (i.e., away from the centre), but in some it has been centripetal (towards the centre), and in still others there have been fluctuations in the balance as new settlements are reached.*

3. *According to some writers, neo-liberal market philosophies contain many elements that tend to work against equity, the valuing of diversity and inclusive education.*
4. *The shift of focus to outputs in the education system is making 'unproductive' students less welcome in schools.*
5. *The implication of these (presumably) unintended consequence is that the state may see itself as having an obligation to intervene to ensure that such consequences are prevented or ameliorated. It can do this through legislation or regulation and by close monitoring of schools' behaviour.*
6. *The coexistence of inclusive education provisions and special schools (which is the case in almost every country) suggests that choices must be exercised as to where SWSEN are 'placed'. In this process, the relative weight given to the preferences of SWSEN and their parents and those who administer education systems constitutes a major point of tension.*
7. *Accountability boils down to the multi-faceted question of who should be held responsible for what, how they can be evaluated, and with what consequences? Its scope therefore is quite complex.*
8. *Increasingly, decisions at all of these levels are evidence-driven, or are being expected to be evidence-driven.*
9. *How to measure the educational performance of SWSEN with validity and reliability is one of the major contemporary challenges facing educators around the world.*
10. *Several countries have developed policies requiring SWSEN to have access to general education accountability systems,*
11. *One of the educational battle cries in many countries since the 1990s has been for 'standards-based reform', with its goal of higher and more rigorous achievement standards for all students, including those with special educational needs.*
12. *Leadership should be exercised throughout an education system: by legislators, policy-makers, school governing bodies, principals and teachers. At the school level, developing a school culture for SWSEN requires the exercise of leadership, particularly by the principal, but also by others in a school.*

Chapter Seven: Funding and Resourcing

1. *The means of allocating resources to SWSEN, and the quantum of these resources, has long exercised policy-makers around the world, and continues to do so.*
2. *Funding is impinged on and, in turn impinges upon almost every issue explored in this review.*
3. *Historically, funding arrangements for special education have often been kept administratively separate from the mechanisms that govern fiscal resources for general education.*
4. *For the past decade or so, funding models for special education have been under review in many countries, driven by rising costs, concerns over efficiency and equity in the use of resources, and concerns about the incentives inherent in funding formulae for contra-indicated practices.*
5. *There is not a strong body of evidence to show that finance in itself has a direct and major effect on student learning outcomes.*
6. *Research has found, however, that particular types of expenditure do have a positive impact on student learning.*
7. *Overall, per student education expenditures for those who receive special education services in the US are 1.91 times greater than expenditures for students who received no special education services. This is comparable to other estimates.*
8. *Three funding models can be identified: (a) demand (b) supply, and (c) output. Each one has advantages and disadvantages, with the consequence that many countries employ mixed funding models.*
9. *Another taxonomy of funding models, based on the sources of funding for SWSEN, has five categories: (a) discretionary funding, (b) categorical funding, (c) voucher-based funding, (d) census-based funding, and (e) actual-cost funding.*
10. *Sources of funding for SWSEN vary considerably among countries, with different proportions coming from national, state and local educational authorities.*
11. *General principles that should be taken into account in determining the most appropriate funding model(s) for SWSEN include:*
   a *The starting point should not be with how to fund special education, but rather with how to fund general education.*
   b *Every funding model has strengths and weaknesses, incentives and disincentives, and positive and negative outcomes that may affect different students differentially, so a combination of funding models seems desirable.*
   c *Resources should be allocated in ways that are coherent with, and promote, system policy.*
   d *Arrangements to ensure accountability, including the monitoring of the use of resources and outcomes for children, should be included.*

Chapter Eight: Curriculum

1. *Approaches to conceptualising curricula for students with disabilities have moved from a developmental model in the 1970s, through a functional model in the 1980s and 1990s, to the contemporary model of embracing ways of enabling such students to participate in the general education curriculum.*
2. *In the US, IDEA 1997, IDEIA 2004 and the No Child Left Behind Act of 2001 specified that all students, including those with significant cognitive disabilities, must have the opportunity to participate and progress in the general curriculum.*
3. *To make the curriculum accessible, consideration should be given to the following alternatives in relation to content, teaching materials, and the responses expected from the learners: (a) modifications (e.g., computer responses instead of oral responses, enlarging the print), (b) substitutions (e.g., Braille for written materials); (c) omissions (e.g., omitting very complex work); and (d) compensations (e.g., self care skills).*
4. *Other modifications can include (a) expecting the same, but only less, (b) streamlining the curriculum by reducing its size or breadth, (c) employing the same activity but infusing IEP objectives, and (d) curriculum overlapping to help students grasp the connections between different subjects, for example.*

Chapter Nine: Assessment

1. *Increasingly, SWSEN, including those with significant cognitive disabilities, are being expected to participate in their countries' national or state assessment regimes.*
2. *High stakes' assessments can have the effects of jeopardising inclusive education, a risk that can be exacerbated by the effects of international comparative studies of educational standards.*
3. *In the US, legislation since IDEA 1997 does not allow SWSEN to be exempted from their states' assessment programmes. Instead, educational authorities are required to provide alternate assessment for students who cannot participate in state or district assessments with or without accommodations. IEPs now must include a statement of any accommodations that are necessary to measure the academic achievement and functional performance of such students on state- and district-wide assessments.*
4. *The main types of alternate assessments comprise portfolios, IEP-linked bodies of evidence, performance assessments, checklists and traditional paper and pencil tests.*
5. *The assumptions underlying these provisions are twofold: (a) that higher expectations will lead to improved instructional programmes and (b) that these will lead in turn to higher student achievement.*
6. *The requirements for all students to participate in state- and district-wide assessments have been shown in some research to have had unintended negative consequences for students with disabilities, including higher rates of academic failure, lower self-esteem, and concerns that they would experience higher drop-out rates.*
7. *Countries or states should include both content area specialists and experts in severe disabilities in validating performance indicators used in alternate assessment.*
8. *With the shift to all students being required to participate in their countries' national or state assessment regimes, teachers of students with disabilities will need professional development on their country's or state's academic standards, alternate achievement standards, and curriculum design that goes beyond functional domains.*
9. *Formative assessment has been associated with positive outcomes for SWSEN and with improvements in teachers' perceptions of students' performances.*
10. *Functional assessment is increasingly being applied, not only to behaviour, but also to learning in general.*
11. *In determining assessment policies, it is important to recognise and resolve as far as possible the tensions between measuring the health of the education system and protecting the interests of students with special educational needs. In other words, educational policy-makers should optimise both the needs of the system and those of its students in determining assessment policies.*

Chapter Ten: Evidence-based Pedagogy

1. *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.*
2. *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'.*

3. *All students, including SWSEN, 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. *To constitute evidence, research studies should meet criteria such as the following: (a) treatment fidelity, (b) reliable and valid measurement of behavioural outcomes, (c) adequate control of variables, (d) freedom from contamination, (e) adequate follow-up, (f) replicated in more than a single study, and (g) cost effectiveness.*
5. *Strategies that have a strong evidential base for use with SWSEN (and other students) include (a) cooperative group teaching, (b) peer tutoring, (c) formative assessment, (d) feedback, (e) cognitive strategy instruction, and (f) instruction in memory strategies.*
6. *A scale for evaluating teachers' use of evidence-based teaching strategies is described.*
7. *In order to bridge the research-practice gap, it is necessary that teacher education - both pre-service and in-service must be upgraded to deliver programmes based on evidence.*

Chapter Eleven: Inclusive Education
1. *Inclusive education is one of the most dominant issues in the education of SWSEN.*
2. *It is not unproblematic, both conceptually and practically.*
3. *A commonly accepted definition of inclusive education is: SWSEN having full membership in age-appropriate classes in their neighbourhood schools, with appropriate supplementary aids and support services.*
4. *In recent years, the concept of inclusive education has been broadened to encompass not only students with disabilities, but also all students who may be disadvantaged.*
5. *Advocacy for inclusive education revolves around three main arguments:*
   a *inclusive education is a basic human right;*
   b *in designing educational programmes for students with disabilities, the focus must shift from the individual's impairments to the social context, a key feature of which should be a unitary education system dedicated to providing quality education for all students; and*
   c *since there is no clear demarcation between the characteristics of students with and without disabilities, and there is no support for the contention that specific categories of students learn differently, separate provisions for such students cannot be justified.*
6. *The characterisation, purpose and form of inclusive education reflect the relationships among the social, political, economic, cultural and historical contexts that are present at any one time in a particular country and/or local authority.*
7. *While many countries seem committed to inclusive education in their rhetoric, and even in their legislation and policies, practices often fall short.*
8. *The United Nations and its agency, UNESCO, have played, and are playing, a significant role in promoting inclusive education.*
9. *Inclusive education goes far beyond the physical placement of children with disabilities in general classrooms, but requires nothing less than transforming regular education by promoting school/classroom cultures, structures and practices that accommodate to diversity.*
10. *The evidence for inclusive education is mixed but generally positive, the majority of studies reporting either positive effects or no differences for inclusion, compared with more segregated provisions.*
11. *In general, the presence of SWSEN in regular classrooms does not have a negative impact on the achievement of other students.*
12. *Criticisms of inclusive education have focused on what some writers consider to be an emphasis on ideology at the expense of empirical evidence and challenges to the view that the mainstream can incorporate students with disabilities when it has so many difficulties in accommodating existing student diversity.*

Chapter Twelve: Non-inclusive Educational Settings
1. *The evidence related to student outcomes in inclusive education is usually compared with outcomes in some form of non-inclusive settings.*
2. *Non-inclusive educational settings range from special schools, through special classes/units and various forms of ability grouping, to individual instruction.*
3. *The 'where to learn debate' has been interrogated on ideological, philosophical and empirical grounds.*
4. *According to OECD data, the percentages of SWSEN in non-inclusive settings range from several countries with less than 1% to several with 4-6%.*
5. *There is evidence that the population of special schools is undergoing change. For example, recent data from England shows a gradual increase in the number and percentages of SWSEN attending*

special schools as having behavioural, emotional and social difficulties and autistic spectrum disorders.

6. *Many countries are developing new roles for special schools by converting them into resource centres with a range of functions replacing direct, full-time teaching of SWSEN.*
7. *Despite the lack of evidence for the beneficial effects of non-inclusive placements on learning, many parents and teachers strongly support a continuum of services, including special schools and units.*
8. *Research into ability grouping shows that, overall, it has little or no significant impact on student achievement, although high-achieving students appear to benefit more than low-achieving students, who suffer from disadvantages in being placed in low ability groups.*
9. *Paradoxically, individual instruction has a low impact on student achievement, suggesting that the social context of the classroom is an important contributor to learning.*
10. *A fitting conclusion would be that the continuation of non-inclusive educational settings should be based on the extent to which they improve student learning outcomes in ways valued by the students, parents, and teachers. Data and evidence, not conviction and ideology, should be the key considerations.*

Chapter Thirteen: Teacher Education

1. *Teacher education in the field of SWSEN involves consideration of four main areas:*
   a *The nature of initial teacher education (ITE) for general education teachers and special education teachers.*
   b *Specialist qualifications for professionals working in an advisory or consultancy capacity.*
   c *The training of paraprofessionals.*
   d *Professional development for professionals working with SWNEN*
2. *There is considerable variability with respect to all of these issues between and even within countries.*
3. *Many countries are adapting their teacher education programmes to take account of the recent emphasis on inclusive education.*
4. *Many jurisdictions are prescribing in considerable detail what is expected of various training programmes.*
5. *In England and Wales, a three-level model of teacher education is being implemented. This involves developing the following:*
   a *Core skills for ALL teachers in ALL schools*
   b *Specialist skills in SOME local schools*
   c *Advanced skills for SOME teachers in ALL schools*
6. *In the US, there is debate over categorical vs non-categorical licensure and the extent to which special and general teacher education should and can be merged.*
7. *In the US, the 2002 President's Commission was highly critical of colleges of education for not ensuring that their curricula and methodologies were empirically connected to improving student achievement and, accordingly, recommended sweeping reforms in teacher education.*

Chapter Fourteen: Collaboration

1. *Educating SWSEN requires collaboration among many people – several professionals and parents in particular.*
2. *Collaborative approaches to educating SWSEN are increasingly becoming embedded in education systems around the world. This is well illustrated in the sources of support for regular class teachers in their work with SWSEN in 23 European countries, which included school-based specialists, community-based agencies and special schools.*
3. *Successful collaboration depends on such factors as establishing clear goals, defining respective roles, adopting a problem-solving approach and establishing mutual trust and respect.*
4. *Co-teaching occurs in inclusive education settings when a general education teacher and a special education teacher combine their expertise to meet the needs of all learners in the class.*
5. *Paraprofessionals are generally inadequately appreciated, compensated, oriented, trained, supervised, and researched. Since 2001, paraprofessionals in the US have had more defined job descriptions and are expected to have a college level qualification.*
6. *Various countries have developed cadres of professionals to act as advisers/consultants to teachers of SWSEN, providing advice and guidance to the general classroom teacher on the programme to be followed.*
7. *In many countries, educational psychologists are considered to play a vital role, not only in the education of SWSEN, but also in education more generally and in community contexts.*
8. *A feature of leading practice throughout the world is a move towards 'integrated support', 'service*

integration' or 'wraparound services', all of which are concerned with the delivery of specialised services in a more coordinated and integrated manner. Such coordination can take place at an institutional level, at an agency level, or at a government level.

Chapter Fifteen: Parent Involvement

1. *Parents play important, if not critical, roles in educating and supporting their children's education.*
2. *Parents have been considered in almost every chapter of the current review.*
3. *Many countries have legislation and/or policies on parent involvement in the education of SWSEN, at a minimum their participation in major decisions affecting their children, such as their IEPs and decisions regarding placements.*
4. *Five different levels of parent involvement have been identified: (a) being informed, (b) taking part in activities, (c) participating in dialogue and exchange of views, (d) taking part in decision-making, and (e) having responsibility to act.*
5. *Parents of SWSEN often require support and guidance in managing their children's challenging behaviour. There is clear evidence that when this is provided both children and parents can benefit.*
6. *Three parent training programmes stand out as having good outcomes: (a) behavioural parent training, (b) parent-child interaction therapy, and (c) Triple P-Positive Parenting Programme.*

Chapter Sixteen: Universal Design for Learning

1. *Universal Design (UD) had its origins in architecture and engineering, and has been increasingly emphasised in education, where it is usually referred to as Universal Design for Learning (UDL).*
2. *UD may be defined as 'the design of products and environments to be usable by all people, to the greatest extent possible, without the need for subsequent adaptation or specialised design'.*
3. *UDL involves planning and delivering programmes with the needs of all students in mind from the outset. It applies to all facets of education: from curriculum, assessment and pedagogy to classroom and school design.*
4. *Three overarching principles guide UDL: (a) provide multiple means of representation, (b) provide multiple means of action and expression, and (c) provide multiple means of engagement.*
5. *More specifically, UDL requires that the following criteria be met (a) equitable use, (b) flexible use, (c) simple and intuitive use, (d) perceptible information, (e) tolerance for error, and (f) low physical and cognitive effort.*

Chapter Seventeen: Conclusions

1. *The education of SWSEN is a complex process with many inter-related elements, most of which apply to education in general and some of which are specific to SWSEN.*
2. *Educational provisions for SWSEN should not be primarily designed to fit the student into existing systems, but rather, they should also lead to those systems being reformed so as to better accommodate diversity, i.e., education should fit the student.*
3. *Inclusive education goes far beyond the physical placement of SWSEN in general classrooms, but requires nothing less than transforming regular education by promoting positive school/classroom cultures and structures, together with evidence-based practices.*
4. *New roles for special schools, including converting them into resource centres with a range of functions replacing direct, full-time teaching of SWSEN, should be explored*
5. *Educational policies and practices for SWSEN (indeed all students) should be evidence-driven and data-based, and focused on learning outcomes.*
6. *International trends in the education of SWSEN should be carefully studied and interpreted through the prism of local culture, values and politics to determine their relevance for New Zealand.*
7. *Issues in the education of SWSEN should be comprehensively researched.*
8. *Determining valid and reliable ways for measuring learning outcomes for SWSEN should be given high priority.*
9. *All decisions relating to the education of SWSEN should lead to a high standard of education for such students, as reflected in improved educational outcomes and the best possible quality of life, for example as outlined in the UK's* Every Child Matters *outcomes for children and young people.*
10. *The rights of SWSEN to a quality education and to be treated with respect and dignity should be honoured.*
11. *National curricula and assessment regimes should be accessible to SWSEN, taking account of the principles of universal design for learning.*
12. *Educational provisions for SWSEN should emphasise prevention and early intervention prior to referral for more costly special educational services, through such processes as graduated response to intervention.*

13. *All educational policies should be examined to ensure that any unintended, undesirable consequences for SWSEN are identified and ameliorated.*
14. *Any disproportionality in groups represented in special education, especially ethnic minorities and males, should be carefully monitored and ameliorated where appropriate.*
15. *Partnerships with parents of SWSEN should be seen as an essential component of education for such students.*
16. *Collaborative approaches involving wraparound service integration for SWSEN should be planned for and the respective professionals trained for its implementation.*
17. *The roles of educational psychologists are going beyond the assessment and classification of SWSEN to incorporate broader pedagogical and systems-related activities, not only with such students, but also in education more generally and in community contexts.*
18. *Initial teacher education and ongoing professional development for teachers and other educational professionals should take account of the recent emphasis on inclusive education.*
19. *In order to improve the quality of education for SWSEN, leadership must be exercised throughout the education system, from legislators to school principals.*
20. *Finally, in order to give expression to the above conclusions, it is vital that a comprehensive national policy document, along the lines of the UK's Code of Practice, be developed.*

CHAPTER ONE
INTRODUCTION

How best to educate students with special educational needs (hereafter referred to as SWSEN) is one of the most dominant and controversial issues confronting educators around the world today. It is a complex and dynamic issue that demands careful and systematic analysis. It requires that we examine such fundamental questions as: What is education? What are schools for? How best to teach diverse learners? How should they be assessed? How should they be classified; indeed, should they be classified at all? How important is the place in which they are educated? What choices should their parents have? What supports do they require? How should they be funded? How can the agencies that are involved with their education, health and welfare be coordinated? Some of these questions are common to general education, but some are specific to the education of students with special educational needs. In many respects, special education is a microcosm of education more generally and, indeed, of society as a whole. How we address issues to do with SWSEN provides us with significant leads as to how similar issues can or should be addressed in the broader contexts.

The purpose of this review is to outline international trends in the education of SWSEN, with the aim of informing the Ministry of Education's current review of special education. The review does not include early childhood or post-school sectors, behaviour services or giftedness, as these fall outside the scope of the current review of special education for which this review is intended to be a companion piece. Other topics not considered, because of time and space limitations, include the brain and learning, support staff, the role of organisations representing persons with disabilities, full service schools, NGOs and ICT. Some of these will be mentioned in the context of other topics, but deserve lengthier consideration.

1.1 Issues to be Explored in this Review

This review will outline some of the principal issues in the education of students with special educational needs, with reference to countries other than New Zealand, particularly the UK[1]., the US, Australia, Canada, and those in continental Europe. The topics that will be covered are as follows:

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[1] Since this review will make frequent references to the UK, it is necessary to enter a caveat from the outset. All UK education websites contains the following statement: 'A new UK Government took office

1. Paradigms of special educational needs
2. Definitions, categorisation and terminology
3. Disproportionality in special education
4. Response to intervention and graduated response
5. Educational contexts
6. Funding and resourcing
7. Curriculum
8. Assessment
9. Evidence-based pedagogy
10. Inclusive education
11. Non-inclusive educational settings
12. Teacher education
13. Collaboration
14. Parent involvement
15. Universal design for learning

1.2 Sources of Information

This review will draw heavily on the writer's earlier publications (Mitchell, 1999; 2004 a, b, c, d; 2005; and 2008; Mitchell et al., 2010). Other significant sources include recent literature reviews carried out by Riddell et al. (2006) and by Shaddock et al. (2009); and reviews carried out by the Organisation for Economic and Cooperative Development (OECD, 1999, 2003, 2007), the European Agency for Development in Special Needs Education (EADSNE) (2003, 2009), and the influential President's Commission on Excellence in Special Education in the US (2002). As well, various reports, journal articles, books and Internet sites will be referred to when relevant.

It should be noted that, apart from occasional references, the New Zealand situation will not be discussed in any detail in this report

1.3 A Note on Nomenclature

As we shall see in Chapter Three, there is no universal agreement as to how students with special educational needs should be referred to, how they should be defined and what, if any, categories they should be divided into. However, for the purposes of this review, the term 'students with special educational needs' (SWSEN) will generally be employed. This is in accord with the definition used in the current New Zealand *Review of special education 2010: Discussion documen*t, which states that 'students may have special education needs because they have a physical impairment, a learning disability,

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on 11 May. As a result the content on this site may not reflect current Government policy. All statutory guidance and legislation published on this site continues to reflect the current legal position unless indicated otherwise'.

hearing or vision difficulties, or struggle with learning, communication or getting along with others' (New Zealand Government, 2010, p.6).

Given that the term 'special education' historically and even contemporaneously, has been widely interpreted to refer solely or mainly to special schools and special classes, with an emphasis on students with disabilities, it will be used sparingly in this report, except where the context determines otherwise. Rather, the broader term 'education of students with special educational needs' will be preferred as it covers both a broader group of students and a greater range of educational provision.

Finally, a note on the title of this report: *Education that Fits*. This was chosen because the writer believes that it draws attention to the importance of education systems adapting to SWSEN, and, conversely, it draws attention away from the notion of fitting students to existing education systems. It also draws attention to the importance of determining learning outcomes for such students, the curriculum and pedagogy that contribute to the desired outcomes, and the means of determining whether or not they have been achieved. As we shall see in the present review, decisions being made in all of these areas are increasingly evidence-based and data-driven.

1.4 Transfer of Ideas Across Countries

Before exploring specific issues, it is relevant to consider why developments in special and inclusive education, indeed education more broadly, show similar trajectories across countries, especially those in the developed western world.

Recent years have seen what McNeely & Cha (1994) refer to as a remarkable degree of convergence in both educational ideology and educational structures across all types of nation states. This phenomenon has also been noted by writers such as Adick (1992) and Meyer et al. (1992) who observed that 'modern' schooling systems have already spread throughout the world at the expense of 'autochthonous' systems. According to Adick (1992), the modern form has in common features such as:

- a more or less differentiated school system with sub-divisions into school classes, levels and graduation qualifications;
- teaching according to a pre-arranged curriculum;
- a systematic differentiation between teaching and learning, so that a professional staff of teachers appears before a class of school children at scheduled time intervals;
- a state controlled, public, legal regulation of educational practices in schools; etc..

To a large extent, this convergence of educational policies and practices reflects the trend towards nation-states becoming increasingly subject to world-level ideological prescriptions and practices, as mediated by such agencies as the UN and the OECD. Such agencies exercise considerable authority, according to McNeely and Cha (1994), influencing national systems through a number of normative and rule-creating activities - four in particular. Firstly, international organisations act as a major forum for the transnational exchange of ideas and information via their publications, through the provision of consultants, and by sponsoring various types of conferences, meetings, and workshops. Secondly, in order to become members of these international organisations, countries have to sign up to their charters and constitutions, which typically contain professions of adherence to global principles, norms, and procedures. A third and related means of bringing about international convergence can be found in standard-setting instruments such as declarations and recommendations. Although these may not be legally binding, 'they may be both inspirational and educational'. Finally, and in some circumstance perhaps most importantly (e.g., in developing countries), international organisations exert their influence through direct financial assistance or through the provision of development experts, both of which are usually linked to the adoption of certain ideas and policies.

Certainly, the UN agencies do aspire to influence global values. For example, the *World Commission on Culture and Development* (1995) identified 'recurrent themes that appear in nearly all cultural traditions', and went on to argue that these could 'serve as an inspiration for a global ethics' (p.36). Five such principles are adduced: human rights and responsibilities, democracy and the elements of civil society, the protection of minorities, commitment to peaceful conflict resolution and fair negotiation, and equity within and between generations. With a more specifically educational focus, the report of the *International Commission on Education for the Twenty-first Century* (UNESCO, 1996) put forward the notion that quality education should have four pillars:

- *learning to know*: broad general education and in-depth work on selected subjects, learning to learn to continue education through life;

- *learning to do*: ability to face a variety of situations, often unforeseen; to work in teams - hence work experience incorporated with education;

- *learning to be*: exercising independence and judgment, combined with sense of personal responsibility for attaining common goals; understanding and realising one's talents: memory, reasoning, imagination, aesthetic sense, physical, leadership;

- *learning to live together*: among individuals, groups, nations; developing an understanding of others and their history, traditions and spirituality (pp.7-8).

Of these pillars, the fourth is given priority. In the words of the Commission,

> the far-reaching changes the traditional patterns of human existence require of us a better understanding of other people and the world at large. There is a need for mutual understanding, peaceful interchange and, indeed, harmony - the very things that are most lacking in our world today (p.7).

More specifically, the writer has elsewhere analysed the ways in which beliefs, principles, knowledge and practices relating to special education are transferred between countries, resulting in what he considers to be a remarkable degree of convergence, both in ideology and in practices, across all types of nations (Mitchell, 1999). Broadly, there are four main sources of influence: international conventions, the dissemination of influential legislation, especially from the US and the UK, the research literature and, more recently, the Internet. The first two of these influences will be outlined below.

International conventions and agreements. International bodies such as the UN have actively promoted the rights of persons with disabilities and the principles of inclusion. For example, The Declaration of the Rights of Disabled Persons, adopted by the UN General Assembly in 1975, stands out as an early landmark in the international context (United Nations, 1975). Its 13-point proclamation has influenced many countries in their formulation of policies for persons with disabilities, including special education policies. *Inter alia*, the Declaration asserts that disabled persons have the right to respect for their human dignity, to measures designed to enable them to become as self-reliant as possible, and to a range of services, including education, which will enable them to develop their skills. Most recently, in 2006, the UN General Assembly confirmed a Convention on the Rights of Disabled Persons, which included a significant commitment to inclusive education[2].

With regard to the education of SWSEN, the 1994 *Salamanca Declaration* was even more specific. At a 1994 conference held in Salamanca, Spain, and sponsored by UNESCO, representatives of 92 governments and 25 international organisations proclaimed that every child has a fundamental right to education and has unique characteristics, interests, abilities and learning needs which should be taken into account by child-centred education systems (UNESCO, 1994).

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[2] New Zealand ratified this Convention in 2008.

More recently, the thrust of the *Salamanca Declaration* was reiterated and expanded at the meeting at the forty-eighth session of the UNESCO *International Conference on Education*, held in Geneva in 2008. This conference was attended by Ministers of Education, heads of delegation and delegates from 153 Member States, along with representatives of 20 intergovernmental organisations, 25 NGOs, foundations and other institutions of civil society. At the conclusion of their work, participants recalled Article 26 of the United Nations Declaration of Human Rights that states that everyone has a right to education and affirmed that inclusive quality education is fundamental to achieving human, social and economic development. Importantly for the current review, it was recommended that States should recognise the importance of a broadened concept of inclusive education that addresses the diverse needs of all learners and that is relevant, equitable and effective. Member States were called upon to adopt an inclusive education approach in the design, implementation, monitoring and assessment of educational policies as a way of contributing to building more inclusive societies (UNESCO. 2009).

Influential legislation and policy documents. Given that the US and the UK have played, and are playing, dominant roles in influencing worldwide provisions for SWSEN, it is relevant to outline some of the important developments in these jurisdictions. As noted by Mitchell (1999), the US *Public Law 94-142* of 1975 and its successors, the *Individuals with Disabilities Education Act* of 1997 and the *No Child Left Behind Act* of 2002, have played influential roles in promulgating the principles of inclusive education worldwide and other matters to do with such themes as all students having access to the general curriculum and to their country's or state's assessment regimes.

A related influential document from the US is the report of the *President's Commission on Excellence in Special Education* (2002). In the preamble to its report, the Commission noted that young people with disabilities drop out of high school at twice the rate of their peers; that most public school educators do not feel well prepared to work with students with disabilities; that of the 6 million students in special education, half are identified as having a 'specific learning problem', mostly because they have not learned how to read; and students of minority status are over-represented in some categories of special education. The Commission brought down nine major findings, including the following: (1) the implementation of the Individuals with

Disabilities Education Act (IDEA) is overly bureaucratised; (2) too little emphasis is placed on prevention, early identification, and aggressive intervention using research-based approaches; (3) general and special education are seen as separate systems; (4) many of the current methods of identifying students with disabilities lack validity; and (5) research in special education needs to be more rigorous, the current system not always implementing evidence-based practice. These major findings led to a wide range of recommendations, with three underlying themes: focus on results - not on process, embrace a model of prevention not a model of failure, and consider children with disabilities as general education children first.

In the UK, the landmark event was the 1978 report of the *Committee of Enquiry into the Education of Handicapped Children and Young People* (the Warnock Report). Lady Warnock (1991) has recounted some of the features of that Committee's recommendations and the background to them. She noted, for example, the significance of the early 1970s transfer of responsibility for the hitherto designated 'ineducable' severely handicapped from the Department of Health to the Department of Education and Science. This led directly to the setting up of the Committee of Enquiry. Among the Committee's central tenets were the beliefs that every person had the right to education; that the goals of education should be independence, the ability to do useful work and the ability to enjoy life; that the concept of 'special needs' should replace diagnostic categories; and that while 2 per cent of children had ongoing significant special needs, as many as 20 per cent had less significant special needs which still required special help. The committee saw equality as equality of entitlement, not identity of provision. Writing some 13 years after presenting the report, however, Warnock painted a bleak picture of progress in the achievement of this notion of equality, blaming the then financial crisis and the new ideal in education, that of cost-effectiveness.

Mittler (2002) reviewed some of the significant developments in the education of students with intellectual disabilities that had taken place in England since responsibility for their education passed from health to education authorities. These included the shift from a categorical to a non-categorical, needs-based approach to teaching; a greater emphasis on changing the environment rather than the child; a shift from exclusion to inclusion (although the majority of children with intellectual disabilities remained in some form of segregated provisions, with considerable

variations between local education authorities); and developments in making the National Curriculum and its assessment more accessible to SWSEN.

Also of significance outside as well as inside the UK has been the *Special Educational Needs and Disability Act* of 2001 and the related policy document the *Special Educational Needs Code of Practice*. The latter replaced an earlier *Code of Practice* issued in 1994. These Codes are intended to provide paractical advice to schools and local authorities on 'carrying out their statutory duties to identify, assess and make provision for children's special educational needs' (Department for Education and Skills, 2001, p.iii).

Finally, it must be recognised that while countries can learn much from other countries, the transfer of knowledge, beliefs and experiences raises the cultural propriety of making such transfers. Mitchell (1999) noted that the challenge to both exporters and importers of philosophies and practices is to determine how far indigenous philosophies, ideologies and practices should be encouraged, respected, challenged, overthrown, or blended with those from 'outside'.

1.5 Summary

1. *The purpose of this review is to outline international trends in the education of students with special educational needs, with the aim of informing the Ministry of Education's current review of special education.*

2. *The review does not include early childhood or post-school sectors, behaviour services or giftedness, as these fall outside the scope of the current review of special education for which the current review is intended to be a companion piece.*

3. *This review examines 15 issues, ranging from paradigms of special educational needs through the administration of special education, to school and classroom policies and practices.*

4. *Throughout the review, the term 'students with special educational needs' (abbreviated as SWSEN) will generally be employed.*

5. *Developments in special and inclusive education show similar trajectories across countries, especially those in the developed western world.*

6. *Broadly, there are four main sources of convergence of policies and practices: international conventions, the dissemination of influential legislation especially from the US and UK, the research literature and, more recently, the Internet.*

7. *In many ways, special education is a microcosm of education more generally and, indeed, of society as a whole.*

CHAPTER TWO

PARADIGMS OF
SPECIAL EDUCATIONAL NEEDS[3]

During its history, the broad field of special education has been the site of quite different paradigms, or models, which posit certain relationships between individuals with disabilities and their environments. This chapter will examine the three most dominant paradigms: the psycho-medical paradigm, the socio-political paradigm and the organisational paradigm. While most countries have a mix of all three underlying their educational provisions for SWSEN, the preponderant paradigm remains the psycho-medical model, which still retains its adherents even when other paradigms that place an emphasis on the environment have gained traction in recent years.

2.1 Psycho-medical Paradigm

Until recently, special education has been dominated by *a psycho-medical paradigm,* which focuses on the assumption that deficits are located within individual students (Clark et al., 1995). Historically, this paradigm has been the most widespread and has been used in both the diagnosis and educational treatment of children with disabilities. As noted by Ackerman et al. (2002), in this model students receive a medical diagnosis based on their psychological and/or physical impairments across selected domains and both strengths and weakness are identified for education and training. Those with similar diagnoses and functional levels are grouped together for instructional purposes. This model is problematic for several reasons, according to Christensen (1996). Firstly, it leads to the attribution of student failure to a defect or inadequacy within the individual, thus masking the role that highly constraining educational systems play in creating failure. Secondly, it wrongly suggests homogeneity within various diagnostic categories. Thirdly, many students enrolled in special education do not manifest demonstrable pathologies. Fourthly, as we shall see later in this report, studies show that instruction based on categories is generally not effective.

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[3] This section draws heavily from Mitchell (2004a and 2004b).

2.2 Socio-political Paradigm

In contrast to the psycho-medical paradigm, several writers regard disability as a *socio-political construct*, which focuses on structural inequalities at the macro-social level being reproduced at the institutional level (Christensen, 1996; Clark, et al., 1995; Skidmore, 2002; Skrtic et al., 1996). Some writers are critical of this socio-political perspective, however, blaming it and its derivatives for what they consider to be an unscientific approach to special education (see Heward, 2003; Kauffman, 1999; Kavale & Mostert, 2003; and Sasso, 2001).

An interesting variant of the socio-political paradigm is a *socio-cultural view* presented by Danesco (1997) on the basis of her examination of international studies of parental beliefs about the nature and causation of childhood disabilities and about treatment and intervention. These studies revealed a commonly held duality of beliefs, with many parents in some cultures simultaneously holding both biomedical and socio-cultural views, the latter derived from magical, religious, supernatural, or metaphysical beliefs. Among the socio-cultural views is the belief espoused by cultural groups that adhere to the idea of reincarnation, where a disability is perceived as a condition affecting a present life but not necessarily the preceding or following lives. This duality of beliefs leads parents to pursue both formal biomedical help and support from informal networks, including eliciting the help of folk healers, performing religious rituals and changing their own behaviours to atone for past transgressions. Danesco argued that professionals need to identify where their and parents' beliefs are convergent, divergent, or in conflict, and to develop strategies to deal with these circumstances.

Danesco's argument is echoed by Kalyanpur et al. (2000), who contended that the equity and advocacy expectations embedded in mandates for parent participation in special education decision-making processes may well be in conflict with the values held by many families from culturally diverse backgrounds. This is particularly so in the case of those who do not share beliefs in the primacy of participatory democracy, individual rights and freedom of choice. Instead of equity, some cultures may believe that inequality is a right and proper principle; instead of asserting individual rights, some cultures emphasise social obligations; instead of valuing choice, some cultures accept the primacy of ascribed roles. It is therefore incumbent on professionals that they develop an awareness of their own cultural and ethical values and understand that these may not be universally shared.

2.3 Organisational Paradigm

To these two paradigms, Clark et al. (1995) have added a third, an *organisational paradigm*, which they have identified in the writings of scholars such as Ainscow (1995) and Lipsky & Gartner (1999). In this newly-emerged paradigm, special education is seen as the consequence of inadequacies in mainstream schools and, consequently, ways should be found to make them more capable of responding to student diversity. Disabilities are perceived as a function of the interaction between individual students and their physical, social and psychological environments. Instructional techniques and learning opportunities should be structured to compensate for environmental deficiencies to ensure that children learn and achieve skills of adaptive living. This can be achieved through such means as schools implementing findings from research into effective teaching, operating as problem-solving organisations, and supporting teachers through the change process.

While recognising that their own work has largely been based on many of the assumptions of the organisational paradigm, Clark et al. have come to have some concerns with certain aspects of it. These include the difficulty in bringing about even minor changes in schools, given their 'actual complexity and messiness', and an apparently absolutist position lurking beneath the paradigm. While their own research shows that in individual schools it is possible to identify one of the three paradigms as being dominant (i.e., held by the powerful members of staff, especially principals), subordinate perspectives invariably co-exist among less powerful members of staff (i.e., teachers) and have to be taken into account by policy analysts.

2.4 Summary

1. *During its history, the broad field of special education has been the site of quite different paradigms, or models, which posit certain relationships between individuals with disabilities and their environments.*

2. *This chapter examined the three most dominant paradigms:*

    (a) *the psycho-medical paradigm, which focuses on the assumption that deficits are located within individual students,*

    (b) *the socio-political paradigm, which focuses on structural inequalities at the macro-social level being reproduced at the institutional level, and*

    (c) *the organisational paradigm, in which special education is seen as the consequence of inadequacies in mainstream schools.*

3.   *While most countries have a mix of paradigms underlying their educational provisions for SWSEN, the preponderant paradigm remains the psycho-medical model, which still retains its adherents even when other paradigms that place an emphasis on the environment have gained traction in recent years.*

CHAPTER THREE

DEFINITIONS, CATEGORISATION AND TERMINOLOGY[4]

Given the diversity of paradigms outlined in the previous chapter, it is not surprising to find that making international comparisons of provisions for SWSEN is fraught with difficulties. As we shall see in this chapter, there is no universal agreement as to how this group of students should be referred to, how they should be defined and what, if any, categories they should be divided into. As well, these differences interact to determine differences in the structure and function of special education services and how they should be funded.

This diversity reflects a variety of factors, including different philosophical positions, such as those outlined in the previous chapter; the history of organisations/systems; local traditions within school districts; legal foundations; and fiscal policies and constraints (Weishaar & Borsa, 2001). It is further compounded by the recent UNESCO International Conference on Education resolution that Member States should adopt a broadened concept of inclusive education that addresses the diverse needs of *all learners* (UNESCO, 2009). In relation to the countries it covers, the European Agency for Development in Special Needs Education (EADSNE) commented on this diversity: 'These differences between countries are strongly related to administrative, financial and procedural regulations. They do not reflect variations in incidence and the types of special educational needs between these countries' (EADSNE, 2003, p.8).

This chapter will examine various definitions and classifications of SWSEN, discuss some problems with classification systems, and terminological issues.

3.1 Definitions and Classifications of SWSEN

In order to discuss policy differences and to gather comparable statistics, EADSNE and the OECD have sought to compare definitions across countries (EADSNE, 2000, 2003; OECD, 2000, 2005). As suggested above, they have found comparisons difficult, as the definitions vary even within nations (Australia and the UK being examples of this), as well as reflecting considerable variation across countries. Thus, for example, the

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[4] This chapter draws heavily from the following sources: Riddell et al. (2006), European Agency for Development in Special Needs Education (2000, 2003) and OECD (2000, 2005).

category, *special educational needs*, is limited in some countries to students with disabilities, while in others it extends to social disadvantage, those with minority ethnic backgrounds and even gifted children (Evans, 2003).

In order to deal with this diversity, the OECD obtained agreement across countries to re-allocate their national categories into three types, for the purpose of obtaining data for international comparisons:

> *Category A: Disabilities*: students with disabilities or impairments viewed in medical terms as organic disorders attributable to organic pathologies (e.g., in relation to sensory, motor or neurological defects). The educational need is considered to arise primarily from problems attributable to these disabilities.

> *Category B: Difficulties*: students with behavioural or emotional disorders, or specific difficulties in learning. The educational need is considered to arise primarily from problems in the interaction between the student and the educational context.

> *Category C: Disadvantages*: students with disadvantages arising primarily from socio-economic, cultural, and/or linguistic factors. The educational need is to compensate for the disadvantages attributable to these factors (OECD, 2005, p.14).[5]

In its 2005 publication, OECD noted that most countries found it easiest to contribute data in relation to category A (disabilities), while many found it less easy to contribute data in relation to categories B (difficulties) and C (disadvantages).

In category A, the number of national sub-categories varied from two for England to 19 in Switzerland, with most countries having 12 or 13 sub-categories and nine sub-categories being found in virtually every country. These common categories comprised students who were blind or partially sighted, deaf or partially hearing, with emotional and behavioural difficulties, with physical disabilities, with speech and language problems, who were in hospital, with a combination of disabilities, with moderate or severe learning problems, and with specific learning difficulties. Certain countries cited IQ scores to define some categories (France, Greece, Italy, the Netherlands, Slovak Republic and Switzerland). Emotional and behavioural problems were not recognised as a separate category in Greece, Hungary, Italy or Turkey. Certain countries had a separate category for autism (Czech Republic, Germany, Poland, Slovak Republic, Turkey and the USA). Only Poland had a category for children who are in 'danger to addiction'.

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[5] Florian et al. (2006) criticised this classification as one-dimensional. For example, there is a presumption that children can be classified in only one category: e.g. a child who is blind (category A (disabilities)) will not also be an immigrant (category C (disadvantages).

The range between countries was less for category A (disabilities) (Korea – 0.47% to USA – 5.16%) than for either category B (difficulties) (Italy – close to or at 0%, to Poland - 22.29%), or category C (disadvantages) (Hungary – close to or at 0% to US – approx 23%). Italy, Japan and Poland identified no categories within category B (difficulties) and Turkey only recognised 'gifted and talented' students in category B.

According to the OECD, countries differed the most in relation to category C. The most common categories across countries related to students whose first language was not that of their host country and/or who were immigrant, migrant or refugee children. Four countries (Belgium (Flemish Community), Germany, Mexico, and Spain) had a category that included 'Travelling children'. Only Belgium (the French Community) and Mexico specified rural areas or areas of small population (respectively). Few countries specifically mentioned socio-economic disadvantage (the exceptions included France, Mexico and the Netherlands). Few countries specifically included children who offend.

Some countries have taken a strong stance in relation to categorisation. Four warrant further description. Firstly, as noted by Riddell et al. (2006), Sweden has generally adopted an anti-categorisation approach to special educational needs and has opposed the use of medical categories for educational purposes. Given the reluctance to categorise children, psychometric assessment techniques have not been widely used. An exception to the Swedish anti-categorisation stance is the recognition of deaf or hearing impaired students as a separate group who may have the option of attending a special school for the deaf. Despite the dislike of categories, Hjorne & Saljo (2004) noted that there has been a marked increase in the identification of some types of impairment, in particular attention deficit/hyperactive disorder (ADHD). However, there is scepticism about the robustness of this category and identification techniques are seen as highly subjective and dependent on professional judgment.

Secondly, following the passage of the Education (Additional Support for Learning) (Scotland) Act 2004, the definition of additional support needs used in Scotland encompassed all children who have difficulty in learning for whatever reason (Riddell et al., 2006).

As noted by the OECD (2005), Denmark and England were two other countries not to take a categorical approach, although the former did make a distinction between more extensive special needs (about 1%) and those with less extensive needs, including

those with disadvantages (about 12%). As Riddell et al., 2006) have noted, whilst efforts have been made to abandon categorical approaches in England, the Statement of Need still included a description of a child's difficulty in learning, and there appears to have been a return to the use of categories, with a growth in the identification of some conditions such as autism, ADHD and dyslexia. The OECD also noted that England had begun to collect data through categories, and the OECD's next set of statistics would contain such information. In fact, England does currently collect statistics on the following categories of SWSEN: specific learning difficulties (e.g., dyslexia, dyscalculia, dyspraxia); learning difficulty (moderate, severe, profound); behavioural, emotional and social difficulty; speech, language and communication needs; autistic spectrum disorder; visual impairment; hearing impairment; multi-sensory impairment; and physical disability (Department for Education and Skills, 2005).

Finally, given the influential role played by the US in international developments in special education, it is relevant to consider that country's approach to the classification of SWSEN. The first point to make is that under IDEA, the US legislation focuses on 13 disability categories. These fall into three major types:

1) *Sensory disabilities* such as visual impairments, hearing impairments, deaf-blindness;

2) *Physical and neurological disabilities* such as orthopedic impairments, other health impairments, traumatic brain injury, multiple disabilities, autism; and,

3) *Developmental disabilities* such as specific learning disabilities, speech and language impairments, emotional disturbance, mild mental retardation, and developmental delay.

In the US, the *President's Commission on Excellence in Special Education* (2002) was very critical of what it referred to as 'the proliferation of categories and assessment guidelines that vary in their implementation, often with little relation to intervention' (p.21). It pointed out that many of the 13 categories emerged as a result of advocacy groups' efforts to promote recognition for their specific constituencies and that 'the necessity of all 13 categories and their relation to instruction is not firmly established' (ibid,). The Commission's conclusion regarding categorisation in the US is worth noting in full:

The Commission could not identify firm practical or scientific reasons supporting the current classification of disabilities in IDEA. The intent of IDEA is to focus on the effective and efficient delivery of special education services. The Commission is concerned that federal implementing regulations waste valuable special education resources in determining which category a child fits into rather than providing the instructional interventions a child requires. The priority should always be to deliver services, with assessment secondary to this aim. When schools are encouraged by federal and state guidelines to focus on assessment as a priority—and often for gate keeping functions to control expenditures—the main victims are the students themselves, whose instructional needs are not addressed in the cumbersome assessment process. Thus, the overall Commission recommendation for assessment and identification is to simplify wherever possible and to orient any assessments towards the provision of services (President's Commission, 2002, p.22).

3.2 Problems with Classification Systems

As mentioned in the previous chapter, special educational classifications based on disabilities are problematic for several reasons. Firstly, they tend to attribute student failure to a defect or inadequacy within the individual student, thus masking the role that highly constraining educational systems may play in creating failure. Secondly, they wrongly suggest homogeneity within various diagnostic categories. Thirdly, many SWSEN do not manifest demonstrable disabilities. Fourthly, studies show that instruction based on disability categories is of limited utility. As well as these four limitations, three other problems should be taken into account, according to Farrell (2010): Fifthly, since all disability categories are continuous in nature (as opposed to being discrete entities such as gender), they require some judgement to be exercised about the relevant cut-off points for special educational purposes, which is not always a straightforward task. Sixthly, issues of category boundaries arise through the co-occurrence of various disabilities. For example, according to the American Psychiatric Association (2000), around half of clinic-referred children with ADHD also have an oppositional defiant disorder or a conduct disorder. Seventhly, since disability categories may militate against seeing the student holistically, 'care is needed that classification of a disorder or disability does not come to be seen as a classification of the child' (Farrell, 2010, p.55).

Farrell went on to note that, in light of such problems, the validity and reliability of some categories of disability may be questionable, leading to some 'very wide variations in the supposed prevalence of conditions' (p.56). He cited studies reported by the authors of the *Diagnostic and Statistical Manual of Mental Disorders Fourth Edition Text Revision (DSM-IV-TR)* (American Psychiatric Association, 2000), which showed a wide

range in estimates of the prevalence of particular disorders. For example, 'oppositional defiance disorder' varied from 2% to 16%, and 'conduct disorders' ranged from 1% to 10% in the general population.

But care must be taken not to throw the baby out with the bathwater, for classification does have some merits, provided its limitations are borne in mind. Farrell (2010) suggested, firstly, that 'the reliability and validity of categories can be tested, leading to clearer and more robust categories' (p.60). Secondly, the relationship between categories, assessment and intervention must be made clear. Thirdly, despite the challenges in delineating disabilities, 'much that is useful to teachers and others can be identified in research and professional practice referring to categorical classifications' (ibid.).

3.3 Terminology

As well as the diversity of categories outlined above, there are differences in the way the broad field of provisions are described internationally. There are three main divisions: 'special education', 'inclusive education', and hybrids of the two. Australia provides a good case in point. As summarised by Shaddock et al. (2009), many state departments in Australia now refer to services using some reference to disability, for example, NSW – 'Disability Programs'; Tasmania – 'Students with Disabilities'; South Australia – 'Disability Services'; and Victoria – 'Students with Disabilities'. In contrast, two states use the term 'Inclusive Education' to describe their services: Western Australian services are known as 'Inclusive Education' and Queensland employs a hybrid term, 'Inclusive Education and Learning and Disability Support'. Shaddock et al. also pointed out that only the two territory governments, ACT and Northern Territory, currently use 'Special Education' as a descriptor of services: 'Special Education and Wellbeing' (NT) and 'Special Education' (ACT). They conclude that 'In Australia, the use of 'special' to describe services for students with a disability is clearly not the preferred option' (p.33).

Other countries reflect this diversity of terminology: for example, the US prefers 'special education', Japan 'special support education', Scotland 'educational provision for pupils with additional support needs', Europe in general and South Africa 'special needs education' (the latter administered by the Directorate of Inclusive Education).

It should not be assumed that this diversity of terminology is merely semantic, for, in most cases it represents significant differences in the perceptions of student diversity and the scope of provisions designed for them.

3.4 Summary

1. *There is no universal agreement as to how SWSEN should be referred to, how they should be defined and what, if any, categories they should be divided into.*

2. *Differences in definitions and categorisation influence the structure and function of special education services and how they are funded.*

3. *This diversity reflects a variety of factors, including different philosophical positions; the history of organisations/systems; local traditions within school districts; legal foundations; and fiscal policies and constraints.*

4. *In order to deal with this diversity, the OECD obtained agreement across countries to re-allocate their national categories into three types:*

    Category A: Disabilities: students with disabilities or impairments viewed in medical terms as organic disorders attributable to organic pathologies; their educational need is considered to arise primarily from problems attributable to these disabilities.

    Category B: Difficulties: students with behavioural or emotional disorders, or specific difficulties in learning, arising primarily from problems in the interaction between the student and the educational context.

    Category C: Disadvantages: students with disadvantages arising primarily from socio-economic, cultural, and/or linguistic factors, and whose educational need is to compensate for the disadvantages attributable to these factors.

5. *In category A, the number of national sub-categories in OECD countries varied from two to 19, with most countries having 12 or 13 sub-categories and nine sub-categories being found in virtually every country.*

6. *Countries differed the most in relation to category C.*

7. *Some countries have adopted an anti-category approach, although none have abandoned them entirely and some are returning to a limited form of categorisation.*

8. *In the US, the President's Commission on Excellence in Special Education (2002) was very critical of what it referred to as 'the proliferation of categories and assessment guidelines that vary in their implementation, often with little relation to intervention'.*

9. *Several problems with classifications based on disability categories have been identified:*

   a   *they mask the role that constraining educational systems may play in creating failure,*

   b   *they wrongly suggest homogeneity within various diagnostic categories,*

   c   *many SWSEN do not manifest demonstrable disabilities,*

   d   *studies show that instruction based on disability categories is of limited utility,*

   e   *they require some judgement to be exercised about the relevant cut-off points for special educational purposes,*

   f   *issues of category boundaries arise through the co-occurrence of various disabilities, and*

   g   *disability categories may militate against seeing the student holistically.*

10. *As well as the diversity of categories outlined above, there are differences in the way the broad field of provisions are described internationally. There are three main divisions: 'special education', 'inclusive education', and hybrids of the two.*

CHAPTER FOUR

DISPROPORTIONALITY IN SPECIAL EDUCATION

Disproportionality, or disproportionate representation, is generally defined as 'the representation of a particular group of students at a rate different than that found in the general population' (Gravois & Rosenfield, 2006, p.42). In many countries, the apparent over-representation in special education of two groups of students – those from ethnic minorities and males – has caused concern to policy makers who worry about the probability of such students being misidentified, misclassified, and inappropriately placed in special education programmes. This chapter will review the literature on both of these groups.

Before reviewing the literature on disproportionality, it is interesting to observe that placement in special education is seen as a negative outcome by many of those who express concern about the over-representation of boys and of ethnic minorities. For example, in the US, the Elementary and Middle Schools Technical Assistance Center (2010) stated that

> For ethnic minority students, misclassification or inappropriate placement in special education programs can have devastating consequences. The problem is exacerbated when it results in a child's removal from the regular education setting, the core curriculum, or both. Students faced with such exclusionary practices are more likely to encounter a limited curriculum and lower teacher expectations. As a result, these students often have more negative post-school outcomes as evidenced by their lack of participation in post-secondary education and limited employment opportunities. In some districts, the disproportionate representation of ethnic minority students in special education classes also results in significant racial separation.

Macmillan & Rechsley (1998) pointed to the irony of considering over-representation to be a problem if students are purportedly gaining the advantage of special education.

4.1 Over-representation of Ethnic Minorities

Disproportionate representation of students from ethnic minority backgrounds in special education has been a persistent concern in the field for more than 30 years, particularly in the US (Fiedler et al., 2008; Garcia & Ortiz, 2006; Skiba et al., 2005) and the UK (Dyson & Gallannaugh, 2008; Strand & Lindsay, 2009). (In passing it is worth noting that an opposite situation pertained in South Africa where, under apartheid, *whites* were

over-represented in special education (Department of Education, 2001).

In considering the over-representation of ethnic minorities in special education, attention must also be paid to a relevant, and possibly causative factor: the continuing gulf between schools and those families whose cultures differ from their children's school. In their recent review of IEPs, the writer and his colleagues referred to the work of the following writers who have analysed this situation: Calicott, 2003; Hanson et al., 1990; Harry et al., 1995; Kalyanpur & Harry, 1997; Robinson & Rathbone, 1999; Thorp, 1997; Trainor, 2010; Valenzuela & Martin, 2005; and Zhang & Bennett, 2003).

4.1.1 Evidence of ethnic disproportionality

Two countries have detailed statistics on the ethnicities of students classified as having special educational needs – the US and England.

US. In the US, the issue of ethnic minority over-representation was explored in some detail by Artiles (2003). He noted that in that country, African Americans and Native Americans were disproportionately represented in special education, especially in the high incidence categories of learning disabilities, mental retardation and emotionally disturbed.

The re-authorisation of IDEA in 1997 required states to collect and analyse data to 'determine if significant disproportionality based on race is occurring in the state or schools'. Five race/ethnicity categories are used in the collection of these data: American Indian, Asian/Pacific Islander, black (non-Hispanic), Hispanic, and white (non-Hispanic). The Office of Special Education Programs (OSEP) in its Annual Report to Congress then collates this information. For example, the 22nd Annual Report to Congress included the information outlined in Table 4.1 about the race and ethnicity of students with disabilities (U.S. Department of Education, 2000):

Table 4.1. Percentage of students by ethnicity in the population and in special education in the United States in the 1998-99 school year

Percentage of Students by Ethnicity		
	Percentage of students in general population	**Percentage of students in special education population**
Asian/Pacific Islander	3.8	1.7
Black (non-Hispanic)	14.8	20.2
Hispanic	14.2	13.2
American Indian	1.0	1.3
Caucasian (non-Hispanic)	66.2	63.6

OSEP presented a second, more detailed, set of statistics in Table 4.2, which shows the percentages of students, by ethnicity making up the various disability categories.

Table 4.2. Percentage of students aged 6 to 21 by race/ethnicity served by disability services in the 1998-99 school year in the United States

Disability	American Indian	Asian/ Pacific Islander	Black (non-Hispanic)	Hispanic	White (non-Hispanic)
Specific Learning Disabilities	1.4	1.4	18.3	15.8	63.0
Speech and Language Impairments	1.2	2.4	16.5	11.6	68.3
Mental Retardation	1.1	1.7	34.3	8.9	54.1
Emotional Disturbance	1.1	1.0	26.4	9.8	61.6
Multiple Disabilities	1.4	2.3	19.3	10.9	66.1
Hearing Impairments	1.4	4.6	16.8	16.3	66.0
Orthopedic Impairments	.8	3.0	14.6	14.4	67.2
Other Health Impairments	1.0	1.3	14.1	7.8	75.8
Visual Impairments	1.3	3.0	14.8	11.4	69.5
Autism	.7	4.7	20.9	9.4	64.4
Deaf-Blindness	1.8	11.3	11.5	12.1	63.3
Traumatic Brain Injury	1.6	2.3	15.9	10.0	70.2
Developmental Delay	.5	1.1	33.7	4.0	60.8
All Disabilities	**1.3**	**1.7**	**20.2**	**13.2**	**63.6**
Resident population	**1.0**	**3.8**	**14.8**	**14.2**	**66.2**

In commenting on the above statistics, OSEP made the following points regarding what it described as 'disparities' between the race/ethnicity distribution of the

students served under IDEA and the general population of students. These included the following:

- *Asian/Pacific Islander* students represented 3.8% of the general population, but they comprised only 1.7% of those receiving special education services in all disability categories. This percentages varied by disability category: in the areas of hearing impairments (4.6%), autism (4.7%), and deaf-blindness (11.3%), the representation of Asian/Pacific Islander students was greater than their representation in the resident population.

- *Black (non-Hispanic)* students accounted for 14.8% of the general population, compared with 20.2% of the special education population in all disabilities. In 10 of the 13 disability categories, the percentage of the special education population composed of black students equaled or exceeded the resident population percentage. At the most extreme, black students' representation in the mental retardation and developmental delay categories was more than twice their national population estimates.

- Representation of *Hispanic s*tudents in special education (13.2%) was generally similar to the percentages in the general population (14.2%). However, Hispanic students exceeded the resident population percentages in three categories: specific learning disabilities (15.8%), hearing impairments (16.3%), and orthopedic impairments (14.4%).

- *American Indian* students represented 1.0% of the general population and 1.3% of special education students. They slightly exceeded the national average in nine disability categories, reaching the largest percentages in the categories of deaf-blindness (1.8%) and traumatic brain injury (1.6%).

- Overall, *white (non-Hispanic)* students made up a slightly smaller percentage (63.6%) of the special education students than the general population (66.2%). However, their representation was higher than the national population estimates in five disability categories: speech and language impairments (68.3%), orthopedic impairments (67.2%), other health impairments (75.8%), visual impairments (69.5%), and traumatic brain injury (70.2%).

    United Kingdom (England). Table 4.3 outlines the primary school statistics for 2007 in England on the number of pupils with special educational needs by ethnicity. (It will be noted that England does not keep statistics comparable to those kept in the US).

From this table it can be seen that the ethnic groups with the highest percentages of students classified as having special educational needs were Travellers of Irish heritage (2.6% with statements and an incredible 55.5% without statements), closely followed by Gypsy/Roma students (2.5% and 49.2%, respectively). At the other end of the continuum were Chinese students (1.2% and 11.1%, respectively) and Indian students (1.2% and 14.2%). By comparison, the figures for the majority group, White British, were 1.8% and 20.0%, respectively.

In a recent UK study, Strand & Lindsay (2009) analysed the 2005 Pupil Level Annual School Census for 6.5 million students aged 5 to 16 years in England. They found that poverty and gender had stronger associations than ethnicity with the overall prevalence of SWSEN. However, after controlling for these effects, significant over- and under-representation of some minority ethnic groups relative to White British students remained. The nature and degree of these disproportionalities varied across categories of special educational needs and minority ethnic groups and were not restricted to judgmental categories of special educational needs.

In another study, Read et al. (2007) also focused on disabilities, reporting the following, *inter alia*:

a. *Black Caribbean* and *Mixed White and Black Caribbean* pupils were around 1.5 times more likely to be identified as having Behavioural, Emotional and Social Difficulties (BESD) than White British pupils;

b. *Bangladeshi* pupils were nearly twice as likely to be identified as having Hearing Impairments than White British pupils,

c. *Pakistani* pupils were between 2 and 2.5 times more likely to be identified as having Profound and Multiple Learning Difficulties, Visual Impairments, Hearing Impairments or Multi-sensory Impairments than White British pupils;

d. *Asian* and *Chinese* pupils were less likely than *White British* pupils to be identified as having Moderate Learning Difficulties, Specific Learning Difficulties and Autistic Spectrum Disorders; and

e. *Travellers of Irish Heritage* and *Gypsy/Roma* pupils were overrepresented among many categories of special educational needs, including Moderate, and Severe Learning Difficulties and BESD.

Table 4.3. Maintained primary schools' number of pupils with special educational needs by ethnic group in England (January 2007)

Ethnic group	1	2	3	4	5	6	7	8	9
White	**2,666,330**	**46,530**	**1.7**	**357,110**	**13.4**	**178,070**	**6.7**	**535,180**	**20.1**
White British	2,545,340	44,770	1.8	338,810	13.3	169,910	6.7	508,720	20.0
Irish	11,760	230	1.9	1,570	13.4	870	7.4	2,440	20.7
Traveller (Irish)	2,840	70	2.6	940	33.0	640	22.5	1,580	55.5
Gypsy / Roma	5,370	140	2.5	1,630	30.4	1,010	18.8	2,640	49.2
Other White	101,000	1,320	1.3	14,160	14.0	5,650	5.6	19,800	19.6
Mixed	**122,450**	**2,090**	**1.7**	**16,780**	**13.7**	**8,240**	**6.7**	**25,030**	**20.4**
W& B Caribbean	40,770	740	1.8	6,470	15.9	3,280	8.1	9,750	23.9
W&B African	13,330	190	1.4	1,920	14.4	960	7.2	2,880	21.6
W & Asian	25,500	370	1.4	2,730	10.7	1,230	4.8	3,960	15.5
Other mixed	42,860	790	1.8	5,670	13.2	2,780	6.5	8,450	19.7
Asian	**276,540**	**4,030**	**1.5**	**39,770**	**14.4**	**14,400**	**5.2**	**54,170**	**19.6**
Indian	78,720	910	1.2	8,480	10.8	2,720	3.5	11,200	14.2
Pakistani	114,780	2,070	1.8	20,060	17.5	7,620	6.6	27,670	24.1
Bangladeshi	48,170	670	1.4	7,460	15.5	2,730	5.7	10,190	21.2
Chinese	11,040	140	1.2	880	8.0	350	3.2	1,230	11.1
Other Asian	34,870	390	1.1	3,770	10.8	1,330	3.8	5,100	14.6
Black	**151,990**	**2,870**	**1.9**	**26,450**	**17.4**	**12,730**	**8.4**	**39,180**	**25.8**
Black Caribbean	47,230	1,020	2.1	8,900	18.8	4,830	10.2	13,730	29.1
Black African	88,210	1,510	1.7	14,690	16.7	6,460	7.3	21,150	24.0
Other Black	16,550	350	2.1	2,860	17.3	1,440	8.7	4,300	26.0
Other ethnic grp	**40,110**	**560**	**1.4**	**5,960**	**14.8**	**2,320**	**5.8**	**8,270**	**20.6**
Classified	**3,268,470**	**56,200**	**1.7**	**446,940**	**13.7**	**216,120**	**6.6**	**663,060**	**20.3**
Unclassified	**35,910**	**680**	**1.9**	**5,460**	**15.2**	**2,720**	**7.6**	**8,180**	**22.8**
All pupils	***3,304,370***	***56,880***	***1.7***	***452,400***	***13.7***	***218,830***	***6.6***	***671,230***	***20.3***

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Source: School Census

Key

1 Total pupils
2 Pupils with statements of special educational needs
3 % of pupils by SEN provision expressed as a percentage of total pupils according to ethnic group
4 Pupils with SEN at School Action
5 % of pupils by SEN provision expressed as a percentage of total pupils according to ethnic group
6 Pupils with SEN at School Action Plus
7 % of pupils by SEN provision expressed as a percentage of total pupils according to ethnic group
8 Total pupils with SEN without statements
9 % of pupils by SEN provision expressed as a percentage of total pupils according to ethnic group

4.1.2 Explanations for ethnic disproportionality

Despite consistent documentation of the existence of disproportionality across many countries, there has been relatively little exploration of the possible causes and factors contributing to racial disparities in special education (Skiba et al., 2005).

Before exploring possible explanations for ethnic disproportionality, it is necessary to consider quite a serious caveat regarding its evidential basis – at least that coming out of the US. Thus, MacMillan & Rechsly (1998) have argued that the over-

representation of ethnic minorities in special education issue is not a straightforward matter. In their critique of the US literature, they argued that data suffer from four major problems. Firstly, quite different results are obtained when percentages of groups in categories or programmes are used, compared with the more commonly cited data on percentage of categories or programmes by groups. Secondly, they urge caution in relying on aggregated data on race/ethnicity from sources that use different approaches to recording these features (in a related point, they note that most data collection fails to account for biracial students). Thirdly, in noting the considerable variability in rates of disability across states, particularly in categories requiring subjective judgements, they question the validity of these designations. Fourthly, they note the failure to consider that social class, rather than race/ethnicity, may be the more significant variable to focus on when considering over-representation.

However, if we accept that since ethnic disproportionality seems to be a universal phenomenon, it is highly likely to be a valid construct and it is therefore appropriate to turn our attention to possible explanations for it. These are many and varied and include such factors as poverty, socioeconomic disadvantage, the lack of congruence between minority cultures and the school culture, the legacy of deficit thinking about racial minorities, bias towards racial minorities, the history of school segregation (at least in the US), resource inequalities, asynchronous power relationships between school authorities and minority parents, culturally inappropriate or insensitive assessment practices, and inadequate professional development opportunities for teachers (Elementary and Middle Schools Technical Assistance Center, 2010; Fiedler et al., 2008; Gabel et al., 2009; Losen & Orfield, 2002; Skiba et al., 2005).

It is to the first of these explanations – poverty – that we shall now turn our attention. The consistent overlap of race and poverty in the US has led some to suggest that race is simply a 'proxy' for poverty and that 'ethnic disproportionality in special education is in large measure an artefact of the effects of poverty' (Skiba et al., 2005, p.130). Indeed, some writers think that the link between poverty and race is so strong that the former could be used as a substitute for the latter in collecting demographic data for the purposes of predicting educational outcomes (Hodgkinson, 1995).

Support for a race--poverty connection in explaining disproportionality in special education can be found in a range of sources. Firstly, the U.S. Bureau of the Census 2001 data showed that whereas 14.4% of White children lived in homes at or below the

poverty line in 2000, 30.4% of African American children and 29.2% of Latino children lived in families below the poverty level (Skiba et al., 2005). As mentioned above, MacMillan & Reschly (1998) argued that insufficient attention has been paid to variations in special education disproportionality by social class and that 'social class, and not ethnicity, would explain more variance in the rates of detection for these high-incidence disabilities, particularly MMR [mild mental retardation]' (p. 20).

Skiba et al., 2005) have presented a detailed analysis of the reasoning behind claims that disadvantages associated with poverty constitute a primary contribution to minority over-representation in special education. They argued that there are at least four assumptions implicit in a logical sequence linking poverty and disproportionality:

1. Minority students are disproportionately poor and hence are more likely to be exposed to a variety of sociodemographic stressors associated with poverty.

2. Factors associated with living in poverty leave children less developmentally ready for schooling and ultimately yield negative academic and behavioral outcomes.

3. Students who are low achieving or at risk for negative behavioral outcomes are more likely to be referred to, and ultimately found eligible for, special education service.

4. Therefore, poverty is an important contributing factor that increases the risk, presumably in a linear fashion, of special education placement for minority students (p.131).

Skiba et al. went on to argue that, given such a logical sequence, it might be assumed that if the first three propositions are proven, the fourth can be inferred. In a closely reasoned argument, they concluded that even a relatively substantial overlap between poverty, race, and achievement does not guarantee a strong association between poverty and minority placement in special education. They concluded that poverty makes only a weak and inconsistent contribution to the prediction of disproportionality across a number of disability categories, and that 'where poverty makes any contribution to explaining disproportionality, its effect is primarily to magnify already existing racial disparities' (p.141).

4.1.3 Addressing the problem of disproportionality
There are two main ways of addressing disproportionality –through legislation and regulation and through actions at the school level.

Legislation and regulation. In the US, the most recent reauthorisation of IDEA 2004 made several statutory provisions to address the problem of disproportionality. Firstly, it required states and local education agencies to develop policies and procedures to prevent the over-identification of students with racial, cultural, ethnic, and linguistic diversity (RCELD). Secondly, it required school districts to gather and analyse data and identify disproportionality across disability categories, in special education placements, and in disciplinary actions. Thirdly, local education agencies with high rates of students with RCELD in special education are required to implement early identification services and to reserve a maximum amount of federal funds (15%) for early intervention services. Finally, the Office of Special Education Programs in the Department of Education was required to monitor state compliance with the IDEA regulations by reviewing state data on performance indicators, including two directly related to disproportionality (Fiedler et al., 2008). As well, The Department of Education's Office of Civil Rights (OCR) undertakes pro-active compliance reviews of disproportionate representation. This office gathers information on the racial breakdown of general and special education enrolments in districts and states. If disparities occur in these data, it works with the relevant districts to create an action plan to rectify the situation and a time schedule to report back to OCR (Elementary and Middle Schools Technical Assistance Center, 2010).

Actions at the school level. There is an extensive literature on how schools can prevent underachievement and failure at the school level among ethnic minorities, thus obviating the need for special education placement. Research has shown that reducing disproportionality requires a comprehensive approach that encompasses teacher education, culturally appropriate assessment and instruction, cultural sensitivity, home and school collaboration, and an effective pre-referral process. It is beyond the scope of the present review to undertake a thorough review of this literature; however, a brief reference to some representative studies is included to give something of the tone of work in this area.

Before presenting these, the writer would like to observe that, for the most part, the principles described are relevant to all students, not just those from ethnic minorities. The truism that 'good teaching is good teaching' surely applies: the principles of learning and pedagogy apply similarly to all students. Just as the question of whether SWSEN require distinctive teaching strategies was answered both in the

affirmative and the negative in Chapter Ten, the same surely applies with respect to students from ethnic minorities: 'Yes' they need culturally appropriate teaching, but 'No' they share the same needs with other students for sound, evidence-based teaching; the goals - a marked and measurable change in educational outcomes - surely remain the same.

Writing on behalf of the National Center for Culturally Responsive Educational Systems (http://nccrest.org), Garcia & Ortiz (2006) have presented a comprehensive overview of how disproportionate representation can be prevented 'through culturally and linguistically responsive pre-referral interventions' (p.1). By 'pre-referral', they mean taking steps to avoid referring students for special education by 'differentiating students with disabilities from those whose academic or behavioral difficulties reflect other factors, including inappropriate or inadequate instruction' (p.4). Others to have identified pre-referral intervention as a successful way to decrease the number of inappropriate referrals for minority students include Schrag & Henderson (1996).

Garcia & Ortiz noted that the concept of pre-referral intervention is similar to the 'response to intervention' model (to be outlined in the next chapter of the present review). In making their case, they argued that

> it is critical that the pre-referral intervention process is culturally and linguistically responsive; that is, educators must ensure that students' socio-cultural, linguistic, racial/ethnic, and other relevant background characteristics are addressed at all stages, including reviewing student performance, considering reasons for student difficulty or failure, designing alternative interventions, and interpreting assessment results (p.4).

Garcia & Ortiz went on to specify key elements of culturally- and linguistically-responsive pre-referral intervention for culturally and linguistically diverse students. These included the following:

- schools should recognise the fact that all students have cultures composed of social, familial, linguistic, and ethnically-related practices that shape the ways in which they see the world and interact with it;

- all educators should share responsibility for educating all students, through culturally responsive curricula and instruction and by creating learning environments in which their culturally and linguistically diverse students can be successful;

- educators should recognise that culturally and linguistically diverse learners are best served by curricula and instruction that build on their prior socio-cultural

and linguistic knowledge and experiences;

- schools should offer an array of programmes and services that accommodate the unique learning characteristics of specific groups of students, including community-based programmes and support services;

- educators should create collaborative relationships with students and their families, by recognising parents/family members as valuable partners in promoting academic progress and by working with them from a posture of cultural reciprocity;

- school authorities should develop effective professional development programmes for educators, which gives attention to participants' cultural self-awareness, attitudes/expectations, beliefs, knowledge, and skills, as well as the socio-political contexts of education in culturally and linguistically diverse communities;

- schools should implement early intervention strategies as soon as learning problems are noted.

To this list many others could be added. One that is particularly worthy of attention is contained in a recent publication by Fiedler et al. (2008), who referred to Wisconsin's Checklist to Address Disproportionality in Special Education (CADSE). This checklist has three broad sections:

1. Culturally responsive beliefs and practices of schools and general education classrooms.
2. Culturally appropriate coordinated early intervening services and referral to special education.
3. Culturally responsive IEP team decision-making evaluation and determination of eligibility.

4.2 Over-representation of Males in Special Education

While there is clear international evidence of a gender imbalance in the incidence of disabilities and in special education enrolments, its causes are not so clear. In this section, the research findings showing gender differences, possible causes and educational implications will be outlined.

The principal sources of information for this section are a paper by Oswald et al. (2003), with its focus on special education, and an extensive report on boys' underachievement by Younger et al. (2005); others will be cited where relevant.

It should be noted from the outset that in the field of special education, some writers portray the gender imbalance as reflecting either or both an over-identification of males and an under-identification of girls (Wehmeyer & Schwartz, 2001). Also, at least one writer (Evans, 2000) has interpreted the gender imbalance to mean that boys receive more resources than girls to help them gain more access to the curriculum.

4.2.1 Research findings on gender imbalance in special education
There is abundant evidence from many countries to show that there are significant gender differences in achievement levels and access to special education.

United States. In their reviews of predominantly US literature, Oswald et al. (2003), Frombone (2005) and Yeargin-Allsopp et al. (2007) reported the following:

- Since the 1960s, the overall male to female ratio in special education has been between 2:1 and 3:1.
- For only a few childhood disorders are prevalence rates higher for girls than boys (e.g., separation anxiety, selective mutism, neural tube defects (NTD), and translocation Down syndrome). With respect to NTD, females are affected 3-7 times as frequently as males, except for sacral-level NTDs, which are about equal (Liptak, 2007). Translocation Down syndrome was represented by females at 74% compared with males at 26% (Roizen, 2007).
- Only for deaf/blindness are boys identified at about the same rate as girls (49.5%);
- For other impairments or disabilities, males predominate: (a) hearing impairments (52%), (b) orthopedic impairments (54%), (c) deafness (54%), (d) other health impairments (56%), (e) visual impairments (56%), (f) mental retardation (secondary school) (58%), (g) speech impairments (60%), (g) multiple disabilities (65%), (h) learning disabilities (73%), and (i) emotional disorders (76%). Also, as reported by Yeargin-Allsopp (2007), ADHD has a 4:1 ratio of males to females and cerebral palsy a ratio between 1.1:1 and 1.5:1. Roizen (2007) reported that trisomic Down syndrome was represented by males at 59% and females at 41%.

- In several studies of gender ratios in autism, the male/female ratio varied from 1.33:1 to 16:1, with a mean ratio of 4.3:1. Gender differences were more pronounced when not associated with mental retardation. In 13 studies where the sex ratio was available within the normal band of intellectual functioning, the median sex ratio was 5.5:1. Conversely, in 12 studies, the sex ratio was 1.95:1 in the group with autism and moderate to severe mental retardation.

Also drawing upon US research, the American Psychiatric Association (2000) has reported a predominance of males with mental retardation (the male/female ratio was about 1.5:1) and ADHD (estimates ranged from 4:1 to 9:1).

United Kingdom. In England, too, there is clear evidence of a gender imbalance in special education statistics, according to the National Pupil Database Version 2.2 (combining 2003 PLASC data and final 2002 attainment data), the Department for Children, Schools and Families (2007) and articles by Daniels et al. (1999), and Eason (2002):

- 68% of the 88,000 students in special schools were boys;
- of those with formal statements, 72% were boys and 28% girls; expressed another way, 21.4% of boys had special educational needs without a statement, compared with 12.6% of girls, while 2.5% of boys had a statement of special educational needs, compared with 1.0% of girls;
- almost five times as many boys as girls were expelled from school;
- of the more than 1.5 million students who were defined as having special educational needs, 64% were boys and 36% were girls;
- girls and boys were more or less equally likely to have physical disabilities, but boys were far more likely than girls to have specific learning difficulties, autistic disorders or emotional or behavioural problems.

OECD. The OECD (2005), too, has reported gender imbalances across a range of countries. Using its three-way categorisation, described in Chapter Three, it found that the median percentages for boys were: 61.3% in category A (disabilities), 66.78% in category B (difficulties), and with a typical range for category C (disadvantages) of between 50 and 60%. It also noted that the gender imbalance for Category A was most marked for autistic spectrum disorders, emotional and behavioural difficulties, and learning difficulties, and was the least marked for hearing impairments.

4.2.2 Boys' underachievement

As well as the above findings from special education, there is an extensive literature on boys' underachievement at school. While it is not within the scope of the present review to deal with this literature in depth, it does serve to contextualise the special education findings by showing that gender imbalances are pervasive and are of widespread concern. An excellent review of this literature can be found in a Cambridge University report authored by Younger et al. (2005). In their survey of the international literature on boys' academic underachievement, they included the following points:

- In the United Kingdom, national performance data have shown a 'gender gap' between the levels of boys' and girls' performance, whether at the age of 7 in reading and writing or at the age of 16, in virtually all GCSE subjects. As well, there is evidence that more boys than girls are disengaged, that more discipline problems are perceived to be caused by boys, and that more boys are excluded from secondary schooling.

- In Australia, there are references to 'underachieving and under privileged' boys and of boys as the 'new disadvantaged'.

- In the United States, there are concern around the theme of how to 'protect' boys, and on how teachers, counsellors and therapists might identify and respond to boys' hidden despondency and depression.

- In mainland Europe, there are similar concerns. For example, in Belgium, research suggests that boys' culture is less study oriented than girls' and that this impacted upon achievement levels in secondary schooling; in Sweden, there has been a concern with the need to develop boys' social competence and democratic understanding; while in Germany girls have been obtaining better school marks than boys, repeating classes less often and gaining school certificates more successfully.

4.2.3 Possible causes of gender imbalance

In addressing the question of the over-representation of males in special education and the corollary phenomenon of more underachievement among boys, a range of reasons have been advanced (Wehmeyer & Schwartz, 2001; Oswald et al., 2003; OECD, 2005; Younger et al., 2005):

a   *Biological factors*. According to Oswald et al. (2003), early explanations emphasised physiology and sex-linked genetic characteristics. The case for a biological basis appeals to gender differences in such factors as genetics, hormones, brain function, and maturation and development. In support of this explanation, Oswald et al. cited reports which document higher rates among boys for foetal mortality, postnatal mortality, complications during pregnancy and childbirth, and congenital malformations. They noted that males are at increased risk for X-linked disorders because they receive only one copy of the X chromosome from their parents, whereas females receive two; thus having a better chance of receiving at least one unaffected copy of the X chromosome. On balance, they claimed that the biological hypothesis for gender disproportionality had the strongest support in the case of mental retardation. They also pointed out that many studies have suggested that overrepresentation of males in special education, and male predominance in childhood psychiatric disorders and learning disabilities, occur because boys mature more slowly than girls. As well, they cited writers who hypothesise pervasive hormone effects on behaviour that extend well beyond sexual and reproductive behaviours.

This latter point was taken up by Younger et al. (2005) when they noted the existence of brain differences between girls and boys with links to boys' testosterone and the 'natural' development of boys. Similarly, they cited researchers who have argued for a biological construction of masculinity, with studies showing behavioural sex differences at a very early age, before children are able to form any notions of socially constructed gender.

b   *Unacceptable behaviour patterns*. Several writers have referred to the tendency for more boys than girls to exhibit behaviour patterns (such as externalising their feelings) that are considered by teachers and other professionals to be socially unacceptable and thus are more likely to lead to special education referrals (OECD 2005, Oswald et al., 2003). Thus, there may be a gender bias in referrals and admissions. A related point, advanced by some writers, is that schooling is becoming feminised (OECD 2005 p. 140), and, possibly a corollary, that masculine behaviours exhibited by boys are less acceptable (OECD, 2005).

Related points were made by Younger et al. (2005) when they cited studies indicating boys' disregard for authority, academic work and formal achievement and the formation of concepts of masculinity which are in direct conflict with the ethos of the school.

c   *Peer influences*. One of the crucial factors leading to boys' underachievement, according to Younger et al. (2005), is the importance for many boys to be accepted by other boys, to enable them to identify with and act in line with peer group norms, so that they are seen as belonging, rather than as different. Such acceptance is often dependent on showing behaviours, speech, dress and body language that incorporate aspects of 'laddishness' and risk-taking to gain and protect a macho image. Such laddishness often runs counter to the expectations of the school.

d   *Learning strategies*. Younger et al. (2005) described studies showing gender differences in attitudes to work, goals and aspirations and learning strategies. With respect to the last point, girls placed more emphasis on collaboration, talk and sharing, whilst boys were neither competitive nor team players. They were unwilling to collaborate to learn, and were less inclined to use cooperative talk and discussion to aid and support their own learning.

e   *Underidentification of girls*. A corollary of point b above may occur because the problems that girls present are not recognised by school personnel as the type of problem typically identified under current definitions of emotional disorders. Commonly used measures for assessing these in schools may not capture the emotional and behavioural problems that are more common in girls (e.g., adolescent depression) (Oswald et al., 2003).

f   *School factors*. Writing from an English perspective, Daniels, et al. (1999) noted that overall patterns of gender imbalance obscured considerable inter-school variability, with ratios of girls to boys varying from 1:1 to 1:8. The authors argued that there is thus a need to investigate what aspects of schools give rise to such disparities. Perhaps they arise from factors such as those outlined in b above.

g   *Ethnicity*. Here, two sets of findings need to be considered. Firstly, in the UK, Daniels et al. (1999) reported that gender differences were much greater among whites than among blacks, suggesting that both gender and race should be

considered simultaneously. Secondly, in the US, Oswald et al. (2003) noted a similarity of gender disproportionality across racial/ethnic groups, regardless of disability condition. This finding suggests that, whatever the forces are that influence gender disproportionality, they act on all racial/ethnic groups in a similar fashion.

h *Students' age*. There is some evidence that gender ratios are influenced by students' age. Phipps (1982), for example, found that disproportionality was greatest among children aged 5–11, during which time referral rates for boys appear to surge. Before and after that, identification rates for boys and girls were much more similar.

Rather unsatisfactorily, perhaps, Oswald et al. (2003) concluded their review of the literature with the statement that

> the question of whether gender disproportionality reflects actual differences between boys and girls or is the result of environment and cultural influences manifested in teacher–student interactions remains unresolved (p.226).

4.2.4 Educational implications of gender imbalances

The first point to be made here is to recognise that although there are clear gender differences in the incidence of many disabilities and that, on the whole, boys are at greater risk for underachievement and special education referral, there are considerable overlaps between the genders. By no means are all boys underachievers or identified as having special educational needs, nor are all girls outside these categories.

Educators should recognise that, in general, boys are biologically at higher risk than girls for certain disabilities. Apart from recognising the causation of such disabilities, and not searching for environmental explanations, teachers must accommodate their teaching to take any associated learning difficulties into account. This might mean, for example, allowing for the fact that boys tend to mature more slowly than girls by making appropriate adjustments to the curriculum and teaching strategies.

In the case of students whose special educational needs are more clearly associated with environmental factors, schools should carefully evaluate their policies and procedures to deal with these factors. For example, the school and classroom disciplinary procedures may be biased against boys and there may be insufficient

attempts to deal with aspects of boys' culture that are inimical to boys acquiring more socially acceptable behaviour or more appropriate academic motivation.

Turning to the possibility of girls being unidentified as having special educational needs, schools and those responsible for assessing students' needs for special support should re-examine their criteria to ensure that problems that girls may have are not overlooked.

For more detailed analyses and suggestion relating to addressing boys' underachievement, the reader is referred to Younger et al. (2005).

4.3 Summary

1. *Disproportionality, or disproportionate representation, is generally defined as the representation of a particular group of students at a rate different than that found in the general population.*

2. *There is an irony in considering over-representation to be a problem if students are purportedly gaining the advantage of special education.*

3. *There is clear international evidence of disproportionality of students from ethnic minority backgrounds in special education.*

4. *However, some caveats have been entered regarding the evidential basis of ethnic disproportionality– at least that coming out of the US.*

5. *The consistent overlap of race and poverty in the US has led some to suggest that race is simply a proxy for poverty and that ethnic disproportionality in special education is in large measure an artefact of the effects of poverty. However, the evidence suggests that where poverty makes any contribution to explaining disproportionality, its effect is primarily to magnify already existing racial disparities.*

6. *There is an extensive literature on how schools can prevent underachievement and failure at the school level, thus obviating the need for special education placement.*

7. *There is clear international evidence of a gender imbalance in the incidence of disabilities, special education enrolments and academic achievement.*

8. *Since the 1960s, the overall male to female ratio in special education has been between 2:1 and 3:1.*

9. *Some writers portray the gender imbalance as reflecting either or both an over-identification of males and an under-identification of girls.*

10. *In addressing the question of the over-representation of males in special education and the corollary phenomenon of more underachievement among boys, a range of reasons have been advanced. These include:*

   a   *biological factors*

   b   *unacceptable behaviour patterns*

   c   *peer influences*

   d   *learning strategies*

   e   *under-identification of girls*

   f   *school factors*

   g   *ethnicity*

   h   *students' age*

11. *Educators should recognise that, in general, boys are biologically at higher risk than girls for certain disabilities and should accommodate their teaching to take any associated learning difficulties into account.*

12. *In the case of students whose special educational needs are more clearly associated with environmental factors, schools should carefully evaluate their policies and procedures to deal with these factors.*

13. *Schools and those responsible for assessing students' needs for special support should re-examine their criteria to ensure that problems that girls may have are not overlooked.*

CHAPTER FIVE

RESPONSE TO INTERVENTION AND GRADUATED RESPONSE

An alternative to categorisations such as those outlined in the previous chapter is 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.

RtI can be considered a being roughly equivalent to other approaches, known variously as 'student progress monitoring' and 'data-based decision making within a problem-solving framework' (NASDSE and CASE, 2006).

RtI is widely used in the US and Canada, but the writer was unable to find any significant reference to its use outside North America. However, RtI bears a close resemblance to the 'Graduated Response' model of intervention in England, as outlined in the 2001 *Code of Practice*. This will be summarised later in this chapter.

The 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).

5.1 Background

In the US, RtI has a statutory and regulatory foundation. Thus, the re-authorisation of IDEA in 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.

RtI builds on two recommendations made by the *President's Commission on Excellence in Special Education* (2002):

> Consider children with disabilities as general education children first…In instruction, the systems must work together to provide effective teaching.

> Embrace a model of prevention not a model of failure. The current model guiding special education focuses on waiting for a child to fail, not on early intervention to prevent failure. Reforms must move the system toward early identification and swift intervention, using scientifically based instruction and teaching methods (p.9).

> The Commission also specifically recommended the use of an RtI model:

> Implement models during the identification and assessment process that are based on response to intervention and progress monitoring. Use data from these processes to assess progress in children who receive special education services (p.21).

It would seem, too, that the development of RtI was provoked, at least in part, by concern that over 50% of IDEA funding was being spent in learning disability programmes, with around 70% of special education activities being related to learning disability cases (Batsche, 2006). However, 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, as well as students with identified disabilities.

5.2 Definition of RtI

The National Center on Response to Intervention (2010) in the US defines RtI as follows:

> Response to intervention integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavior problems. With RTI, schools identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness, and identify students with learning disabilities or other disabilities (p.2).

Another definition is provided by the National Association of State Directors of Special Education and the Council of Administrators of Special Education (2006):

> RtI is the practice of providing high-quality instruction and interventions matched to student need, monitoring progress frequently to make decisions about changes in instruction or goals and applying child response data to important educational decisions. RtI should be used for making decisions about general, compensatory

and special education, creating a well-integrated system of instruction/intervention guided by child outcome data (p.2).

5.3 Components of RtI

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.

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

behavioral). The core curriculum should be effective for approximately 80% -85% 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 needs to be strengthened, while at the same time addressing the learning needs of the students not being successful. 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.

Tier II: supplemental instruction. Sometimes referred to as 'secondary prevention'*,* interventions at this level are of moderate intensity and serve approximately 15-20% of students (some writers go as high as 30%) 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.

Tier III: Instruction for intensive intervention. Sometimes referred to as 'tertiary prevention', this tier serves approximately 5-10% (some say as few as 2%) 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 is remediation of existing problems and the prevention of more severe problems. Students at this tier receive intensive, individual and/or small group interventions for an additional hour (two thirty minute sessions) per day, with daily progress monitoring of 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 target skills levels, the intensity and/or level of support is adjusted. These

students also move fluidly among and between the tiers. If Tier III is not successful, a student is considered for the first time in RtI as being potentially disabled.[6]

These three Tiers are sometimes referred to as 'universal' (Tier I), 'targeted group' (Tier II), and 'individual' (Tier III).

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 which would allow them to be 'triaged' directly into Tier III, rather than requiring them to go through Tiers I and II. This procedure should be used with caution, however.

Figure 5.1 provides a graphic depiction of this three-tier model (National Association of State Directors of Special Education and the Council of Administrators of Special Education, 2006):
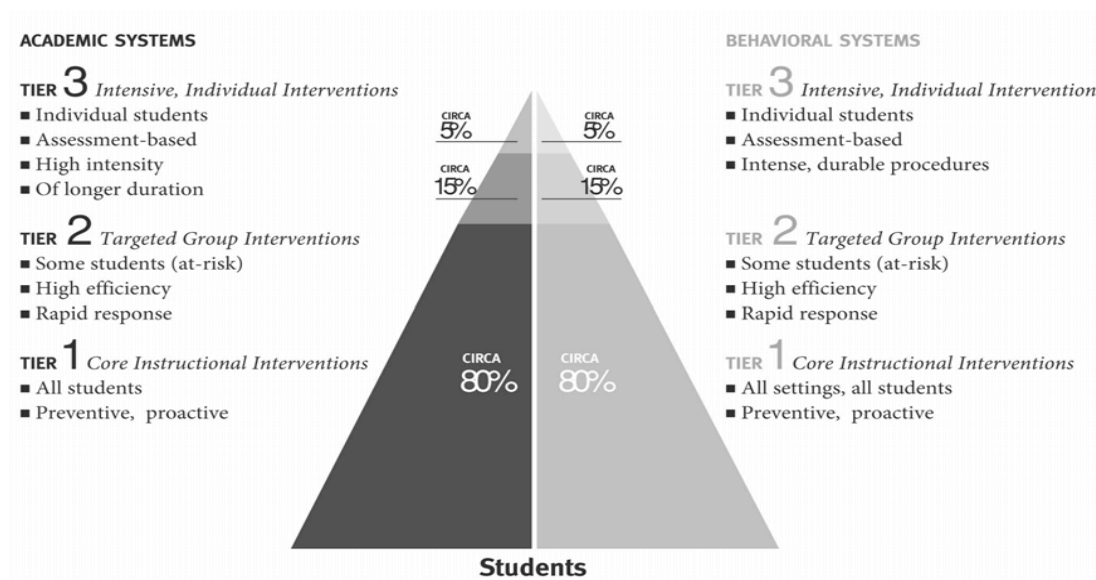
Figure 5.1 The three-tier model of Response to Intervention

5.4 Implications of Implementing RtI

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

a   effective assessment   procedures – for screening, diagnosis and progress monitoring- have to be put in place (see also Chapter Nine of this review);

b   evidence-based teaching strategies should be employed (see also Chapter Ten of this review);

c   a structured, systematic problem-solving process should be implemented;

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[6] To these three Tiers, Gerber (2010) adds a fourth to encompass students with 'extraordinary needs,' who require 'highly specialized methods'.

d   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;

e   there should be school-wide responsibility for all students, including SWSEN;

f   teachers, principals and specialists should receive appropriate pre-service training and in-service professional development on RtI (see also Chapter Thirteen of this review);

g   adequate resources need to be made available;

h   parents should be involved in the decision-making processes in RtI (see also Chapter Fifteen of this review);

i   exemplar RtI models should be developed before RtI is fully implemented;

j   it takes time and can be costly to implement; Batsche (2006), for example, pointed out that evidence from Iowa and Minnesota suggested that it takes 4-6 years (or more) to complete full implementation, including policy and regulatory change, staff development, and development of school/district-based procedures;

k   consideration must be given to teachers' variability in their 'capacity to respond to differences in *students'* response to instruction' (Gerber, 2005, p.215).

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. They also reported a significant reduction in the rate of placement in LD programmes. 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% to 55% (considering that 45% of the student population was comprised of African-American students). Like VanDerHeyden et al. (2007), Marston (2001) also reported a 40% decrease in special education placements for LD programs. He attributed this to the use of RtI to determine eligibility, with students appearing to get the help needed in skill development with the three-tier model of prevention and intervention.

5.5 The Graduated Response Model in England

There are marked similarities between RtI in the US and the system of 'Graduated Response' in England, 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[7] 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, 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 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 and above 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 <u>additional to</u> or <u>different from</u> 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 a 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 IEP.

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[7] Similar Graduated Response systems are also in place for early education settings and the secondary sector.

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 (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 child' 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).

An Ofsted (2006) survey found serious weaknesses in schools and local authorities' interpretation and operation of the graduated response approach. It considered that the provision of additional resources to students, such as support from teaching assistants, did not ensure good quality intervention or adequate progress. The survey findings showed that key factors for good progress were: the involvement of a specialist teacher; good assessment; work tailored to challenge pupils sufficiently; and commitment from school leaders to ensure good progress for all pupils. Ofsted also felt that students with behavioural, emotional and social difficulties were disadvantaged in that they were the least likely to receive effective support and the most likely to receive support too late.

5.6 Summary

1. *Response to Intervention (RtI) focuses on student outcomes and the evaluation of intervention.*

2. *In the US, RtI has a statutory and regulatory foundation, IDEA 2004 favouring a process in which the child 'responds to scientific, research-based intervention'. This arose from a recommendation of the President's Commission on Excellence in*

Special Education in 2002.

3. *The National Center on Response to Intervention in the US defines RtI as '[The integration] of assessment and intervention within a multi-level prevention system to maximise student achievement and to reduce behavior problems. With RtI, schools identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness, and identify students with learning disabilities'.*

4. *Important educational decisions about the intensity and the likely duration of interventions are based on an individual student's response to instruction across multiple (usually three) tiers of intervention:*

    Tier I: core classroom instruction. This contains the core curriculum (both academic and behavioural), which should be effective for approximately 80% - 85% 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 needs to be strengthened, while at the same time addressing the learning needs of the students not being successful. The teaching programme should comprise evidence-based instruction and curriculum and should be the responsibility of the general education teacher.

    Tier II: supplemental (or secondary) instruction. Interventions serve approximately 15-20% of students (some writers go as high as 30%) who have been identified as having continuing difficulties and who have not responded to normal instruction. This tier is still the responsibility of the general education teacher, but with the assistance of a relevant specialist.

    Tier III: Instruction for intensive intervention (tertiary). This tier serves approximately 5-10% (some say as few as 2%) 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. Students at this tier receive intensive, individual and/or small group interventions for an additional hour per day, with daily progress monitoring of critical skills. At

this level a trained specialist would be involved. If Tier III is not successful, a student is considered for the first time in RtI as being potentially disabled.

5. *For RtI to be effectively implemented, several conditions have to be met. These include:*

   a *effective assessment procedures should be in place;*

   b *evidence-based teaching strategies should be employed;*

   c *a structured, systematic problem-solving process should be implemented;*

   d *teachers, principals and specialists should receive appropriate pre-service training and in-service professional development on RtI;*

   e *adequate resources need to be made available; and*

   f *parents should be involved in the decision-making processes.*

6. *Although there is relatively little evidence as to the effectiveness of RtI, what research has been reported is encouraging.*

7. *In England, the system of 'Graduated Response' bears a close similarity to RtI. This approach recognises that there is a continuum of special educational needs and brings increasing specialist expertise to bear. The first level assumes that the classroom teachers do all they can do to provide an appropriate education for their students through differentiated teaching. If this is not succeeding, the second level, 'School Action' is implemented. This involves providing interventions that are additional to or different from those provided as part of the school's differentiated curriculum. Should further help be required, a request for external services is likely, through what is referred to as 'School Action Plus'. The next step in the process is for the school to request a statutory assessment.*

CHAPTER SIX

THE EDUCATIONAL CONTEXT[8]

Policies and practices relating to the education of SWSEN must take account of the general educational context, especially those aspects that are derived from such neo-liberal philosophies as marketisation, decentralisation/devolution, choice, competition, and the setting of accountability criteria such as standards and high-stakes testing. According to some writers, the broader educational contexts provided by neo-liberal market philosophies, which have characterised education reforms in many countries in the past couple of decades, contain many elements that tend to work against equity, the valuing of diversity and inclusive education (Blackmore, 2000; Dyson, 2005; Meijer et al., 2003; Mitchell, 1996; Thurlow, 2000). This chapter will examine (a) contestability and competition, (b) decentralisation/devolution, (c) parental choice, (d) accountability, (e) standards-based reforms, and (f) leadership.

6.1 Contestability and Competition

It is frequently assumed that the adoption of marketisation approaches to education will lead to excellence. However, most writers would agree with Blackmore's (2000) perception that marketisation and the associated competitive relationships between schools and students have negative impacts on SWSEN. Such students, she argued, are seen as 'non-marketable commodities' (p.381). Several writers taken up this point. Thus, Dyson (2005) noted that since low-attaining students are likely to depress schools' performance scores, they are wary about accepting such students, or will place them in one of the multiple forms of segregated grouping, or seek to have them assessed as having special educational needs. According to Rouse & Florian (1997), too, the main features of market-oriented reforms taking place in the UK and in many other countries include the pursuit of academic excellence, choice and competition. They claimed that in such a climate, SWSEN are particularly vulnerable and inclusive education is jeopardised. For example, some schools, given increased autonomy, discriminate against students with disabilities while trying to attract greater numbers of high-achieving students. Furthermore, Rouse & Florian noted, local education authorities have only limited ability to guide school policies; and many parents of such students do not have the knowledge, skills and contacts to comprehend an increasingly

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[8] This chapter draws upon Mitchell (2004a, 2004b, and 2005).

deregulated system. In a similar vein, Barton (1999), another English writer, wrote that 'the impact of market ideologies on the governance, process and outcomes of education has been to establish a more hierarchical, status-ridden and selective system in which exclusionary policies and practices have become more prominent' (p.54). These ideologies, he claimed, exacerbate the deep structural socio-economic conditions in society that serve to maintain inequalities, discrimination and exclusionary practices. Similar concerns have been expressed in Europe, where Meijer et al. (2003) noted that 'schools are most likely to favour pupils who contribute to higher outputs' and that 'pupils with special needs not only contribute to more variance within the class but also lower average achievements' (p.15).

Similarly, Slee (2005) writing from an Australian perspective, noted that the intensification of competition between schools, resulting from parents choosing schools based on student results, amplifies and reinforces social division. This is compounded when schools are given permission through a quasi-market to become selective of their student cohort. Slee felt that the implications of this for students who are likely to jeopardise school results on academic performance league tables, and therefore for notions of inclusive education, are stark. In Singapore, too, where there is increasing stress on competition, with schools being ranked annually, the capacity of some schools to be selective provides them with an incentive for attracting students who are likely to be assets and, conversely, deters them from accepting students who might depress their scores (Mitchell & Desai, 2005).

If the foregoing risks to the education of SWSEN, particularly inclusive education, are to be avoided or ameliorated, there is an obligation on the state to intervene. As Blackmore (2000) argued, 'The first condition for quality education for all students is a reassertion of the value of a strong state supporting public education systems' (p.383). Dyson (2005) took a similar tack, recommending that the operation of the market be supplemented with vigorous state intervention to ensure that its more perverse consequences are avoided. In particular, there is a need to ensure that those who are vulnerable in the market place are not so much protected as 'empowered to succeed'. This may require appropriate legislation or regulation and close monitoring of schools' behaviour.

6.2 Decentralisation/devolution

The previous point regarding state intervention runs up against another aspect of educational reforms, namely the principle of decentralisation or devolution. According to the European Agency for Development in Special Needs Education (2003), decentralisation has been subject to legislative change in many countries, particularly in the Czech Republic, Finland, Lithuania, the Netherland, Sweden and the UK. The US, of course, has always decentralised its education system, with states enjoying considerable autonomy from the federal system and districts also enjoying a high degree of independence from state administrations. The same would be broadly true of Canada and Australia (and, more recently, Mexico, according to Fletcher & Artiles, 2005), although districts in those countries generally have less autonomy than in the US.

In most countries, the direction of the shifts in administration has been centrifugal (i.e., away from the centre), but in some it has been centripetal (towards the centre), and in still others there have been fluctuations in the balance as new settlements are reached (Dyson, 1997). In any case, it is not an either/or issue, for as Bray (1991) has argued, in his general analysis of centralisation and decentralisation in educational administration,

> It is misleading to present centralization versus decentralization as a simple dichotomy. Many alternative patterns may be devised, and systems may be centralized in some respects and decentralized in others. Appropriate balances depend strongly on the political values of particular societies and the influence of specific contextual conditions (p.384).

Conyers (1986) presented a similar argument, noting that it is not realistic to have either a totally centralised or totally decentralised system of government. Rather,

> It is more accurate ... to envisage a series of continua, one for each relevant criterion, rather than a single one. It then becomes possible to understand how, in many countries, ... 'centralisation' and 'decentralisation' appear to be occurring simultaneously (p.90).

Before proceeding, it might be helpful to distinguish between two forms of the centrifugal shift: 'decentralisation' and 'devolution'. These two concepts should not be seen as synonymous. The political science literature usually defines decentralisation, on the one hand, as involving the transfer of responsibility from the centre, or higher level of government, to an agency at a lower level - a position taken by Rondinelli (1981) when he defined it as 'the transfer of authority to plan, make decisions and manage public functions' (p.137). Devolution, on the other hand, involves a more genuine transfer of power from the centre.

As noted in the previous section, the issue of decentralisation (or devolution) raises the question of how far can special education policies, as well as management decisions, be devolved to the local level? Elsewhere, the author (Mitchell, 1996; Mitchell, 1997) has argued there is a risk that unless there are strong safeguards at the centre, individual schools could pursue their own idiosyncratic policies with respect to students with special education needs. This could very well result in marginalisation of such students (Dyson, 1997), a lack of equity and an incoherent pattern of service provision across the country. Such undesirable consequences can be avoided by requiring that schools continue to conform to 'hard-wired' central legislation and policy guidelines, with clear accountability procedures.

Perhaps the major unresolved issue is how accountability mechanisms can be introduced without unduly threatening the centripetal/centrifugal balance of responsibility.

Sweden is a particularly interesting case. As described by Riddell et al. (2006), education in Sweden has traditionally been organised within the public sector, with a highly centralised regime of governance. Through legislation, regulations and specified curricula, the state issued detailed instructions and rules on educational activities and the allocation of funds. The development of a comprehensive system of education under the guiding principle of a 'school for all' (Persson, 2000) was a central pillar in Sweden's efforts to shape a welfare system founded on democratic representation, social redistribution, and the public provision of services. For this reason, equal educational opportunities were viewed as an essential element of democratic rights. This central state control included tight regulations and checks over the form and content of schooling by the National Agency for Education (Riddell et al., 2006). More recently, however, the education system underwent reforms that led to a change in the role of the state, with far more delegation of decision-making to the local level and more emphasis on competition and individual choice. Indeed, over the course of a few years Sweden went from having one of the most centralised to one of the most decentralised education systems in the Western world (Lundahl, 2002). Under the decentralised regime, for example, the state leaves decisions on the allocation of additional resources to municipalities and schools. Consequently, there is no guarantee that SWSEN in a mainstream setting will attract additional funding; as a result some mainstream schools have become increasingly reluctant to accept some children with special educational

needs. According to Riddell et al., these reforms arose partly from political pressures, including the political dominance of right-wing parties during the 1990s, which promoted a neoliberal market-based agenda in education. However, towards the end of the decade, there was a return to more centralised controls in an attempt to secure greater social inclusion and equality of experience across what had become a very decentralised system. According to Riddell et al. (2006), 'the legacy of these educational reforms is a model of governance employing central steering through target-setting and audit, alongside decentralised responsibilities for delivery mechanisms' (p.40).

Inevitably, with responsibility for education split (or shared, to employ a more generous term), this can give rise to tensions. In Canada, for example, McLaughlin & Jordan (2005) referred to a 'disjunction between the federal and provincial political contexts that sets the stage for the push and pull for and against inclusive education' (p.91).

Such tensions are further exacerbated when they are combined with the diffusion of responsibility for special needs education among different ministries and, in some countries among various NGOs. Meijer et al. (2003) cited France and Portugal as clear European examples of countries where responsibility for educational provisions for SWSEN is divided among different ministries.

6.3 Parental choice

One of the keystones of recent education reforms is the principle of choice. The coexistence of inclusive education provisions and special schools (which is the case in almost every country) suggests that choices must be exercised as to where SWSEN are 'placed'. In this process, the relative weight given to the preferences of SWSEN and their parents and those who administer education systems constitutes a major point of tension. Subsidiary issues centre on how parents negotiate any choices that are at least nominally available to them and how they can be assisted to make informed choices.

Parental choice is a legal right in Austria, Belgium (Flemish Community), The Czech Republic, the Netherlands, Lithuania, the UK and the US (European Agency for Development in Special Needs Education, 2003). In Belgium, for example, legislation passed in 2002 gave more rights to parents in decisions about school placement, with parents no longer being compelled to enroll their child with special needs in a special

school. On the other hand, in Greece, although recent legislation gave parents the right to choose the school for their child following appropriate assessment and an IEP, in practice students with the most significant difficulties are rarely included in mainstream settings.

With particular reference to Scotland and England, Riddell (2000) explored the tension between the principles of inclusion and choice. She noted that this relationship works in different ways in different countries and at different periods in their histories. She asserted that there is 'a danger that the hegemony of individual consumerism [i.e., choice] may cause us to lose sight of the wider ideas of group empowerment [i.e., inclusion]' (p.100), a view that is espoused by the disability movement, for whom the principle of inclusion is generally prioritised over that of choice.

Parental choice has been increasingly encouraged in Sweden since decentralisation took place in the early 1990s, with funding following the student (European Agency for Development in Special Needs Education, 2005). Thus, for example, parents may choose to use this funding to send their child to an independent school. However, should a parent choose not to send their child to a school designated by their municipality, then the authority is not obliged to cover transportation costs. Also, parental choice is more limited when it comes to SWSEN, when local authorities may impose restrictions on the basis of a school's capacity to cater for the child's needs (Rädda Barnen, 2004).

In the US, the President's Commission (2002) made the following recommendation relating to parental choice:

> INCREASE PARENTAL EMPOWERMENT AND SCHOOL CHOICE: Parents should be provided with meaningful information about their children's progress, based on objective assessment results, and with educational options. The majority of special education students will continue to be in the regular public school system. In that context, IDEA should allow state use of federal special education funds to enable students with disabilities to attend schools or to access services of their family's choosing, provided states measure and report outcomes for all students benefiting from IDEA funds. IDEA should increase informed opportunities for parents to make choices about their children's education. Consistent with the *No Child Left Behind* Act, IDEA funds should be available for parents to choose services or schools, particularly for parents whose children are in schools that have not made adequate yearly progress under IDEA for three consecutive years (p.36).

The Commission went on to argue that parental choice is an important accountability mechanism: 'Increasing school choice options is an effective means of

achieving accountability in the broad system if parents are able to more easily choose where their child attends school' (p.40). Further, the Commission pointed out that one way to increase choice is simply to give states more flexibility to use federal IDEA funds for this purpose, making it possible for funds to follow students to the schools their families choose, especially 'when they choose to opt out of chronically failing schools or districts' (ibid,).

6.4 Accountability

Accountability boils down to the multi-faceted question of *who* should be held responsible for *what*, *how* they can be evaluated, and with what *consequences*? Its scope therefore is quite complex. It includes:

(a) *Legislators,* who are responsible for passing appropriate laws and providing the necessary funds to enable them to be implemented;

(b) *policy-makers,* who are responsible for advising legislators and for establishing and monitoring effective policies for implementing laws;

(c) *schools (through their governing bodies and principals),* for translating policies into administrative arrangements and for monitoring their implementation;

(d) *teachers and other 'front-line' professionals,* for implementing policies and employing their professional skills and judgements in effectively teaching individual students (in the present case those with special educational needs).

Increasingly, decisions at all of these levels are evidence-driven, or are being expected to be evidence-driven (see, for example, Shaddock et al., 2009). Thus, referring to education more generally, Hattie (2005) wrote, 'If we, as educationalists in classrooms and schools do not provide evidence that increased resources make a difference to student learning outcomes, then we will soon be on the back foot, arguing why there should not be decreases in resources' (p 12).

How to measure the educational performance of SWSEN with validity and reliability is one of the major contemporary challenges facing educators around the world. As Shaddock et al. (2009) have recently noted, the first challenge is to establish the principles that should underpin accountability for the learning outcomes of such students. They cited the National Center on Educational Outcomes (Thurlow et al., 2008) as providing possible approaches for measuring performances. In the UK, the influential government document, *Removing barriers to achievement* (Department for

Education and Skills, 2004), stressed the need for accountability: 'Though we do not wish to prescribe one model, we are clear that all local monitoring arrangements should be linked to service standards for SEN specialist support … and should be focused on outcomes for children and school self-evaluation' (p.78).

Useful guidelines for developing accountability processes in general have been provided by Crooks (2003, pp 2-5) who argued that they should

- preserve and enhance trust among the key participants in the accountability process;
- involve participants in the process, offering them a strong sense of professional responsibility and initiative;
- encourage deep, worthwhile responses rather than surface window dressing;
- recognise the severe limitations of our ability to capture educational quality in performance indicators;
- provide well-founded and effective feedback that promotes insight into performance and supports good decision-making; and
- ensure that as a consequence of the accountability process, the majority of the participants are more enthusiastic and motivated in their work (p.2).

With regard to SWSEN, there are major challenges in determining what to measure, how to measure it, the accuracy of measurement, and the meaning of the results (Kauffman & Hallahan, 2005). As noted by Shaddock et al. (2009), disability is not a unitary variable and hence it is difficult to develop a meaningful, common metric. However, they went on to suggest the need for data on results such as (a) the programme and level of schooling achieved, (b) the timeliness of additional support; participation and suspension rates, (c) graduation rates, (d) students' postsecondary outcomes, (e) students' time in segregated/integrated settings, (f) parents'/carers' satisfaction, (g) students' satisfaction, (h) parents'/carers' and students' participation in individual planning; and (i) outcomes of IEPs (e.g., Decline in Performance, No Progress, Some Progress, Expected Progress, or, Better than Expected Progress - can easily be aggregated and reported). The critical conclusion, according to Shaddock et al., is that 'no student should be left out of accountability policies' (p.128).

In the US, attempts are made to aggregate data on student outcomes at the state level, with the Department of Education carrying out annual ratings of states' performances of their special education programmes. These ratings are intended to fulfill IDEA's requirement that 'measurable' and 'rigorous' targets be met for students enrolled in special education. Thus, states are required to create a 'state performance plan' on a six-year cycle that sets goals for special education performances in 20

different areas. Since 2007, the Department of Education has been rating each state annually in four categories: 'meets requirements', 'needs assistance', 'needs intervention', and 'needs substantial intervention'. To date, no state has received the last rating, but several have been rated in the third category. Alaska, for example, has been consistently rated in the top category. See article in *Education Week*, July 7, 2010: http://www.edweek.org/ew/articles/2010/07/07/36idea_ep.h29.html?tkn=YLWFfd70n5NecFwB17jAQnnGn2QAbmBQWgkn&print=1

State Performance Plans and Annual Performance Reports are expected to cover 20 areas, including:

- Percent of youth with IEPs graduating from high school with a regular diploma.

- Percent of youth with IEPs dropping out of high school.

- Participation and performance of children with IEPs on statewide assessments, including proficiency rate for children with IEPs against grade level, modified and alternate academic achievement standards.

- Rates of suspension and expulsion, including percent of districts that have (a) a significant discrepancy, by race or ethnicity, in the rate of suspensions and expulsions…in a school year for children with IEPs…

- Percent of children with IEPs aged 6 through 21 served

    A. Inside the regular class 80% or more of the day;

    B. Inside the regular class less than 40% of the day; and

    C. In separate schools, residential facilities, or homebound/hospital placements.

- Percent of parents with a child receiving special education services who report that schools facilitated parent involvement as a means of improving services and results for children with disabilities.

- Percent of districts with disproportionate representation of racial and ethnic groups in special education and related services that is the result of inappropriate identification.

- Percent of youth with IEPs aged 16 and above with an IEP that includes appropriate measurable postsecondary goals that are annually updated and based upon an age appropriate transition assessment, transition services, including courses of study, that will reasonably enable the student to meet those postsecondary goals, and annual IEP goals related to the student's transition services needs…

Several countries have developed policies requiring SWSEN to have access to general education accountability systems, as summarised in Mitchell et al. (2010). The arrangements in the US will suffice to illustrate these policies. Until recently, in that country, accountability in special education was defined in terms of progress in meeting IEP goals. This all changed in IDEA 97, which required all students, including those with disabilities, to participate in their states' accountability systems. This was followed

by a policy memorandum from the U.S. Department of Education (2000), to the effect that an exemption from a state's assessment programmes was no longer an option for students with disabilities. Both IDEA 97 and the No Child Left Behind Act (NCLBA) of 2002 required the provision of alternate assessment for students who could not participate in state or district assessments with or without accommodations. Districts are permitted to measure up to 3% of their students using alternate assessments (1% against alternate achievement standards and 2% against modified standards). The use of alternate assessment is a decision to be made by a student's IEP team. To quote IDEIA, IEPs must include 'a statement of any appropriate accommodations that are necessary to measure the academic achievement and functional performance of the child on state- and district-wide assessments' (IDEIA, 2004, p.118). As well, the NCLBA stipulated that student performance be disaggregated by special education status, among others, and, to avoid sanctions, by 2013/2014 schools must show that students in various subgroups are making adequate yearly progress toward mastering content standards.

Of course, effective accountability requires effective monitoring. As Meijer et al. (2003) pointed out from a European perspective, 'Monitoring and evaluation procedures must be developed and, in general the issue of accountability still has to be addressed within the framework of special needs education' (p.15).

6.5 Standards-based Reforms[9]

One of the educational battle cries in the US since the 1990s has been for 'standards-based reform', with its goal of higher and more rigorous achievement standards for all students. This economics-driven quest for 'excellence' or 'high standards' is increasingly referred to in the educational literature and in international policies. For example, in his discussion of inclusive education in England, Dyson (2005) outlined the standards-driven, highly accountable post-welfare society with its aim of developing individuals as a means of developing the economy. In this context, the emphasis is on excellence in education. Although the aim is to achieve excellence for the many, not the few, Dyson felt that the shift of focus to outputs in the education system is making 'unproductive' students less welcome in schools.

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[9] This section should be read in conjunction with Section 4 in the recent review of IEPs carried out by the writer and his colleagues at the University of Canterbury (Mitchell et al., 2010). It contains a full review of international trends in policies requiring SWSENs' access to general education accountability systems. See also Chapter Nine of the present report.

Canada and the US are also undertaking what McLaughlin & Jordan (2005) referred to as 'standards-driven reform', which focuses on increasing the educational performance of all students, assessing these performances through 'high-stakes testing' and holding schools to more stringent levels of accountability. In this context, the focus of inclusive education shifts from access to outcomes and it thus becomes a means to an end and not the goal. McLaughlin & Jordan considered that parents seeking inclusive education will increasingly be faced with regular classrooms that have an even more demanding curriculum and a pace of instruction that may not support inclusion. Writing from a US perspective, Thurlow (2000) concluded that students with disabilities do not fare well under these reforms. She cited research showing that such students are frequently excluded from national and state assessments at various points – the setting of standards; participation in assessments; accommodations to enable their abilities, rather than their disabilities, to be assessed; and the reporting of assessment results. Students with disabilities are disadvantaged, too, by the narrowing of the curriculum that emerges as an unintended consequence of the standards-based reforms as teachers focus on the range of knowledge and skills included in assessments. While this latter point could be considered undesirable for all students, Thurlow argued that it is particularly relevant when considering the need for students with disabilities to have access to a broader curriculum. Also writing from a US perspective, Artiles (2003) predicted that the introduction of such education reforms as standards and high-stakes testing may well exacerbate the current trend towards over-representation of ethnic minority groups in special education.

Other writers to touch on these issues include Brown (2005), who noted that in Middle Eastern countries the concept of excellence is perceived as being incongruous with the accommodation of learning diversity, and Slee (2005), who considered that narrowly defined notions of academic outcomes enforced through high stakes testing 'is not the friend of educational inclusion' (p.143).

6.6 Leadership[10]

Effective leadership has been, and always will be, an essential component of education. One test of leadership is the extent it succeeds in achieving positive outcomes for the most disadvantaged, in this case for SWSEN. As noted in Section 6.4, leadership should

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[10] See Chapter Eleven, section 11.4, for further comments on leadership.

be exercised throughout an education system: by legislators, policy-makers, school governing bodies, principals and teachers. Also, leadership should be evidence-driven, focused on student outcomes, and based on a recognition that success comes from individuals working together (Shaddock et al., 2009).

At the school level, according to Mitchell (2008), developing a school culture for SWSEN requires the exercise of leadership, particularly by the principal, but also by others in a school. This was recognised, for example, in the UK document, *Removing barriers to achievement* (Department for Education and Skills, 2004), which stressed the leadership of headteachers in bringing about inclusion. According to Heller & Firestone (1995) and Mayrowetz & Weinstein (1999), too, in order to bring about an inclusive school culture, the following leadership roles need to be exercised:

(a) *provide and sell a vision*: this involves defining the philosophy and goals of inclusion and promulgating them wherever possible, e.g. in school publications, talks to parents and the community, and in casual conversations;

(b) *provide encouragement and recognition*: this can be formal and informal, public or private, but it has the common feature of recognising those who are promoting inclusion;

(c) *obtain resources*: since one of the key barriers to the successful implementation of inclusion in many countries is the lack of appropriate resources, leadership has to advocate for adequate resources to be brought into the school; once these are in the school, leaders should ensure that they are equitably distributed;

(d) *adapt standard operating procedures*: this involves recognising that since rules, regulations and requirements may have evolved without the significant presence of learners with special educational needs in the school, they may have to change; examples here include curriculum, textbooks and examinations that may be inappropriate for these learners;

(e) *monitor improvement*: increasingly, it is not acceptable for leaders just to 'do good', but to show that what they are doing is having a positive impact on learners' achievements and social behaviour;

(f) *handle disturbances*: since inclusive education is rarely a settled and universally agreed policy in any school, it is inevitable that there will be overt and covert resistance that has to be handled.

6.7 Summary

1. Policies and practices relating to the education of SWSEN must take account of the general educational context, especially those aspects that are derived from such neo-liberal philosophies as marketisation, decentralisation/devolution, choice, competition, and the setting of accountability criteria such as standards and high-stakes testing.

2. *In most countries, the direction of the shifts in administration has been centrifugal (i.e., away from the centre), but in some it has been centripetal (towards the centre), and in still others there have been fluctuations in the balance as new settlements are reached.*

3. *According to some writers, neo-liberal market philosophies contain many elements that tend to work against equity, the valuing of diversity and inclusive education.*

4. *The shift of focus to outputs in the education system is making 'unproductive' students less welcome in schools.*

5. *The implication of these (presumably) unintended consequence is that the state may see itself as having an obligation to intervene to ensure that such consequences are prevented or ameliorated. It can do this through legislation or regulation and by close monitoring of schools' behaviour.*

6. *The coexistence of inclusive education provisions and special schools (which is the case in almost every country) suggests that choices must be exercised as to where SWSEN are 'placed'. In this process, the relative weight given to the preferences of SWSEN and their parents and those who administer education systems constitutes a major point of tension.*

7. *Accountability boils down to the multi-faceted question of who should be held responsible for what, how they can be evaluated, and with what consequences? Its scope therefore is quite complex.*

8. *Increasingly, decisions at all of these levels are evidence-driven, or are being expected to be evidence-driven.*

9. *How to measure the educational performance of SWSEN with validity and reliability is one of the major contemporary challenges facing educators around the world.*

10. *Several countries have developed policies requiring SWSEN to have access to general education accountability systems,*

11. *One of the educational battle cries in many countries since the 1990s has been for 'standards-based reform', with its goal of higher and more rigorous achievement standards for all students, including those with special educational needs.*

12. *Leadership should be exercised throughout an education system: by legislators, policy-makers, school governing bodies, principals and teachers. At the school level,*

developing a school culture for SWSEN requires the exercise of leadership, particularly by the principal, but also by others in a school.

CHAPTER SEVEN

FUNDING AND RESOURCING[11]

The means of allocating resources to SWSEN, and the quantum of those resources, has long exercised policy-makers around the world, and continues to do so. As we shall see in this chapter, the issue of funding is impinged on and, in turn impinges upon almost every issue explored in this review. Thus, for example, there is a reciprocal relationship between funding and such issues as paradigms of special educational needs, categorisation, Response to Intervention, decentralisation, accountability, parental choice, inclusive education and special schools.

Historically, funding arrangements for special education have often been kept administratively separate from the mechanisms that govern fiscal resources for general education (Ferrier et al., 2007; Moore-Brown, 2001). Reasons for this are explored by Ferrier et al. (2007), who noted that special educational services have traditionally been reserved for students with identified disabilities. Because of their disabilities, these students were considered to have a clear and justifiable need for extra resources and specialised interventions over and above that provided to other students in the regular classroom. They cited Pijl & Dyson's (1998) and Rechsly's (1996) point that these specialised services are often viewed as entitlements that should be reserved for students meeting pre-determined eligibility requirements, with the funding for these entitlements directed only towards students identified as eligible and placed in special education.

In most jurisdictions, these and other factors have contributed to the creation of separate budgetary arrangements to ensure extra funding to support the educational needs of eligible students. For the past decade or so, however, funding models for special education have been under review in several countries. Ferrier et al. (2007) identified several drivers for such reviews, in particular rising costs, concerns over efficiency and equity in the use of resources, and concerns about the incentives inherent in funding formulae for contra-indicated practices, such as exclusion from mainstream education and over-referral into special education.

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[11] This chapter draws upon the European Agency for Development in Special Needs Education (2003), Ferrier et al. (2007), Riddell et al. (2006), and Shaddock et al. (2009), as well as those sources specifically acknowledged.

This chapter will explore the variety of ways in which additional support for SWSEN is provided and the various tensions that arise in different funding models. It will examine five main topics: (a) the relationship between funding and student achievement, (b) levels of funding, (c) various funding models, (d) sources of funding, and (e) general principles of funding.

7.1 Relationship between Funding and Student Learning Outcomes

As noted by Shaddock et al. (2009), in their review of the literature, there is not a strong body of evidence to show that finance in itself has a direct and major effect on student learning outcomes. For example, they cited Hattie (2005) as reporting an effect size on student learning of only 0.14 for 'finances' and, in a more recent meta-analysis, an effect size of 0.23. Hattie suggested that this lack of association is probably due to factors such as the source of the data (from well-resourced countries only), that most school finances are fixed; and that disbursements within schools involve whole *school* expenditure. Shaddock et al. concluded, however, that the stark reality is that available research does not demonstrate a strong, *direct* causal relationship between finances and educational outcomes; rather, the big effects on student learning are attributable to individual *teacher* differences. Thus 'some minimum level of resourcing is necessary, and after that, the key consideration in regard to finances and educational outcomes is how well the finances are spent' (p.91).

Research has found that particular *types* of expenditure do have a positive impact on student learning. For example, increased per student expenditure on professional learning for teachers and paying salaries to attract high quality and experienced teachers, have modest effects on student outcomes (Hattie, 2009). Further, there is evidence that the quality of the learning space affects learning. For example, after reviewing more than 30 studies, the present writer (Mitchell, 2008) concluded, 'Learners who spend time in well-designed, well-maintained classrooms that are comfortable, well-lit, reasonably quiet and properly ventilated with healthy air learn more efficiently and enjoy their educational experiences' (p.92).

7.2 Levels of Funding

Chambers et al. (2003) presented an analysis of extensive US data on special education funding for the 1999-2000 school year. According to these data, per student expenditures ranged from a low of $10,558 for those with specific learning disabilities

to a high of $20,095 for those with multiple disabilities. Expenditures for students with specific learning disabilities were 1.6 times the expenditure for regular education students, whereas expenditures for those with multiple disabilities were 3.1 times higher. Overall, per student education expenditures for students who received special education services (excluding homebound students) were 1.91 times greater than expenditures for students who received no special education services.

In his detailed review of special education funding in one state, New York, Parrish (2000) noted that, on average, expenditures for students receiving special education services were 2.3 times greater than general education students. This was marginally higher than the figure of 1.91 for the US as a whole, as noted above. In another analysis, Parrish et al. (2004) found that although the costs of special education in the US were rising, the data suggested that 'rather than rising numbers of high cost special education students or extravagant services per student, the primary source of rising special education costs seems to be the rising numbers of students being referred to, and identified as needing, special education' (p.30). This was shown in data indicating that the special education population had been growing steadily as a percentage of the total student population, from 8.96 percent in 1987-88 to 10.74 percent in 2000-01, and 11.46% in 2005/06.

Across all OECD countries, according to Evans (2004), students with disabilities cost two to four times as much to educate as regular students. For those with disabilities, the cost is higher in special schools, compared with mainstream education, by a ratio of about 1.2:1.

7.3 Various Funding Models
Three funding models can be identified: (a) demand (b) supply, and (c) output. Each one has advantages and disadvantages, with the consequence that many countries employ mixed funding models.

7.3.1 Demand-driven funding
Sometimes referred to as an *input model* (Riddell et al., 2006) or *categorical funding* (Ferrier et al., 2007), demand-driven approaches to funding SWSEN is based on allocating individual funding to identified students, the amount based on the student's degree and type of disability or need for support. An example would be the ACT procedure for allocating funding on the basis of a Student Centred Appraisal of Need

and New Zealand's ORRS system.

Drawing upon the work of Beek (2002), Ferrier et al. (2007), Fletcher-Campbell et al. (2000), and Pijl & Dyson (2008), Shaddock et al. (2009) outlined the unintended effects of reliance on demand-driven models, as follows:

- they offer a 'perverse incentive' to over-identify and/or 'play the system';

- 'playing the system' results in a reduction in funds for each student;

- the strong focus on disability, difference and deficit is upsetting for parents and has deleterious effects on inclusive culture and practice; and

- they lead to the 'medicalisation' of diversity in order to attract additional funds.

These concerns are echoed in European research on the impact of special education funding models. According to Meijer (1999), in countries where funds are tied to individual children, there is more evidence of strategic behaviour by parents and teachers to secure resources. Thus, countries like England, France and Luxemburg, where children with greater 'needs' have greater funding, there is more strategic behaviour by parents and teachers to secure resources (Riddell et al., 2006).

After undertaking a 17-nation study on the distribution of resources to support inclusion, Beek (2002) found that individual budgets reduce inclusive practice. Shaddock et al. went on to cite recent Australian research that supports Beek's view and highlights additional deleterious effects of demand-driven funding approaches. For example, Graham & Sweller (2009) report that between 1997 and 2009, the costs of special education services in NSW nearly doubled: up from 7.2% in 1997 to 12.8% in 2009. They pointed out that needs-based and input-driven models 'produce incentives to formulate needs' because of the extra funding attached to the diagnosis of disability' (p.16). They also noted the attractiveness of opportunities to provide authoritative medical explanation for learning failure and the lure of segregated placement that can lead to a reduction in expectations all-round.

Yet another problem with demand-led funding has been noted by Riddell et al. (2006), who pointed out that where funds are tied to the formal identification of particular disabilities, resources may be used on expensive litigation. Also, as Ferrier et al. (2007) and Naylor (2001) have pointed out, while the diagnostic process serves as a check and balance to over-identification, the costs of verifying a student's diagnosis are considerable. For example, in an early study, Reynolds et al. (1987) estimated that up to

20% of the costs of educating a SWSEN is taken up by the identification process.

7.3.2 Supply-driven funding

In contrast to a demand-driven model, a supply-driven model permits control over levels and patterns of expenditure. Notwithstanding the above analysis, Shaddock et al. (2009) pointed out that although the nomenclature is about response to *needs*, ACT's Student Centred Appraisal of Need is fundamentally a *supply*, rather than a *demand*, driven model.[12] That is, they say, while the process helps ensure that different levels of need are differentially and transparently resourced, there does not seem to be any direct and necessary connection between the totality of individual needs of a particular student and the totality of funding allocated for that student. They go on to speculate that this is perhaps the reason for the considerable discontent with the level of funding currently delivered by the Student Centred Appraisal of Need to individual students.

In order to guard against the 'perverse incentive' to over-identify SWSEN and/or 'play the system', which is inherent in pure demand-driven models, the supply-driven model usually *caps* the number of students who can be considered eligible for additional funding. For example, as pointed out by Parrish (2000), the US has capped the proportion of such students at 12% of the school-age population. Further, Parrish pointed out that federal special education funding will eventually be *census-based*, meaning that it will be based on total school enrolments rather than on special education counts.

According to Ferrier et al. (2007), the literature contains two studies that have investigated census-based models for funding special education (Evans et al., 1997; and Hartman, 2001). In the latter, schools received a set amount of funding based on total enrolment. The amount per student was set at a level designed to cover the costs of special education for the 15% of students estimated to have mild disabilities. An additional amount was provided to cover the costs associated with the 1% of the school population expected to have severe disabilities. The author found that census-based funding increased administrative burdens for school districts, did not lower expenditure, nor did it decrease special education enrolments. Evans et al. (1997) concluded that

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[12] The same could be said of New Zealand's ORRS system, given that there is a cap on the number of students coming under its purview.

census-based models could be improved by introducing a weighting formula to compensate schools with higher SWSEN enrolments and to allow funding of prevention programmes.

Such supply-driven approaches, Parrish argued, would permit SWSEN to be served outside special education and would reduce the incentives to over-identify. Further, Evans (2000) noted that supply-driven models have the advantage of being quantifiable and can be used to determine the extent to which additional resources are being used efficiently and effectively. It also enables comparisons to be made between and within countries.

On the other hand, according to Parrish (2000), supply-driven models would raise issues of equity in states and districts with higher prevalence rates, jeopardise procedural safeguards if students are not identified as having special needs, and may threaten current levels of funding. Further, as Pijl & Dyson (1998) noted, the downside of supply-driven models is that 'individual cases have to be fitted into a centrally determined pattern, sometimes with unfortunate consequences' (p.275).

7.3.3 Output funding

As outlined by Shaddock et al. (2009), Meijer et al. (1999) raised the potential benefits of 'output funding' and Fletcher-Campbell (2002) referred to this model as a 'theoretical possibility' in which schools are 'rewarded' for effectiveness and excellence and are funded for tasks completed, retrospectively, rather than 'tasks to be done', as is mostly the case at present (p.20). Shaddock et al. go on to note that while Fletcher-Campbell pointed to the problem of what could be called 'perverse disincentives' (e.g., a school may be so successful that it no longer qualifies for additional funding) - the approach deserves further attention as *part* of the funding mix, because in focusing on quality outcomes, it aligns special education with the mainstream accountability agenda. Further, they noted that Farrell (2005) has argued that 'student progress' is a useful funding criterion because, compared with criteria such as 'evidence of need' and 'provision required to address barriers to learning', 'student progress' can at least be defined – and presumably measured. However, they conclude that the benefits of output funding for students with a disability would depend on the way in which such a policy were implemented.

7.4 Sources of Funding

7.4.1 Country descriptions

In this section, consideration will be given to the sources of funding made available to SWSEN in six countries: Australia, England, Sweden, Finland, the Netherlands, and the US. This range is probably sufficient to illustrate the various ways in which funding occurs.

As described by Shaddock et al. (2009), funding for schools in *Australia* is extraordinarily complex. Resources are delivered from the Commonwealth through a range of programmes and disbursed by state and territory governments to sectors. The complicated array of Australian Government financial assistance to the States and Territories to improve the educational outcomes of students with disabilities is described in some detail by Shaddock et al. (2009) and Ferrier et al. (2007) and won't be further explored in this review.

In *England,* local authorities retain responsibility for meeting the needs of children as specified in the Statement of Needs. However, as an ever-increasing proportion of the education budget is devolved to school level, there is a greater emphasis on schools deciding how to allocate their budget. Local authorities generally conduct an audit of the number of pupils with special educational needs in particular schools at the beginning of the school year, and distribute enhanced levels of funding accordingly. 'However, it is almost impossible to track these funds to ensure that they are being used in relation to the children for whom the additional resources were intended' (Riddell et al., p.45).

In *Finland*, most institutions providing basic and upper secondary level education are maintained by local authorities or joint municipal boards (consortia of municipalities). Responsibility for educational funding is divided between State and the local authorities. Of the funding for primary and secondary education, the state subsidy averages 57% of the costs, while municipal contributions amount to an average of 43%. In addition, the State supports local authorities by granting them increased state subsidies to assist with provision of special education (European Agency for Development in Special Needs Education, 2009).

For so long known as a highly centralised society, *Sweden* in the 1990s became one of the most decentralised, with considerable delegation of decision-making to the

local level. For example, the state leaves decisions on the allocation of additional resources to municipalities and schools, and there is no guarantee that a SWSEN in a mainstream setting will attract additional funding. As a result, some mainstream schools have become increasingly reluctant to accept such students and there has been a small but steady increase in the number of pupils attending special schools (Riddell et al., 2006).

Until recently, *the Netherlands* stood out as reporting higher proportions of students registered in special schools and/or special classes than in most other European countries (Pijl, 2000), and the financing of SWSEN in mainstream schools had been restricted (Emanuelsson et al., 2005). In 1996, however, a major change occurred in the funding model with the introduction of a 'Back Pack' system. Instead of financing places in special facilities only, there was a shift to funding special services to SWSEN, regardless of the type of school they attended (Emanuelsson et al., 2005).

In the *US*, federal funds are made available to contribute to the costs of educating students with IEPs. In order to receive these funds, state and local educational agencies are required to provide 'free appropriate public education'. According to a Center for Special Education Finance Report on state special education finance systems, on the average, states provide about 45% and local districts about 46% of the support for special education programs, with the remaining 9% provided through federal IDEA funding (Parrish et al., 2003). This latter figure compares unfavourably with the original intent of IDEA, which had authorised Congress to contribute up to 40 percent of the national average per student expenditure for each special education student. From the outset, appropriations for special education have failed to implement that original authorisation. Debates persist about the level of funding which should come from the different levels (federal, state, school district). Most states, in turn, have failed to make up the gap in federal funding, and this in turn has created financial pressures on local school districts. The relatively high proportion of funding expected to be contributed by school districts inevitably means that the education of children in poorer areas is less well resourced despite various attempts to redress any imbalances through special funding programmes. Given these funding shortfalls, it should come as no surprise that there is often a discrepancy between what is recommended in IEPs and what is actually delivered, especially in the poorer school districts (Bowers & Parrish, 2000).

7.4.2 Source and allocation funding models

Ferrier et al. (2007) have provided an interesting taxonomy of funding, based largely on its sources and disbursement. While there are some overlaps with the funding models outlined in section 7.3 above, there are some new elements that are worth exploring. Ferrier et al. identified five broad categories based on the source and allocation of funding:

- Discretionary funding
- Categorical funding
- Voucher-based funding
- Census-based funding
- Actual-Cost funding

Discretionary funding models provide separate funds for special education purposes. The funds might be allocated as a set percentage of the school's overall budget or they might be received from an external source. They enable individual schools to make decisions about the types of services and programmes to support, within broad guidelines on the use of the funds. For example, in a model described by Grigal et al. (2001), schools allocated 20% of their budget to special education. Similarly, in the model described by Naylor (2001), additional funding was set aside specifically for students requiring specialised services and intensive support due to the severe nature of their disabilities.

Categorical funding models allocate additional funding to each student with an identified disability, with the amount based on the child's degree and type of disability (cf. the demand-driven model described in section 7.3). This funding might be allocated to the school or to the student's parents. These models aim to ensure that special education funds are specifically targeted to meet the needs of students with identified disabilities or special needs. Funding allocated to parents can be moved if the student transfers from one school to another, thus the categorical model has features in common with voucher-based models below.

Voucher-based funding models provide a direct public payment to parents to cover their child's public or private school costs. The amount of the voucher varies depending on parent and student characteristics, such as the type and degree of the student's disability and parental income. The payment can be made either directly to the

parents or to a school on behalf of the parents. The aim of these models is to increase parental choice and to promote competition between schools in order to increase the quality of educational services.

Census-based models allocate funding on the basis of the number of students with certain weighted characteristics, such as socio-economic status or the type and degree of disability. The aims of these models are to simplify the overall funding mechanism; and to make the financing of special education independent of classification and placement decisions, thus removing the financial incentives for over-identifying students as having a disability, which, as noted earlier, can be associated with more categorically-based funding models.

Actual costs funding models allocate funding based on the actual costs involved in providing special education services. Total funds would be allocated to schools on the basis of the number of students meeting the definition for mild or more severe/multiple disabilities. This model is unique in attempting to estimate the actual costs of providing services, but also includes features of categorical and census-based approaches in that the total amount of funding is based on student numbers.

Ferrier et al. (2007) went on to evaluate these models, but it is beyond the scope of the present review to include such detail. However, it is worthwhile briefly outlining their schematic conceptualisation of the funding models they have identified (Figure 7.1). Essentially, they have presented a bi-polar model with two overlapping continua: one with census-based models at one end and categorical-based models at the other end. Orthogonal to this continuum is another axis with anchors related to whether the funds go to the district, school, programme, or parents, i.e., a continuum with full central control of funds at one end and full parental control at the other. As can be seen in the following figure, they place some of the broad funding categories summarised above within this bipolar model.

Figure 7.1 Funding models

District

1. Census-based

2. census-based
discretionary

School

3. Categorical
Discretionary

5. Mixed funding system

Census

Categorical

Programme

4. Voucher

Parent
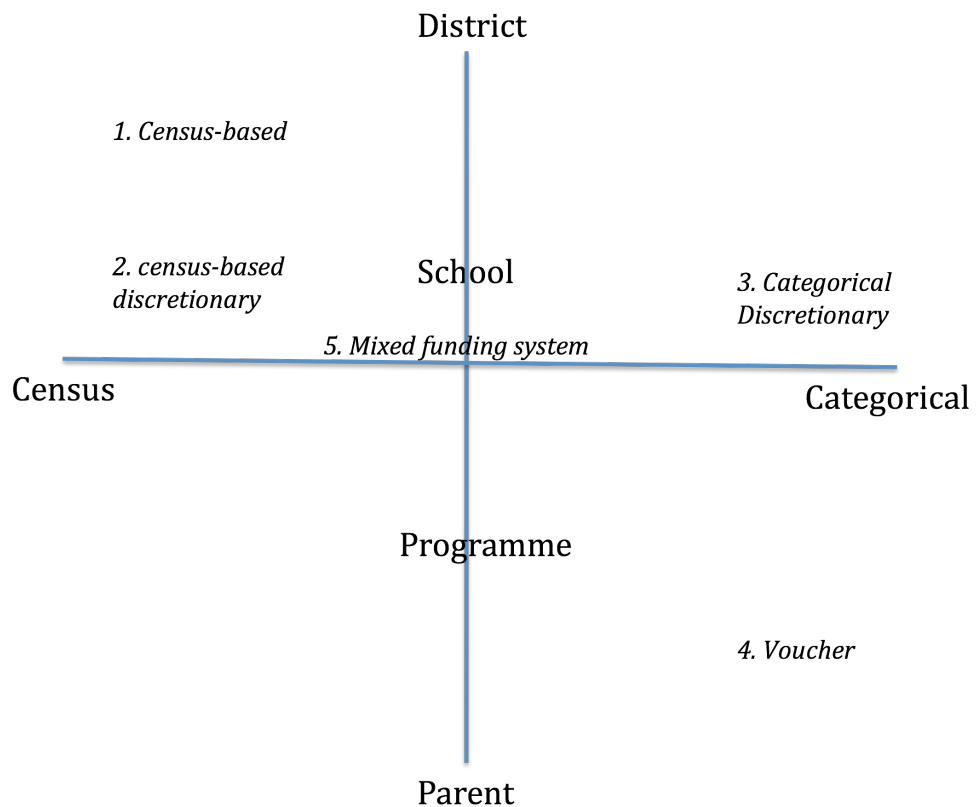
7.5 General Principles of Funding

Research on the impact of different funding models for SWSEN suggests that the following general principles should be taken into account by policy-makers:

1. The funding of education and special education is extraordinarily complex.

2. In efforts to resolve funding issues, the starting point should not be with how to fund special education, but rather with how to fund general education.

3. There is no single, 'best' funding model. Every model has strengths and weaknesses, incentives and disincentives, and positive and negative outcomes that may affect different students differentially, so a combination of funding models seems desirable.

4. From an economic efficiency viewpoint, it is best to allocate resources where they will do the most good, for example, to early identification and intensive education for students who struggle with learning, and in ways that support system or school policy, for example, improvements of students functioning in the lowest quartile.

5. Resources should be allocated in ways that are coherent with, and promote, system policy, for example, towards greater inclusivity, lifting the performance of all

students and particularly those functioning in the bottom quartile and improving equity. There are sound pedagogical and financial rationales for using resources to further integrate special and regular education.

6. Funding should be flexible enough to meet the needs of children who experience complex needs.

7. Undue perverse incentives and disincentives should be avoided.

8. Resources should be directed to approaches for which there is evidence of effectiveness in improving students' learning outcomes.

9. Arrangements to ensure accountability, including the monitoring of the use of resources and outcomes for children, should be included.

10. Funding should be transparent and equitable, with individual schools clear about the resources available to them.

11. Funding should be allocated in ways that give schools the flexibility, within appropriate accountability frameworks, to implement practices that work for them and assist teachers to meet the learning needs of SWSEN in the context of accountability for a quality education for every student.

(Synthesised from Beek, 2002; Ferrier, et al. 2007; Gallagher, 2006; Graham & Sweller, 2009; Itkonen & Jahnukainen, 2007; Harr et al., 2008; Meijer et al., 1999; Shaddock et al., 2009; Weishaar & Borsa, 2001).

A fitting conclusion to this section, and to the chapter, is Parrish's (2001) advice to policy-makers on the allocation of resources:

> We need to support programs that attempt to assist students prior to their referral to more costly special education interventions – especially in light of ever increasing student standards and high stakes accountability. We also need to target supplementary special education aid to districts serving students with extraordinarily high cost special needs. At the same time it is essential to begin bridging the gap between general and special education programs and providers to more fully address the educational needs of all children (p.8).

7.6 Summary

1. *The means of allocating resources to SWSEN, and the quantum of these resources, has long exercised policy-makers around the world, and continues to do so.*

2. *Funding is impinged on and, in turn impinges upon almost every issue explored in this review.*

3. *Historically, funding arrangements for special education have often been kept administratively separate from the mechanisms that govern fiscal resources for general education.*

4. *For the past decade or so, funding models for special education have been under review in many countries, driven by rising costs, concerns over efficiency and equity in the use of resources, and concerns about the incentives inherent in funding formulae for contra-indicated practices.*

5. *There is not a strong body of evidence to show that finance in itself has a direct and major effect on student learning outcomes.*

6. *Research has found, however, that particular types of expenditure do have a positive impact on student learning.*

7. *Overall, per student education expenditures for those who receive special education services in the US are 1.91 times greater than expenditures for students who received no special education services. This is comparable to other estimates.*

8. *Three funding models can be identified: (a) demand (b) supply, and (c) output. Each one has advantages and disadvantages, with the consequence that many countries employ mixed funding models.*

9. *Another taxonomy of funding models, based on the sources of funding for SWSEN, has five categories: (a) discretionary funding, (b) categorical funding, (c) voucher-based funding, (d) census-based funding, and (e) actual-cost funding.*

10. *Sources of funding for SWSEN vary considerably among countries, with different proportions coming from national, state and local educational authorities.*

11. *General principles that should be taken into account in determining the most appropriate funding model(s) for SWSEN include:*

   a *the starting point should not be with how to fund special education, but rather with how to fund general education,*

   b *Every funding model has strengths and weaknesses, incentives and disincentives, and positive and negative outcomes that may affect different students differentially, so a combination of funding models seems desirable.*

   c *Resources should be allocated in ways that are coherent with, and promote, system policy.*

   d *Arrangements to ensure accountability, including the monitoring of the use of resources and outcomes for children, should be included.*

CHAPTER EIGHT

CURRICULUM[13]

8.1 Different Models of the Curriculum for SWSEN

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 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, according to Browder et al., 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 (reflected, for example in 'person-centred planning'). 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 will form the basis of the following analysis.

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[13] This chapter is mainly drawn from Mitchell et al. (2010).

8.2 Policies Requiring Access to the General Curriculum[14]

With the advent of inclusive education policies and practices, many countries are addressing the need for students with special educational needs to have access to the general education curriculum. Thus, in the *US*, IDEA 1997, IDEIA 2004 and the No Child Left Behind Act of 2001 specified that all students, including those with significant cognitive disabilities, must have the opportunity to participate and progress in the general curriculum. As stated in the IDEIA 04, IEPs must incorporate 'a statement of measurable annual goals, including academic and functional goals, designed to … meet the child's needs that result from the child's disability to enable the child to be involved in and make progress in the general education curriculum' (IDEIA 2004 614(d)(I)(A)(i)(II)).

In interpreting these requirements, Pugach & Warger (2001) observed that

> Although the law still maintains the right of each student with disabilities to an individually referenced curriculum, outcomes linked to the general education program have become the optimal target. It is no longer enough for students with disabilities to be present in general education classrooms (p.194).

Even so, this requirement for students with special needs to access the general education curriculum is not always adhered to. For example, in a survey of 84 special education teachers in Iowa, Agran & Wehmeyer (2003) found that the majority were not frequently involved in curricular planning with regular teachers and half of the school districts represented did not have clear plans to involve students with disabilities in the general curriculum.

Scotland is another country that seeks to ensure that students with special educational needs can access the common curriculum framework, while at the same time ensuring appropriate and targeted support (Riddell et al., 2006). This arrangement has been in place since the early 1990s, when the *5-14 Curriculum*, with its accompanying *Support for Learning* pack, came into force. This material endorsed five strategies for customising the curriculum: differentiation, adaptation, enhancement, enrichment and elaboration. According to Riddell et al., these strategies would enable teachers to plan a suitable curriculum for individual students, while ensuring that their learning was framed by the national curriculum guidelines.

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[14] The notion of SWSEN having access to the general curriculum has long been a feature of New Zealand special education policy.

In contrast with the US and Scotland (and New Zealand), some countries have separate curricula: one for mainstream students and the other for students with special educational needs. The Flemish community in *Belgium* is one such country (Riddell et al., 2006).

In *England*, a compromise has been reached with the introduction in 2006 of 'P Scales' to support the structured progression of students with special educational needs working towards level 1 of the National Curriculum. Beyond the level when P Scales are employed, Attainment Targets and Programmes of Study are designed to allow maximum participation in the National Curriculum for all students. To enable this to occur for those with special educational needs, teachers are encouraged to recognise that such students need time, support, carefully structured teaching programmes, and, in some cases, use of alternative means of communication. While modifications and exemptions to the national Curriculum can be written into students' Statements, it is hoped that the need for these would be minimised.

http://www.bournemouth.gov.uk/Education/SEN/SEN_The_National_Curriculum.asp

8.3 Adaptations and Modifications to the General Curriculum

According to Mitchell (2008), 'Making appropriate adaptations or modifications to the curriculum is central to inclusive education' (p.30). He described curriculum in an inclusive classroom as having the following features:

- It is a single 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.

- Since an inclusive classroom is likely to contain students who are functioning at two or three levels of the curriculum, this means that multi-level teaching will have to be employed; or, at a minimum, adaptations will have to be made to take account of the student diversity.

- To make the curriculum accessible, consideration should be given to the following alternatives in relation to content, teaching materials, and the responses expected from the learners, as noted by Jönsson (1993):
  - *modifications*: e.g., computer responses instead of oral responses;
  - *substitutions:* e.g., braille for written materials;
  - *omissions:* e.g., omitting very complex work;
  - *compensations*: e.g., self care skills, vocational skills.

Mitchell went on to give an example of curriculum differentiation in South Africa, where, a 'curriculum ladder' is used to indicate how to adapt work according to the strengths and needs of individual learners (Department of Education, 2005). In spelling, for example,

- in step 1 educators ascertain if learners can work at the same level as their peers;
- in step 2 the learners may be able to do the same activity but with adapted expectations (e.g., fewer words);
- in step 3 they may be able to do the same activity but with adapted expectations and materials (e.g., matching words to pictures);
- in step 4 they may be able to do a similar activity but with adapted expectations (e.g., using words that are functional to the learners' environment);
- in step 5 they may be able to do a similar activity but with adapted materials (e.g., using a computer spelling programme);
- in step 6 they may be able to do a different, parallel activity (e.g., learning a computer programme with a spell check);
- in step 7 they may be able to carry out a practical and functional activity with assistance (e.g., playing with a word puzzle, flash cards etc., possibly assisted by a peer or a teaching assistant).

Several researchers have investigated ways in which IEPs can be connected with the general curriculum. For example, Fisher & Frey (2001) described a study in which students with 'significant disabilities' accessed the core curriculum in several regular classrooms. The authors concluded that, despite there being 'a disconnect between the IEP and curriculum and instruction' (p148), 'the findings… indicated that students with significant disabilities can and do access the core curriculum with appropriate accommodations and modifications' (p.155). These accommodations and modifications are worth quoting at length:

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).

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 IDEA 2004 and NCLB, while still providing ongoing instruction on those essential basic skills' (p.25).

With particular reference to the unique needs of students with mental retardation in accessing the general curriculum, Wehmeyer et al. (2002) presented a multi-step, multi-level decision-making model. 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 Sullivan (2003), who suggested that teachers should augment the general curriculum rather than replace it for such students; 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.

8.4 Problems in Accessing the General Curriculum

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 ACT, 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.

In a similar vein, Karnoven & Huynh (2007) observed that evidence is suggesting that curricula for students with significant disabilities have begun to 'shift away from functional approaches seen in the 1980s and 1990s to include more academics' (p.275). They thought that it was encouraging that 97% of the 292 IEPs for students with significant disabilities in their study contained academic objectives.

A more critical perspective is offered in a recent book by Farrell (2010), who argued that 'a special curriculum may differ from a regular curriculum with regard to: the balance of subject and areas; and the balance of components of subjects; and the content of certain areas of the curriculum' (p.3). He went on to put 'a case for a distinctive curriculum for some pupils' (p.99), pointing out that in England, the DfES recognises that the needs of students with moderate learning difficulties 'will not be able to be met

by normal differentiation and the flexibility of the National Curriculum' (DfES, 2005, p.6).

8.5 Summary

1. *Approaches to conceptualising curricula for students with disabilities have moved from a developmental model in the 1970s, through a functional model in the 1980s and 1990s, to the contemporary model of embracing ways of enabling such students to participate in the general education curriculum.*

2. *In the US, IDEA 1997, IDEIA 2004 and the No Child Left Behind Act of 2001 specified that all students, including those with significant cognitive disabilities, must have the opportunity to participate and progress in the general curriculum.*

3. *To make the curriculum accessible, consideration should be given to the following alternatives in relation to content, teaching materials, and the responses expected from the learners: (a) modifications (e.g., computer responses instead of oral responses, enlarging the print), (b) substitutions (e.g., Braille for written materials); (c) omissions (e.g., omitting very complex work); and (d) compensations (e.g., self care skills).*

4. *Other modifications can include (a) expecting the same, but only less, (b) streamlining the curriculum by reducing its size or breadth, (c) employing the same activity but infusing IEP objectives, and (d) curriculum overlapping to help students grasp the connections between different subjects, for example.*

CHAPTER NINE

ASSESSMENT[15]

In Chapter Eight, we saw how the trend in western countries was for SWSEN to participate and progress in the general curriculum, albeit with appropriate modifications and adaptations. In this chapter, parallel issues will be explored with respect to assessment, namely the extent to which SWESEN are expected to participate in a country's national or state assessment regimes and what, if any, alternate assessment procedures are permitted. Both trends are part of the wider concern for standards-based reform in education that is dominating much of the educational and political discourse around the world[16]. The vast bulk of literature on modified and alternate assessment has emanated from the US and this section of the review reflects that.

9.1 Policies Requiring Access to General Education Accountability Systems

United States. Until recently, in the US, accountability in special education was defined in terms of progress in meeting IEP goals. That all changed in IDEA 97, which required all students, including those with disabilities, to participate in their states' accountability systems. This was followed by a policy memorandum from the U.S. Department of Education (2000), to the effect that an exemption from a state's assessment programmes was no longer an option for students with disabilities. Both IDEA 97 and the No Child Left Behind Act (NCLBA) of 2002 required the provision of alternate assessment for students who could not participate in state or district assessments with or without accommodations. Districts are permitted to measure up to 3% of their students using alternate assessments (1% against alternate achievement standards and 2% against modified standards – a distinction that will be described in more detail below). The use of alternate assessment is a decision to be made by a student's IEP team. To quote IDEIA, IEPs must include 'a statement of any appropriate accommodations that are necessary to measure the academic achievement and functional performance of the child on state- and district-wide assessments' (IDEIA, 2004, p.118). As well, the NCLBA stipulated that student performance be disaggregated by special education status, among others, and, to avoid sanctions, by 2013/2014 schools must show that students in

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[15] This chapter is mainly drawn from Mitchell et al. (2010) and Mitchell (2008).
[16] See Chapter Six, section 6.5.

various subgroups are making adequate yearly progress toward mastering content standards.

At this juncture, it is worth quoting at length a personal communication from David Egnor, Assistant Division Director, National Initiatives, Research to Practice Division, Office of Special Education Programs, US Department of Education:

> … one of the main pushes in the U.S. particularly among special education administrators, but also teachers, is to develop standards-based IEPs. I believe that standards-based IEPs are becoming much more attractive from an administrative point of view as a direct result of our country's increasing focus on standards-based educational reform … and which will ratchet up even further under the Obama administration. That is, requiring standards-based IEPs for every student with a disability (not currently required for all students with disabilities, although things are moving that way) provides a way, from an administrative perspective, to more efficiently administer and monitor special education service delivery and to do so within a standards-based accountability environment, where, in the past, special education practice historically focused more on individualized services and outcomes for students with disabilities. My view is that the growth of standards-based IEPs in the U.S. is a clear sign that special education practice is undergoing fairly significant changes that are directly tied to standards-based reform under the ESEA/NCLB and the next iteration of our main federal education law currently under consideration in the US Congress. I think that what we are seeing with regard to standards-based IEPs is an outgrowth of the special education inclusion movement, where as a field special education attempts to make the general education environment more accessible to students with disabilities. Given the focus on standards-based educational reform, it is not surprising that special education administrators, in particular, seek a way to join with the standards-based movement through the IEP development process and, as a result, students' IEPs are emphasizing general education standards more and more. Although a standards-based IEP should not limit the services a student receives (just standardize, to some extent, the educational outcomes we expect), I think that this movement may be unintentionally limiting services for some students with disabilities. I also think that more work needs to be done to explicate how individualization (equity) for students with disabilities can co-exist within the growing context of standards-based reform (excellence).

According to Defur (2002), the thinking behind the earlier requirements was two-fold. Firstly, it was assumed that higher expectations would lead to higher achievement for students with disabilities. Previously, the educational progress of such students had been limited by low expectations, which in turn narrowed their access to the general curriculum and to higher achievement. The second assumption was that assessment information on students with disabilities would lead to improved instructional programmes, which in turn would lead to improved student outcomes. It would seem that this rationale still applies.

England and Wales. In England, tasks and tests set for assessment at the end of Key Stages 2 and 3 (for students aged 11 and 14, respectively) are designed to monitor attainment targets for each of the National Curriculum subjects, and are expected to be accessible to the vast majority of students, including those with *special educational needs*. However, those children in Key Stage 2 working at level 1 or below of the National Curriculum eight-level scale are assessed by teacher assessment alone. Similarly, at Key Stage 3, students working at or below level 2 of the National Curriculum scale are assessed by teacher assessment and not by statutory national testing. If a student's statement of special educational needs modifies the statutory assessment arrangements, the provisions within the statement should be followed in respect of the statutory tests and tasks. With regard to the GCSEs and GCE A levels, although the same examinations are available for SWSEN as for other students, special arrangements in examinations may be made for *some* of them. The nature of these arrangements is determined according to the assessment needs of the individual student, but must not give him or her an unfair advantage over other students. Some may be awarded extra time to complete the assessment task, or may be permitted to take supervised breaks or rest periods during the examination. For visually impaired students, the visual presentation of the papers may be changed by, for example, the use of large print or simplified layout of the examination paper, or by the use of braille versions of the papers. Other candidates may have questions read to them; flashcards may be used to assist hearing-impaired candidates in mental arithmetic tests; or typewritten, word processed or transcribed responses may be accepted from students who are unable to write. Some candidates may also be allowed to take their examinations at a venue other than the examination centre, for example, at home or in hospital (see http://www.inca.org.uk/wales-sources-special.html#31)

In England, too*,* the 'P Scales', referred to in Chapter Eight, can also be employed to provide a means of assessing students with special educational needs for accountability and school improvement purposes, prior to them becoming eligible for assessment on national instruments. These P Scales have eight levels against which students' progress can be mapped. However, Riddell et al. (2006) while recognising that P Scales are helpful for curriculum planning, noted that 'whether they will be useful in terms of tracking and comparing the progress of pupils with special educational needs has yet to be fully assessed' (p.5).

Scotland. According to Riddell et al. (2006), in Scotland there are 'ongoing difficulties in devising a national system of assessment which is able to recognise the progress of all pupils' (p.5). The Standard Grade system, they pointed out, is regarded as too difficult for some students with special educational needs, particularly those with significant difficulties in numeracy and literacy.

9.2 Adaptations, Modifications and Alternate Assessment

Geenen & Ysseldyke (1997) identified six types of accountability systems relating to the extent to which students with disabilities are included in assessment regimes:

> *Total inclusion.* This type establishes a single set of standards, with one assessment programme for all students, including those with disabilities. At the time of writing [1997], two US states had developed portfolio-assessment programmes that covered all students.
>
> *Partial inclusion.* Here there is one set of standards for all students, with alternate or modified standards for students with disabilities. Many states were adopting this arrangement.
>
> *Dual systems.* This type involves two sets of standards: one for students without disabilities and another one for students with disabilities, the latter usually focussed on 'functional' objectives.
>
> *Multiple systems.* Here there is one set of standards for students without disabilities and multiple sets of standards for those with disabilities, usually based on their disability category.
>
> *Total exclusion.* In this type, students with disabilities are excluded from standard-setting efforts, state-wide assessments, and data-based reporting procedures. Usually, the IEP is seen as sufficient for accountability purposes, despite the difficulty in aggregating their outcomes.
>
> *System-based.* This sets standards on a system rather than an individual basis. Here, students with disabilities 'count' in the overall statistics.

Research relating to one or more of the models as outlined by Geenen & Ysseldyke (1997) has been reported in the literature.

For example, in a paper by Defur (2002), the Virginia state assessment programme was outlined. This state employed the *total inclusion model*, albeit with accommodations/modifications/exemptions in parts of the tests for students with disabilities (the author pointed out that after her study, Virginia eliminated the use of total exemptions). It is interesting to note that 98 special education administrators in the state identified some intended and unintended consequences of this assessment policy. Among the intended consequences were (a) 'some degree of benefit for students with disabilities' - reported by 83% of the respondents, (b) 'access to the general curriculum'

(73%), and (c) 'improved daily performance by students with disabilities' (but only 21% noted this) (p.206). There were also unintended, negative consequences of the policy. These included (a) higher rates of academic failure (reported by 51% of the administrators), (b) lower self-esteem among students with disabilities (50%), and (c) concerns that these students would experience higher drop-out rates (44%). As well, some were of the opinion that standards should be lowered (33%) and that accommodation options should be increased (37%). And, finally, 55% of the respondents expressed the belief that special education teachers were not adequately trained to assist students with disabilities to meet Virginia's assessment standards.

In full inclusion assessment models, with no exemptions or accommodations permitted, there is a risk that 'the accountability procedures may have the incidental effect of discouraging schools from taking on children who are likely to perform poorly in examinations, of encouraging schools to expel children whom they find difficult to teach, or of tempting schools to omit children with learning difficulties from testing programmes' (OECD, 1999). As proof of this danger, OECD cited a study by Thurlow in 1997 in which it was found that two-thirds of students with disabilities in US schools had been excluded from a National Assessment of Educational Progress. Thus, 'high stakes' assessments, and associated 'league tables' can have the effects of jeopardising inclusive education (Dyson, 2005; Slee, 2005; McLaughlin & Jordan, 2005). As Watkins & D'Alessio (2009) pointed out, this risk can be exacerbated by the effects of international comparative studies of educational standards – most notably OECD's PISA studies.

A second study, involving the *partial inclusion model*, was reported by Browder et al. (2004). Subject specialists and experts in severe disabilities from 31 US states were surveyed and interviewed regarding their views on the extent to which alternate assessment content was aligned with academic and functional curricula in maths and the language arts. The findings were quite mixed, with some states rated as having a high degree of alignment and some having missed the mark. The authors also noted that their results suggested that the alternate assessments included in their study had a strong focus on academic skills, but also reflected an approach that linked academic and functional skills, one which they referred to as 'a blended curriculum approach' (p.221). Browder et al. concluded with the recommendation that states should include both content area specialists and experts in severe disabilities in validating performance

indicators used in alternate assessment. In another paper by the same authors (Browder et al., 2003), some lessons to be drawn from their research are outlined. These included the need to develop research into (a) ways of teaching students with severe disabilities the more advanced academic skills that were being expected under the US legislation, (b) the impact of alternate assessment in general, and (c) the optimal way of blending functional and academic curricular priorities, and hence assessment approaches. And, finally, they argued that 'We also need to avoid a transformative approach in which academics become the replacement curriculum' (p.179).

In a similar vein, Ford et al. (2001) posed some pertinent, albeit rhetorical, questions. Firstly, when a state develops separate standards for students with disabilities, is it suggesting there is no overlap between the 98% of the students included in the regular assessment and the 2% who are not? Secondly, when states elect to use identical standards for those participating in alternate assessment, 'does this mean that all students should be held to the same set of standards – and that these are the only valued areas of learning?' (p.215).

In another US study involving Geenen & Ysseldyke's (1997) partial inclusion model, Ketterlin-Geller et al. (2007) investigated the consistency of test accommodations across 38 3rd grade students' IEPs, teachers' recommendations, and students' performance data. They defined accommodations as representing 'changes in the medium through which information is presented, the response formats, the external environment, or the timing of the testing situation that are designed to mediate the effects of a student's disability that inhibit understanding or expression of domain-specific knowledge' (p.194). They found significant differences among all three of the comparisons, i.e., students' IEPs, teachers' recommendations, and students' performance data. For example, individual teachers often made accommodation decisions without support from the IEP team and there was little correspondence between the accommodations listed on IEPs and teacher recommendations. As Ketterlin-Geller observed, 'IEPs were more likely to make errors of omission, whereas teachers were more apt to make errors of commission in recommending accommodations' (p.203). With respect to the latter errors, the researchers commented that by making decisions without recognition of the IEP, teachers may be subverting the legal requirements and that this may significantly affect student success by withholding accommodations or by providing unnecessary accommodations. This, they concluded,

compromises both students' needs and the accountability systems set up to ensure that their needs are being met. 'The current system', they stated, 'needs improvement' (p.205).

In yet another US study, Karnoven & Huynh (2007) investigated the relationship between IEP characteristics and test scores on an alternate assessment instrument for students with significant cognitive disabilities. They found that whereas the curriculum emphasised in IEPs and alternate assessments were aligned for some students, for others they were not. They concluded that teachers of such students, who may have operated outside the general education curriculum for many years, 'need professional development on state academic standards, alternate achievement standards, and curriculum design that goes beyond functional domains' (p.291). As well, they argued that there is a need to create standards-based IEPs and that test developers must contribute to improving the curriculum-assessment link.

For other studies of alternate assessments and some attendant concerns, see papers by Browder et al. (2003); Crawford & Tindall (2006), Kohl et al. (2006), NAREM Associates, in cooperation with OECD (2005), Rabinowitz et al. (2008), Salend (2008), Thompson & Thurlow (2000), Turner et al. (2000), and Zatta & Pullin (2004).

In the US, the National Center on Educational Outcomes has published extensively on alternate assessment for students with significant cognitive disabilities (see Lazarus et al., 2010a and 2010b; Olson, et al., 2002; and Quenemoen et al., 2003). These documents are too lengthy to summarise here, but suffice to say they provide information on States' accommodation policies on alternate assessments and guidelines for such assessments. Other useful guides to alternate assessment are to be found in the recently published book by Bolt & Roach (2009) and in publications from the US Department of Education, particularly those relating to its policy for including students with disabilities in standards-based assessment used in determining 'adequate yearly progress' (Technical Work Group on Including Students with Disabilities in Large Scale Assessments, 2006).

9.3 Some Definitions of Assessment Accommodations and Alternate Assessments

Basically, there are two types of adjustments to nation- or state-wide assessments.

Assessments with accommodations. This involves making changes to the assessment process, but not the essential content. Braden et al. (2001) described accommodations as alterations to the setting, timing, administration and types of responses in assessments. Here, assessors need to distinguish between accommodations necessary for students to access or express the intended learning content and the content itself.

Alternate assessments. As defined by the US Department of Education (2003), alternate assessments are defined as assessments 'designed for the small number of students with disabilities who are unable to participate in the regular State assessment, even with appropriate accommodations' (p.68699). They refer to materials collected under several circumstances, including: teacher observations, samples of students' work produced during regular classroom instruction, and standardised performance tasks. Further, alternate assessments should have:

- a clearly defined structure,
- guidelines for which students may participate,
- clearly defined scoring criteria and procedures,
- a report format that clearly communicates student performance in terms of the academic achievement standards defined by the State, and
- high technical quality, including validity, reliability, accessibility, objectivity, which apply, as well, to regular State assessments.

Quenemoen et al. (2003) provided more detailed definitions and examples of the following alternate assessment approaches:

Portfolio: a collection of student work gathered to demonstrate student performance on specific skills and knowledge, generally linked to state content standards. Portfolio contents are individualized and may include wide ranging samples of student learning, including but not limited to actual student work, observations recorded by multiple persons on multiple occasions, test results, record reviews, or even video or audio records of student performance…

IEP-Linked Body of Evidence: Similar to a portfolio approach, this is a collection of student work demonstrating student achievement on standards-based IEP goals and objectives measured against predetermined scoring criteria…This evidence may meet dual purposes of documentation of IEP progress and the purpose of assessment.

Performance Assessment: Direct measures of student skills or knowledge, usually in a one-on-one assessment. These can be highly structured, requiring a teacher or test administrator to give students specific items or tasks similar to pencil/paper traditional tests, or it can be a more flexible item or task that can be adjusted based on student needs. For example, the teacher and the student may work through an assessment that uses manipulatives and the teacher observes whether the student is able to perform the assigned tasks….

Checklist: Lists of skills, reviewed by persons familiar with a student who observe or recall whether students are able to perform the skills and to what level. Scores reported are usually the number of skills that the student is able to successfully perform, and the settings and purposes where the skill was performed.

Traditional (pencil/paper or computer) test: Traditionally constructed items requiring student responses, typically with a correct and incorrect forced-choice answer format. These can be completed independently by groups of students with teacher supervision, or they can be administered in one-on-one assessment with teacher recording of answers.

For useful descriptions of alternate assessments for students with significant cognitive disabilities, see Perner (2007), who gave examples of various States' methods, such as portfolio and performance-based assessments referred to above.

9.4 Formative Assessment

As might have become apparent in the foregoing, there is a tension between the need for schools to ascertain students' level of achievement for accountability purposes and the need to take account of what is best educationally for SWSEN (Bauer, 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.

Mitchell (2008) has summarised the distinction between summative and formative assessment. Briefly, *summative* assessment is concerned with evaluating learners' performances at the end of a module or a course. The results count towards making a final judgement on what the learners have achieved. *Formative assessment* evaluates students' progress during a course or module so that they have opportunities to improve, and teachers to 'fine tune' their teaching. In its pure form, formative assessment does not contribute to the overall grade. 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.

There is evidence to suggest that formative assessment has a positive effect on learning outcomes for SWSEN. 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 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).

Finally, in a related vein, in recent years, the European Agency for Development in Special Needs Education has argued that assessment processes can either contribute to or hinder the process of inclusion (see various documents on the Agency's website: www.european-agency.org). Thus, it has focused on what it refers to as 'inclusive assessment', which it defines as:

> an approach to assessment in mainstream settings where policy and practice are designed to promote the learning of all pupils as far as possible. The overall goal of inclusive assessment is that all assessment policies and procedures should support and enhance the successful inclusion and participation of all pupils vulnerable to exclusion, including those with SEN (Watkins, 2007, p.47).

Educational policy-makers, then, should optimise both the needs of the system and those of its students in determining assessment policies.

9.5 Functional Behavioural Assessment

In the US, a major variant of the IEP is the 'Behavior Intervention Plan '(BIP), with its reliance on 'Functional Behavior Assessment' (FBA). BIPs came into force in the US with the 1997 reauthorisation of IDEA, and were reiterated in the 2004 IDEIA. As described by Killu (2008) and Etscheidt (2006), BIPs consider the relationship between student learning and any behaviour problems they manifest that may impede their classroom performance or that of other students. A point of distinction between IEPs

and BIPs is that the latter must not only focus on individuals, but must also address school-wide issues that serve as contextual factors that may contribute to the behavioural problems (Killu, 2008).

In a review of FBA, 22 studies focused on learners with or at risk for emotional and behavioural disorders were reported. 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).

The principles of FBA are not limited to behaviour, but in recent years have been extended to learning difficulties as well (Daly & Martens, 1997; Jones & Wickstrom, 2002; Duhon et al., 2004).

9.6 Summary

1. *Increasingly, SWSEN, including those with significant cognitive disabilities, are being expected to participate in their countries' national or state assessment regimes.*

2. *High stakes' assessments can have the effects of jeopardising inclusive education, a risk that can be exacerbated by the effects of international comparative studies of educational standards.*

3. *In the US, legislation since IDEA 1997 does not allow SWSEN to be exempted from their states' assessment programmes. Instead, educational authorities are required to provide alternate assessment for students who cannot participate in state or district assessments with or without accommodations. IEPs now must include a statement of any accommodations that are necessary to measure the academic achievement and functional performance of such students on state- and district-wide assessments.*

4. *The main types of alternate assessments comprise portfolios, IEP-linked bodies of evidence, performance assessments, checklists and traditional paper and pencil tests.*

5. *The assumptions underlying these provisions are twofold: (a) that higher expectations will lead to improved instructional programmes and (b) that these will lead in turn to higher student achievement.*

6. *The requirements for all students to participate in state- and district-wide assessments have been shown in some research to have had unintended negative consequences for students with disabilities, including higher rates of academic failure, lower self-esteem, and concerns that they would experience higher drop-out rates.*

7. *Countries or states should include both content area specialists and experts in severe disabilities in validating performance indicators used in alternate assessment.*

8. *With the shift to all students being required to participate in their countries' national or state assessment regimes, teachers of SWSEN will need professional development on their country's or state's academic standards, alternate achievement standards, and curriculum design that goes beyond functional domains.*

9. *Formative assessment has been associated with positive outcomes for SWSEN and with improvements in teachers' perceptions of students' performances.*

10. *Functional assessment is increasingly being applied, not only to behaviour, but also to learning in general.*

11. *In determining assessment policies, it is important to recognise and resolve as far as possible the tensions between measuring the health of the education system and protecting the interests of students with special educational needs. In other words, educational policy-makers should optimise both the needs of the system and those of its students in determining assessment policies.*

CHAPTER TEN

EVIDENCE-BASED PEDAGOGY[17]

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 United States, the No Child Left Behind (NCLB) 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.' As well, NCLB requires each state to ensure that all learners (including those with disabilities) make 'adequate yearly progress', i.e., 'continuous and substantial improvement'.

In their recent review of special education in the ACT, Shaddock et al. (2009) proposed 'increased accountability for the learning outcomes of students with a disability and the adoption of evidence-based policy to inform service development', arguing that 'data and evidence, not conviction and ideology, are the key considerations' (p.16). In a similar vein, the President's Commission (2002) in the US recommended the establishment of 'long-term programs of research that support evidence-based practices' (p.61).

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).

10.1 Do SWSEN Require Distinctive Teaching Strategies?

The answer to this question is 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, SWSEN simply require good teaching. As some writers argue, there is little evidence to support the

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[17] This chapter is based on Mitchell (2008 and 2009).

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 (Lewis & Norwich, 2005).

Although they all have a substantial evidence base for SWSEN, almost all them have general applicability.

10.2 Criteria for What Constitutes Evidence

Ideally, evidence that a particular strategy works should be based on carefully designed research studies that meet criteria such as the following:

Treatment fidelity. The teaching strategy is fully described and there is evidence that it has been carefully implemented.

Behavioural outcomes. The study should include reliable and valid measures of the behavioural outcomes. When he selected the teaching strategies described in his recent book, Mitchell (2008) relied heavily on various meta-analyses that have been reported in educational literature. Briefly, a meta-analysis synthesises the results from a range of similar research studies to determine the average effect of a particular intervention. Meta-analyses usually produce a numerical indicator, known as *effect size.* The larger the effect size, the greater is the impact of the intervention. An effect size of 1.0 indicates that learners receiving the intervention would achieve better than 84% of those who did not receive it; an effect size of 0.7 means that those receiving the intervention would do better than 76% of those who did not; an effect size of 0.3 means scores better than 62%, and so on. Most of the strategies selected by Mitchell had effect sizes between 0.3 and 0.7, with some over 1.0.

Learner characteristics. Studies should include clear descriptions of the learners' ages, developmental levels, and the nature and degree of any disabilities they may have. Ideally, research studies should focus on learners who are as homogeneous as possible. The more heterogeneous the sample studies, the more difficult it is for educators to decide which learners would benefit from the strategy.

Control of variables. The research should be designed to ensure that the outcomes are due to the intervention and not to any confounding variables such as the simple passage of time or a placebo effect. One would also want to be confident that the

outcomes are not due to the effects of additional attention to the learners in the study or to the effects of repeated testing.

Freedom from contamination. There should be no, or minimal, 'contamination' which might affect the results of the study. In other words, it is important that nothing happens (outside of the intervention) that could affect the outcomes for either the experimental group or the control group. Of course, if events occur that affect *both* the experimental and the control groups, that is acceptable.

Acceptable side effects. Possible side effects should be assessed and should be positive, or at least not negative. For example, coercive means might be used to control certain learner behaviours, but they may cause heightened anxiety or even fear.

Theory-based. The psychological mechanisms or learning processes underlying the strategy should be clearly explained, thus enabling one to generalise it to other situations.

Follow-up. There should be been adequate follow-up after, say, six months, but preferably longer, to ascertain if the behavioural gains are maintained over time.

Research versus natural conditions. Ideally, the research should be carried out in everyday teaching environments, not just in research conditions. This is because it could well be that the research conditions are dramatically different from the actual conditions educators work in.

Peer review. The research should have been published in reputable journals after rigorous peer review.

Replication. The research should contain at least two studies (more for single-case studies) that have shown positive effects for the strategy; i.e., the research has been replicated, preferably by independent researchers.

Cost effectiveness. Clearly, for an intervention to be adopted it must not be excessively expensive. For example, the more the intervention depends on one-to-one treatment over a prolonged period, the less likely it is considered to be cost effective.

10.3 Evidence-based Teaching Strategies

By applying as many as possible of the above criteria, Mitchell (2008) arrived at a total of 24 strategies, some of which included several sub-strategies. Although they are

illustrated with reference to learners with special educational needs, almost all the strategies have general applicability.

Mitchell emphasised that he was not arguing for a single strategy or blueprint that all teachers should use. Rather, he felt that the most effective programmes are those that incorporate a variety of best practices. His strong advice was that educators should develop a repertoire of such strategies, nested within their own philosophy, personality, craft knowledge, professional wisdom, and, above all, their knowledge of the characteristics and needs of their students and their knowledge of local circumstances.

In this chapter, 18 of the strategies are presented (Mitchell, 2009). They are as follows

1. cooperative group teaching
2. peer tutoring
3. review and practice
4. formative assessment
5. feedback
6. cognitive strategy instruction
7. self-regulated learning
8. memory strategies
9. reciprocal teaching
10. behavioural approaches
11. social skills instruction
12. positive, motivating classroom environment
13. adequate active learning time
14. information and communications technology
15. parent involvement
16. phonological processing
17. optimal physical environment
18. combined strategies

In the following selection only a single representative study will be cited for each strategy. For a full review of the evidence, see Mitchell (2008).

Co-operative group teaching. A comprehensive study researched the effects of co-operative 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).

Peer tutoring. In a study of the effects of peer-assisted learning strategies on students' reading achievement in 22 U.S. 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).

Review and practice. 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).

Formative assessment. In an early meta-analysis of 21 studies of the effects of formative evaluation, an effect size of 0.70 was obtained (Fuchs & Fuchs, 1986). (See also Chapter Nine of the present review).

Feedback. After synthesising a large number of studies on the effects of a wide range of influences on learner achievement, a 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 confined to SWSEN, it is highly likely to apply to such learners.

Cognitive strategy instruction. In a Canadian study of 166 learners, 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).

Self-regulated learning. 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 per cent of the students treated by this method (Stage & Quiroz, 1997).

Memory strategies. Several research studies have shown that students (including those with a range of disabilities) can be trained to use memory strategies independently across a range of different content areas. For example, in 19 meta-analyses of various interventions, mnemonic training, with an effect size of 1.62, was rated the highest. This effect size can be translated to mean that the average student receiving mnemonic instruction was better off than 95 per cent of the students not receiving such instruction (Mastropieri & Scruggs, 1989).

Reciprocal teaching. A New Zealand study investigated the efficacy of a tape-assisted reciprocal teaching programme, referred to as 'cognitive bootstrapping' (LeFevre, Moore & Wilkinson, 2003). The study's subjects were learners aged from eight to 10 years with poor comprehension skills, half of whom also had poor decoding skills. The results showed that the poor decoders improved their use of cognitive strategies and their comprehension. These results were maintained after 10 weeks and transferred to other material.

Behavioural approaches. 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).

Social skills instruction. 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).

Positive, motivating classroom environment. 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).

Adequate active learning time. An Australian investigation found that when 'wait-time' was greater than 3 seconds, changes in educator and learner discourse took place and higher cognitive level achievement was obtained in elementary, middle and high school science classes. This finding was attributed to both educators and learners having additional time to think (Tobin, 1987).

Information and communications technology. A recent review of the literature on the use of computer assisted instruction (CAI) with learners with mild and moderate disabilities found that, although mixed, research supported the potential for CAI to raise academic achievement, particularly when it is used as a tool for extended practice of previously learned concepts (Fitzgerald & Koury, 1996).

Parent involvement[18]. A 1996 meta-analysis of the effects of behavioural parent training on anti-social 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 (Serketich & Dumas, 1996).

Phonological processing. An Australian study evaluated the effects of phonological processing skills training for learners aged nine-14 years with persistent reading difficulties. The results showed that improvement in the learners' phonological processing skills led to considerable improvement in their reading accuracy and reading comprehension. Extending the length of the training time significantly improved the transfer of skills to the reading process, especially for those with severe phonological processing skill difficulties (Gillon & Dodd, 1997).

Optimal physical environment. A New Zealand study examined the effects of sound-field amplification for four learners with Down syndrome aged six to seven years. The results showed that the learners perceived significantly more speech when the system amplified the investigator's voice by 10 dB (Bennetts & Flynn, 2002).

Combined teaching strategies. A few studies have investigated the impact of two or more teaching strategies on learners' academic achievement and social behaviours. 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 co-operative group teaching (Swanson, 2000). One Canadian study

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[18] See also Chapter Fourteen of the present review.

looked at the combination of three strategies: co-operative group teaching, teacher collaboration and parent involvement (Saint-Laurent et al., 1998).

10.4 A Scale for Evaluating Teachers' Use of Evidence-based Strategies

In his recent paper presented at a UNESCO conference, Mitchell (2009) outlined a scale for evaluating teachers' use of the strategies outlined above. The scale is designed to be used in carrying out a needs analysis for teachers' professional development. This could involve the following three steps:

Step One. Teachers are asked to complete a questionnaire, rating their use of the 22 key strategies. The questions are intended to provide a broad picture only and provide a basis for a more detailed analysis to be conducted in the next step.

Step Two. This step would normally involve an independent evaluator who would build on a teacher's questionnaire responses and would use a combination of an in-depth interview, classroom observations and document inspection to evaluate the teacher's use of the 22 strategies. Mitchell noted that it might be possible for some teachers to carry out a self-evaluation of their use of the strategies, thus obviating Step One.

Step Three. On the basis of information obtained in the previous two steps, a professional development programme is designed.

EXCERPT FROM A SCALE FOR EVALUATING STRATEGIES FOR ENHANCING LEARNING (DRAFT)
©David Mitchell, 2009

NB: This Scale has yet to be peer-reviewed and tested for reliability. It should not be used until these steps have been taken and a revised form provided. Readers of this draft are invited to provide comments.

Criteria	Indicators	Evaluation
1. Employs co-operative group teaching The teacher regularly uses co-operative group teaching in which all learners work together in small learning groups of 6 to 8, helping each other to carry out individual and group tasks. Groups are usually mixed ability, but are sometimes comprised of learners with similar ability. The teacher teaches group process skills and carefully supervises group interactions. **Reference** Mitchell, 2008, pp.43-51.	1. In most lessons the teacher uses co-operative group activities. 2. The teacher uses a combination of (a) mutual assistance groups in which learners are encouraged to help individuals to carry out tasks, and (b) 'jig-saw' type groups in which all learners contribute to a group task. 3. Mostly, groups are comprised of learners with mixed abilities. 4. The teacher teaches group process skills and carefully supervises group activities.	A. All the indicators are regularly met. B. The teacher occasionally uses both forms of co-operative group activities with ability groups and mixed ability groups. C. The teacher occasionally uses mutual assistance groups. D. None of the indicators are met.
2. Employs peer tutoring The teacher regularly sets up peer tutoring in which one learner (a 'tutor') provides learning experiences for another learner (a 'tutee'). Such tutoring is mainly used to promote fluency through practising or reviewing skills or knowledge. The tutors are taught to follow a structured lesson format. Each dyad works for no more than 10 minutes at a time for 8-10 sessions. **Reference** Mitchell, 2008, pp.52-59.	1. In most lessons the teacher uses peer tutoring. 2. The peer tutoring is used for practice and review of previously taught material. 3. Tutors are taught to use a structured lesson format. 4. Care is taken in matching tutors with tutees.	A. All the indicators are regularly met. B. The teacher regularly uses peer tutoring, but not all the other indicators are met. C. The teacher occasionally uses peer tutoring. D. None of the indicators are met.

10.5 A Final Word

The overarching theme of this chapter is that teaching must become more based on empirical evidence of what has been proven to be effective strategies for improving students' outcomes. A secondary theme is that, in order to bridge the research-practice gap, it is necessary that teacher education - both pre-service and in-service must be

upgraded to deliver programmes based on evidence (see also Chapter Thirteen). Only by doing this will teaching be able to lay claim to being a true profession.

10.6 Summary

1. *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.*

2. *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'.*

3. *All students, including SWSEN, 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. *To constitute evidence, research studies should meet criteria such as the following: (a) treatment fidelity, (b) reliable and valid measurement of behavioural outcomes, (c) adequate control of variables, (d) freedom from contamination, (e) adequate follow-up, (f) replicated in more than a single study, and (g) cost effectiveness.*

5. *Strategies that have a strong evidential base for use with SWSEN (and other students) include (a) cooperative group teaching, (b) peer tutoring, (c) formative assessment, (d) feedback, (e) cognitive strategy instruction, and (f) instruction in memory strategies.*

6. *A scale for evaluating teachers' use of evidence-based teaching strategies is described.*

7. *In order to bridge the research-practice gap, it is necessary that teacher education - both pre-service and in-service must be upgraded to deliver programmes based on evidence.*

CHAPTER ELEVEN

INCLUSIVE EDUCATION[19]

In almost every country, inclusive education has emerged as one of the most the dominant issues in the education of SWSEN. In the past 40 years the field of special needs education has moved from a segregation paradigm through integration to a point where inclusion is central to contemporary discourse. Even so the concept of inclusion is not unproblematic, both conceptually and practically (Hegarty, 2001). This chapter presents material on six themes relating to inclusive education: the concept, its origins, international perspectives, approaches to its implementation, related research evidence, and critiques.

From the outset, it must be said that inclusive education is a complex, if not a problematic concept. Despite the internationalisation of the philosophy of inclusive education (UNESCO, 1994, 2008), for a range of historical, cultural, social and financial reasons its implementation has been uneven across the world. It has been a particularly problematic concept in developing countries, where resources are limited and fewer than 2% of children with disabilities receive any form of education.

Inclusive education affects not just the conceptualisation of special educational needs and the nature of education provided for SWSEN, but it calls into question the broader aims of education, the purposes of schools, the nature of the curriculum, approaches to assessment, and schools' accommodation to diversity. Hence, some of the principles of inclusive education are traversed elsewhere in this review, in particular in the introduction (Chapter One) and the chapters on the educational context (Chapter Six), curriculum (Chapter Eight), assessment (Chapter Nine), pedagogy (Chapter Ten), teacher education (Chapter Thirteen), and universal design for learning (Chapter Sixteen).

11.1 The Concept of Inclusive Education

A succinct definition of inclusive education is provided by Lipsky & Gartner (1996, 1999), who described it as students with disabilities having full membership in age-appropriate classes in their neighbourhood schools, with appropriate supplementary aids and support services. To Antia et al. (2002), inclusion denotes a student with a

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[19] This chapter is mainly drawn from Mitchell 2004b, 2005, and 2008.

disability unconditionally belonging to and having full membership of a regular classroom in a regular school and its community. They contrasted this with 'integration', or 'mainstreaming', both of which imply that the student with a disability has the status of a visitor, with only conditional access to a regular classroom, but primary membership of a special class or resource room.

In their review of 28 European countries, Meijer et al. (2003) described three different approaches to including pupils with special educational needs: one-track (including almost all pupils in the mainstream), multi-track (a variety of services between mainstream and special needs education), and two-track (two distinct educational systems). In this chapter, the main focus is upon the first of these – the one-track approach.

In recent years, the concept of inclusive education has been broadened to encompass not only students with disabilities, but also all students who may be disadvantaged. Earlier, Skrtic et al. (1996) had argued that inclusive education goes far beyond physical placement of students with disabilities in general classrooms, but should involve schools meeting the needs of all their students within common, but fluid, environments and activities. This broadened conceptualisation of inclusive education was recently articulated in the meeting at the forty-eighth session of the UNESCO International Conference on Education, held in Geneva in November 2008, where it was acknowledged that 'inclusive education is an ongoing process aimed at offering quality education for all while respecting diversity and the different needs and abilities, characteristics and learning expectations of the students and communities, eliminating all forms of discrimination' (UNESCO, 2009, p.126).

11.2 The Origins of Inclusive Education

Advocacy for inclusive education revolves around three main arguments. Firstly, several writers claim that inclusive education is a basic human right. For example, Christensen (1996) argued that exclusion or segregation of students with special needs is a violation of their human rights and represents an unfair distribution of educational resources. Similarly, Lipsky & Gartner (1996, 1999) asserted that inclusive education is a fundamental right, derived from the principle of equity, which, if recognised, would contribute significantly to a democratic society. This is also emphasised in UNESCO's *Salamanca Statement* (1994) and by Slee (2001), the latter considering that inclusive

education is about the cultural politics of protecting the rights of citizenship for all students. Writing from a British perspective, and as a person with a disability, Oliver (1996) argued that the education system has failed disabled students by not equipping them to exercise their rights and responsibilities as citizens, while the special education system has functioned to exclude them from both the education process and wider social life. He thus saw inclusion as a political as well as an educational process.

Secondly, as Lipsky & Gartner (1996, 1999) pointed out, in designing educational programmes for students with disabilities, the focus must shift from the individual's impairments to the social context, a key feature of which should be a unitary education system dedicated to providing quality education for all students (cf., Meijer et al.'s (2003) one-track approach mentioned above). A similar point is advanced by English writer, Skidmore (2002), who found that teachers have two contrasting 'pedagogical discourses' – the discourse of deviance and the discourse of inclusion. These differ along a number of dimensions, such as teachers' views on the educability of students, their explanations of student failure, and their curriculum models. He argued that the discourse of inclusion provides an alternative vision of the relationship between education and society that runs counter to the processes of segregation and differentiation that have dominated the development of mass schooling. The latter point was also expressed by Slee (2001), who claimed that the more schools have been called upon to include the masses, the more they have developed the technologies of stratification and exclusion. Slee saw a danger, too, in inclusive education deteriorating into assimilation or absorption.

A third argument asserts that since there is no clear demarcation between the characteristics of students with and without disabilities, and there is no support for the contention that specific categories of students learn differently, separate provisions for such students cannot be justified (Lipsky & Gartner, 1996, 1999).

11.3 International Perspectives on Inclusive Education

In a recent book outlining international perspectives on inclusive education, Mitchell (2005) and his authors explored the notion that the characterisation, purpose and form of inclusive education reflect the relationships among the social, political, economic, cultural and historical contexts that are present at any one time in a particular country and/or local authority. Among the 16 propositions to emerge from this overview, seven are particularly pertinent to the present review:

1. Inclusive education extends beyond special needs arising from disabilities and includes consideration of other sources of disadvantage and marginalisation, such as gender, poverty, language, ethnicity, and geographic isolation. The complex inter-relationships that exist among these factors and their interactions with disability must also be a focus of attention.

2. Inclusion goes beyond education and should involve consideration of employment, recreation, health and living conditions. It should therefore involve transformations across all government and other agencies at all levels of society.

3. While many countries seem committed to inclusive education in their rhetoric, and even in their legislation and policies, practices often fall short. Reasons for the policy-practice gap in inclusive education are manifold and include barriers arising from societal values and beliefs; economic factors; a lack of measures to ensure compliance with policies; the dispersion of responsibility for education; conservative traditions among teachers, teacher educators and educational researchers; parental resistance; lack of skills among teachers; rigid curricula and examination systems; fragile democratic institutions; inadequate educational infrastructures, particularly in rural and remote areas; large class sizes; resistance from the special education sector (especially special schools); and a top-down introduction of inclusive education without adequate preparation of schools and communities.

4. Inclusive education exists in historical contexts in which vestiges of older beliefs co-exist with newer beliefs.

5. Inclusive education is embedded in a series of contexts, extending from the broad society, through the local community, the family, the school and to the classroom.

6. Because cultural values and beliefs, levels of economic wealth, and histories mediate the concept of inclusive education, it takes on different meanings in different countries, and even within countries. The form taken by inclusive education in any particular country is influenced by the nature of the settlements reached at any one time between (a) traditional values such as social cohesion and group identity, collectivism, images of wholeness, fatalism, hierarchical ordering of society, and (b) modernisation values such as universal welfare, equity and equality, democracy, human rights, social justice, individualism, and parent choice.

7. Economic considerations play a significant role in determining approaches to inclusive education. These include (a) a recognition that it would not be financially realistic to provide special schools throughout a country, (b) the adoption of a human capital policy of developing all individuals primarily as a means of enhancing the economy, and (c) an attitude that persons with disabilities are economic liabilities and are therefore of low priority.

The United Nations and its agency, UNESCO, have played a significant role in promoting inclusive education, as noted in Chapter One, section 1.4, in the present review.. The most significant event took place in June 1994 when representatives of 92 governments and 25 international organisations met in Salamanca, Spain (UNESCO, 1994). The resulting agreement, known as the *Salamanca Statement*, demonstrated an international commitment to inclusive education. It included these agreements:

- those with special educational needs must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs, and
- regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving an education for all; moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system.

The *Statement* called upon all governments to 'adopt as a matter of law or policy the principle of inclusive education, enrolling all children in regular schools, unless there are compelling reasons for doing otherwise'.

More recently, in December 2006, the 61st session of the United Nations General Assembly confirmed a *Convention on the Rights of Disabled Persons*, which included a significant commitment to inclusive education. Article 24 is the most relevant to inclusive education. It stated, *inter alia*, the following:

1. States Parties recognise 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 realising 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 individualised support measures are provided in environments that maximise academic and social development, consistent with the goal of full inclusion.

A total of 145 countries signed the *Convention* and, as of June 2010, 87 had ratified it (including New Zealand).

It should be noted, however, that neither the *Salamanca Statement* nor the *Convention* explicitly states that *all* SWSEN should be educated in *fully inclusive settings* at *all levels* of the education system. Nor do they explicitly exclude such an interpretation. In other words, there is a degree of ambiguity regarding the intentions of both documents with regard to the meaning of inclusion.

With the impetus provided by the UN and UNESCO, and other influences such as those outlined in Chapter One, it is not surprising that virtually all countries have policies on inclusive education, or are in the process of developing them. To attempt to summarise them would be a major task. It is perhaps sufficient to mention some countries' approaches in order to illustrate the developments that are occurring,

England. In this country, the 2004 document *Removing barriers to achievement: The Government's strategy for SEN* (Department for Education and Skills, 2004) made a clear commitment to inclusive education by embedding inclusive practice in every school and early years setting. It cited the 1997 Green Paper, *Excellence For All Children,* as signaling the government's commitment to the principle of inclusion and the need to rethink the role of special schools within that context. It also referred to The SEN and Disability Act 2001 as delivering 'a stronger right to mainstream education, making it clear that where parents want a mainstream place for their child, everything

possible should be done to provide it' (p.25). A small, but significant, caveat to the principle of inclusion, however, can be found in the 2001 *Code of Pra*ctice (Department for Education and Skills, 2001), which stated that 'A parents' wish to have their child with a statement educated in the mainstream should only be refused in the small minority of cases where the child's inclusion would be incompatible with the efficient education of other children' (p.14). A further indication of England's commitment to inclusive education is the government's decision to place the Index for Inclusion (Booth & Ainscow, 2002) in every school.

Australia. Several Australian states have made a commitment to inclusive education. In Western Australia, for example, the aim of the Building Inclusive Schools (BIS) strategy since it commenced in 2002 has been to raise awareness across all levels of the education system of changing societal expectations in relation to the education of students with disabilities and the legal imperatives that now impact on schools. It is described as 'a professional learning program that promotes and supports the cultural shift of inclusive educational practices in all public schools'. (For details of the Building Inclusive Schools strategy, see the following website: http://www.det.wa.edu.au/inclusiveeducation/detcms/navigation/building-inclusive-learning-environments/building-inclusive-schools/).

Similarly, the *Inclusive Education Statement 2005* in Queensland aimed to (a) foster a learning community that questions disadvantage and challenges social injustice, (b) maximise the educational and social outcomes of all students through the identification and reduction of barriers to learning, especially for those who are vulnerable to marginalisation and exclusion, and (c) ensure all students understand and value diversity so that they have the knowledge and skills for positive participation in a just, equitable and democratic global society (for details see the website: (http://education.qld.gov.au/strategic/eppr/curriculum/crppr009/).

Europe. The European Agency for Development in Special Needs Education has been developing 'Indicators for Inclusive Education', with the aim of developing 'a methodology that would lead to a set of indicators suitable for national level monitoring, but that could also be applied at the European level'. The indicators are expected to have 'a clear focus on the policy conditions that may support or hinder the development of inclusive education within schools'. (see http://www.european-agency.org/agency-projects/indicators-for-inclusive-education).

US. The United States has a voluminous literature and a range of policies relating to inclusive education, although the term is not employed in official documents. A recent reflection by Sailor (2009) will suffice to sum up the present status of inclusive education:

> Without question, one of the thorniest policy questions to confront American education in the second half of the twentieth century and continuing today is the issue of placement for students served under the Individuals with Disabilities Education Act (IDEA). Federal policy consistently has used the least restrictive environment (LRE) language in statutory and regulatory policy to enhance the integration of students with disabilities and greater access to the curriculum of general education. In addition, families assisted by advocacy organizations have litigated successfully to achieve these ends for their children with disabilities. Some of these cases have produced favourable interpretations at the level of the Supreme Court. Finally, university researchers associated with special education departments around the country built a strong case for more positive educational and social outcomes for children when they are educated alongside their nondisabled peers. Despite this three-pronged effort, educational segregation of students with disabilities continues on a large scale today (p.467).

Sailor's final point is reflected in Table 12.3 in Chapter Twelve, which shows that in 1995, only 26.2% of students with disabilities were receiving their education in regular classroom settings.

11.4 Approaches to Implementing Inclusive Education[20]

As Skrtic et al. (1996) pointed out, inclusive education goes far beyond the physical placement of children with disabilities in general classrooms. Rather, as many writers have emphasised, it requires nothing less than transforming regular education by promoting school/classroom cultures, structures and practices that accommodate to diversity (Christensen, 1996; Department of Education, 2001; Dyson et al., 2003; Shaffner & Buswell, 1996). In implementing inclusive education, attention should be paid to three levels: the broad society and education system, the school and the classroom.

Societal and education system level. At this level, factors such as the following have been identified as playing important roles: (a) the policy context of the wider community (Dyson, et al. 2003), (b) collaboration between government agencies and between them and non-government organisations, and (c) collaboration among

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[20] The impact of school reforms on inclusive education is of particular significance and was outlined in Chapter Six of this review.

educators, parents, peers, other school personnel, and community agency personnel (Department of Education, 2002; King-Sears, 1997).

To bring about inclusion, according to Oliver (1996), changes must take place at all levels of society. These include differences becoming positively valued, education systems becoming morally committed to the integration of all children into a single education system, schools becoming welcoming environments, teachers becoming committed to working with all children, curricula becoming freed of 'disablist' content, and disabled people being given skills to enter the labour market.

School level. At this level, the key question is what evidence is there that mainstream schools can act in ways that enable them to respond to student diversity to facilitate participation by all students in the cultures, curricula and communities of those schools? After extensively reviewing the literature on this topic, Dyson et al. (2003) were able to find only six studies that provided trustworthy evidence relevant to this question. In determining the extent to which schools facilitate (or inhibit) inclusion, two school-level themes ran through these studies: the importance of school culture (e.g., the values and attitudes held by staff) and leadership and decision-making. School leadership was also emphasised by Ainscow (1995), Schaffner & Buswell (1996) and Stanovich & Jordan (1998). The latter found that the strongest predictor of effective teaching behaviour in inclusive education settings in Canada was the subjective school norm as operationalised by principals' attitudes towards heterogeneous classrooms[21]. Developing school support networks has also been identified as an important facilitator of inclusive education (Ainscow, 1995; Shaffner & Buswell, 1996), as has encouraging a strong sense of community with professionals and paraprofessionals working collaboratively with parents (Skrtic et al., 1996).

Classroom level. Of course, the success or otherwise of inclusive education critically depends on what takes place minute-by-minute in regular classrooms. Inclusive education does not mean the coexistence of one programme for a student with special educational needs and another for the other students. Rather, it implies changing the programme and teaching approaches for all students in a class. In this sense, inclusive education is something of an educational Trojan Horse, since it involves not only accommodating regular classroom programmes and teaching strategies to the

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[21] See Chapter Six, section 6.6, for further comments on leadership.

needs of SWSEN, but also making adjustments to meet the diverse needs of other students in the class. In general terms, this means teachers adopting student-centred pedagogy, as distinct from curriculum-centred pedagogy (McDonnell, 1998; UNESCO, 1994).[22]

Inclusive education also requires close collaboration between regular class teachers and a range of other people, including specialist teachers, teaching assistants, therapists, and parents. Features of consultation models that have been advocated include (a) the regular classroom teacher having primary responsibility for students' overall programmes, (b) equal professional status of the regular teacher and the specialist teacher, (c) the involvement of parents in decision-making and planning (Antia et al., 2002)[23], (d) teaching assistants working in partnership with teachers to provide supplementary, but not the sole, input to SWSEN, and (e) most additional support being provided *in situ*, rather than through withdrawal (Davis & Hopwood, 2002).

11.5 Research Evidence Relating to Inclusive Education

In his review of efficacy studies of inclusion, Lindsay (2003) concluded that they do not provide a ringing endorsement of the concept. Similarly, Kavale & Mostert (2003) claimed that the evidence is mixed at best and clearly suggests the need for caution. They noted, for example, that analyses of regular classrooms in the US show that they are places where undifferentiated, large group instruction dominate and teachers make few adaptations, with the result that there is little individualised programming. They also noted that while some positive outcomes have been found, there is also evidence of negative consequences for students with disabilities, including poor self-concepts and inadequate social skills and low levels of peer acceptance.

Research into inclusive education can be divided into studies concerned with ascertaining the perceptions various stakeholders hold towards inclusion and those investigating academic and social outcomes.

11.5.1 Teachers'/principals' perceptions

In order for inclusion to work in practice, teachers and principals in regular schools must accept its philosophies and demands. According to Salend & Duhaney (1999), in

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[22] See chapters Eight, Nine and Ten, for more detailed ideas on classroom-level adaptations.
[23] See also Chapter Fourteen.

their review of studies (largely American), educators have varying attitudes towards inclusion, their responses being shaped by a range of variables such as their success in implementing inclusion, student characteristics, training and levels of support. Some studies reported positive outcomes for general teachers, including increased skills in meeting the needs of all their students and developing an increased confidence in their teaching ability. Negative outcomes included the fear that the education of non-disabled children might suffer and the lack of funds to support instructional needs. For special educators, the benefits included an increased feeling of being an integral part of the school community and the opportunity to work with students without disabilities.

Similarly mixed, but generally positive, attitudes towards inclusion were reported by Scruggs & Mastropieri (1996). About two-thirds of the US teachers they surveyed supported the concept of mainstreaming/inclusion. A smaller majority were prepared to include students with disabilities in their own classes, their attitudes depending on the type and severity of the disability. Only one-third or less believed they had sufficient time, skills or resources necessary for inclusion, especially for students with severe disabilities. In their study of Canadian teachers' and principals' beliefs about inclusive education, Stanovich & Jordan (1998) found two strong predictors of effective teaching behaviour in inclusive classrooms. The strongest one was the 'subjective school norm' as operationalised by the principal's attitudes towards heterogeneous classrooms. The second major predictor was an 'interventionist school norm', a measure derived from a scale ranging from the idea that problems exist within students ('pathognomonic'), at one end, to the idea that problems result from the interaction between the student and their learning environments ('interventionist'), at the other end.

11.5.2 Parents' perceptions

Parents play a critical role in bestowing social validity on inclusion and in facilitating its implementation. Duhaney & Salend (2000) reviewed 17 studies published between 1985 and 1998 that investigated the perceptions of inclusion held by parents of children with and without disabilities. They found that these were complex, multidimensional, and affected by a range of intervening variables. Both groups had mixed, but generally positive, perceptions of inclusive education. Parents of children with disabilities believed that inclusion promoted acceptance by non-disabled peers and helped their children's social, emotional and academic development. Concerns included a loss of access to specialised personnel. Parents of children without disabilities valued their

children's greater awareness of others' needs and their enhanced acceptance of human diversity. Some, however, were concerned that their children would not receive sufficient assistance from their teachers and they might emulate inappropriate behaviours of children with disabilities.

There is evidence that countries with more segregated provisions (e.g., Belgium, France, the Netherlands (until recently), Germany and Switzerland) report parental pressure for inclusion, and there is positive parental support in countries with existing inclusive practices (e.g., Cyprus, Greece, Norway, Portugal, Spain and Sweden. However, parents whose children have more severe special needs are said to prefer segregated settings for their children (e.g., Norway, Portugal, Spain and Sweden) (European Agency for Development in Special Needs Education, 2003).

11.5.3 Students' perceptions

Inclusive education involves several stakeholders, not least of which are the students with disabilities and their peers without disabilities. What are their perceptions of inclusive education? Klinger & Vaughn (1999) presented a synthesis of 20 US studies of programmes involving students with high incidence disabilities in settings ranging from kindergarten to grade 12. The consensus of the findings is that those with and without disabilities wanted the same activities, books, homework, grading criteria and grouping practices. Both groups recognised that since not everyone learns in the same way or at the same speed, teachers should slow down instruction when necessary, explain concepts more clearly, and teach learning strategies.

A recent New Zealand study by Hornby (2010) challenged the assumption that inclusive education is applicable to all SWSEN, irrespective of their degree of disabiity. He studied former students of two special schools – one for students with learning disabilities and the other for students with behavioural difficulties - who had been re-integrated into mainstream schools for the last few years of their schoolimg.The results indicated that many of the students subsequently exhibited limited inclusion in their communities in terms of low levels of employment, education and community adjustment. The students also reported mainly positive experiences regarding their time in special schools or units and mainly negative experiences in mainstream classes. Hornby attributed these findings, in part at least, to the goals of education for the last few years of schooling being focused on academic attainments, when vocational, social

and life skills may have been more useful in assisting the SWSEN to make successful transitions to adult life.

11.5.4 Educational achievement and psychosocial development

There is a considerable, almost bewildering, body of research that addresses the question of how inclusion impacts on the achievements of students with and without special educational needs. In interpreting these studies, several cautions must be taken into account: (a) some of the earlier studies may not be relevant to current conditions, (b) many of the studies compare placements only and do not 'drill down' into the nature of the educational programmes the students received, (c) many studies are methodologically flawed, and, of course, (d) all studies are specific to the context in which they were conducted.

In general, methodologically sound studies have come up with mixed results, the majority reporting either positive effects or no differences for inclusion. (Some would argue that if there are no differences, this is also an argument for inclusion: why have segregated education programmes when they are no better than placement in regular classes?) The following is a representative sample of research carried out in this area.

Positive findings

In an early meta-analysis, 11 empirical studies carried out between 1975 and 1984 were analysed. It was shown that mainstreamed disabled students (mentally retarded, learning disabled, hearing impaired, and mixed exceptionalities)[24] consistently outperformed non-mainstreamed students with comparable special education classifications. Two types of mainstreaming were included: part-time with occasional pull-out resource class attendance, and full-time inclusion in general classes. Of the 115 effect sizes calculated, two-thirds indicated an overall positive effect of mainstreaming. The overall effect size was 0.33, which translates into a gain of 13 percentiles for students in mainstreamed settings (Wang & Baker 1986). In a more recent meta-analysis, Hattie (2009) obtained a somewhat more modest effect size of 0.21 in favour of mainstreaming.

A Canadian study of 3rd grade students with 'at risk' characteristics (e.g., learning disabilities, behaviour disorders) compared the impact on achievement of a multi-faceted inclusive education programme. The intervention group (N=34) received all

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[24] Throughout this section the original terminology employed by the authors is retained.

instruction and support in general education classrooms, while the comparison group (N=38) received 'pull-out' resource room support. The intervention group also received a programme that included collaborative consultation, cooperative teaching, parent involvement and adapted instruction in reading, writing and mathematics. The comparison group continued using general education teaching methods characterised by whole-class instruction and minimal cooperation between the general and special teachers. Significant effects were found in the writing scores for the inclusive education group. The general education students were not held back by the presence of the at-risk students in the classroom; on the contrary, their reading and mathematics scores benefited from the additional interventions offered by the programme (Saint-Laurent et al., 1998).

A US study addressed the effects of an inclusive school programme on the academic achievement of students with mild or severe learning disabilities in grades two - six. The experimental group comprised 71 learning disabled students from three inclusive education classrooms. In these classrooms special education teachers worked collaboratively with general education teachers, each student's programme was built upon the general education curriculum, and instructional assistants were used to support the SWSEN. The control group of 73 learning disabled students were in classrooms which were to become part of the inclusive programme, but in which the students received traditional resource class programmes. Results showed that the students with mild learning disabilities in the inclusive classrooms made significantly more progress in reading and comparable progress in mathematics, compared with those in the resource classes. Students with severe learning disabilities made comparable progress in reading and mathematics in both settings (Waldron & McLeskey, 1998).

In a study carried out in Hawaii, the effects of placement in general education classrooms or in self-contained special education classrooms on the social relationships of students with severe disabilities were reported. Nine matched students were studied in each of the two placements. The results showed that those who were placed in the general education classrooms had higher levels of contact with non-disabled peers, received and provided higher levels of social support, and had much larger friendship networks (Fryxell & Kennedy, 1995).

One of the most comprehensive studies of the effects of inclusive programmes on the development of social competence in students with severe disabilities is that

reported by Fisher & Meyer (2002). In a matched-pairs design, 40 students were assessed across two years of inclusive versus self-contained special education classrooms. Those in the inclusive programme made significant, albeit small, gains on measures of social competence, compared with students in self-contained classrooms

A recent Dutch study reported on the differences in academic and psychosocial development of at risk students in special and mainstream education. It was found that those in special education classes did less well in academic performances and that these differences increased as the students got older. In psychosocial development, variables such as social behaviour and attitudes to work also favoured students in regular classes (Karsten et al., 2001).

A UK study compared the outcomes for adolescents with Down syndrome of similar abilities but educated in mainstream or in special schools. The results showed no evidence of educational benefits for those in segregated settings, despite the higher teacher-student ratios. Those who attended their neighbourhood mainstream schools made significant gains (two-three years) over their special school peers in expressive language and in academic achievement (Buckley, 2006). Note, however, that this study has not been published in peer-reviewed journals.

A 2004 study in England showed that the presence of relatively large numbers of SWSEN (not analysed by category) in ordinary schools did not have a negative impact on the achievement of general education learners at the local education authority level. Rather, attainment seemed to be largely independent of levels of inclusive education. Other factors, such as socio-economic status, gender, ethnicity and language, seemed to be much more significant. Furthermore, the researchers found evidence that SWSEN were making good progress academically, personally and socially. They also found some evidence (chiefly in the views of teachers and pupils) that inclusion can have positive effects on the wider achievements of all learners, such as on their social skills and understanding. On the other hand, they also found some indications that having special educational needs might be a risk factor for isolation and for low self-esteem (Dyson et al., 2004).

A recent English study produced similar results, finding no evidence that the presence of higher proportions of learners with special educational needs (also not analysed by category) in secondary schools lowered the performance of general

education students. Indeed, as with the previous study, many educators in those schools believed that the inclusive education strategies used actually contributed to improved overall educational achievement (Rouse & Florian, 2006).

The impact of inclusion on the achievement of general education elementary school students was also investigated in a US study reported by Sharpe et al. (1994).. Two groups were studied: 35 students whose classes included five students with learning disabilities, and 108 who had no classmates with special educational needs. Measures of academic achievement were taken over a three-year period at three points: pre-inclusion, inclusion and post-inclusion. The researchers found no significant differences between the two groups of learners on basic skills of language arts, reading and mathematics. Certainly, there was no evidence of any decline in the academic or behavioural performances of learners in the inclusive setting.

Similar findings were reported in a recent Canadian study. Friesen et al. (2009) analysed data from British Columbia to compare the performance of successive cohorts within every public elementary school in B.C. (as measured by the change in individual test scores between grades 4 and 7), to see if the proportion of disabled peers makes any difference to the achievement of non-disabled students. They concluded that 'Attending school with a higher percentage of students with disabilities is found to have only extremely small and statistically insignificant effects on the reading and numeracy achievement of non-disabled students' (p.1).

Mixed and negative findings
In one of the earliest meta-analyses, 50 studies compared general (i.e., inclusive) and special class placements. It was found that placement in general classes resulted in better outcomes for learners with mild mental retardation, but poorer outcomes for students with learning disabilities or behavioural/emotional problems (Carlberg & Kavale, 1980).

A comprehensive review of inclusion research involving students with autism also reported mixed results. In one set of studies, those who were fully included (a) displayed higher levels of engagement and social interaction, (b) gave and received higher levels of social support, and (c) had larger friendship networks. This was counterbalanced, however, by another study that found that these students were more frequently on the receiving, rather than the giving, end of social interactions. The review

also described a study in which the effect of inclusive education, compared with segregated education, on the language ability of autistic students was evaluated. The fact that there were no differences between the two placements was interpreted as supporting inclusion, since segregated placements were shown to be of no benefit (Harrower & Dunlap, 2001).

Peetsma et al. (2001) reported on a longitudinal study on the effects of inclusion on the academic and psychosocial development of Dutch students with mild learning and behavioural difficulties. The results were that, after two years, only a few differences in development were found: students made more progress in mathematics in inclusive settings, but school motivation developed more favourably in special schools. After four years, students in regular schools had made more progress in academic performance, whereas there were no differences in psychosocial functioning. However, a small–scale qualitative study, which was incorporated as part of the major study, showed that students with psychosocial problems made somewhat better progress in special education than in regular education, pointing to the need to pay attention to the psychosocial development of students with mild disabilities when they are placed in inclusive settings.

Several studies have found that quality of instruction, rather than placement, is the most important predictor of student achievement. For example, in one study of mathematics achievement of students with hearing impairments, placement in regular or special classes did not seem to impact on achievement. Rather specific features of quality placement included a supportive teacher, regular and extensive reviews of material, direct instruction and a positive classroom environment (Kluwin & Moores, 1989).

These findings were echoed in a report by Ofsted (2006) on English provisions for SWSEN. It considered that the most important factor in determining the best outcomes for pupils with learning difficulties and disabilities was not the type but the quality of the provision. Effective provision was distributed equally in the mainstream and special schools visited, but there was more good and outstanding provision in resourced mainstream schools than elsewhere.

One final point of mixed evidence can be found in a report from the European Agency for Development in Special Needs Education (2003). This suggested that

inclusion generally works positively at the primary school level, but serious problems emerge at the secondary level. This was attributed to increased topic specialisation, the different organisation of secondary schools, and the increasing gap between the achievement of SWSEN and other students with age.

11.6 Critiques of Inclusive Education

As Lindsay (2003) has pointed out, while the philosophy of inclusive education holds considerable sway at the turn of the 21st century, there is by no means unanimous support for it in the literature. Although he believes that any segregative provisions constitute a denial of human rights to disabled persons, Oliver (1996) believed that the success of integration at the ideological level has made it almost impossible for it to be examined critically. So what are the principal points that have been raised in the many critiques of inclusive education?

Starting with Lindsay (2003), he claimed that UNESCO's Salamanca Statement (1994) contains many contestable features: an overemphasis on the uniqueness of individual learners, a lack of clarity as to what is a regular school, and an imbalance of emphasis on the social model compared with the medical model. With regard to the latter point, while supporting the trend away from a medical (within child) model to a social (environmental) model, Lindsay felt that the recent narrow adherence to the social model has promoted the notion that inclusion is solely a question of rights and that the question of its efficacy in practice is irrelevant. He argued that it is not a matter of one or the other model but of finding the right balance between the two and of understanding how each interacts with the other. He further argued that the best way of enhancing children's rights is through rigorous, substantial research projects that demonstrate effectiveness.

The issue of what model is the most appropriate in determining the way forward in inclusive education was discussed by Clark et al. (1995). Until recently, they claimed, special education has been dominated by two paradigms: the psycho-medical one, which focuses on deficits located within individual students, and the socio-political one, in which the focus is on structural inequalities at the macro-social level being reproduced at the institutional level[25]. To these two paradigms, Clark et al. added a third, an 'organisational paradigm', in which special education is seen as the

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[25] See also Chapter Three of the present review for a more detailed discussion of various paradigms.

consequence of inadequacies in mainstream schools and, consequently, ways should be found to make them more capable of responding to student diversity. This can be achieved through such means as schools implementing findings from research into effective teaching, operating as problem-solving organisations, and supporting teachers through the change process.

In his critical examination of inclusive education, Hegarty (2001) made three main points. Firstly, he argued that if the notion of inclusion is to have any utility it must signify something other than excellence in education or good schools, which some definitions seem to highlight. Secondly, he asserted that for some SWSEN being included in a regular school environment is neither possible nor desirable (e.g., students with a visual impairment will need mobility training outside a regular classroom). And, thirdly, he claimed that while the notion of inclusion is important, an over-emphasis on it runs the risk of distorting the hierarchy of values in education generally, which has as its core the twin objects of developing young people's potential and equipping them for adult life.

Several writers have criticised the employment of what they perceive to be rhetoric on behalf of inclusive education, at the expense of empirical evidence. Thus, with a US frame of reference, Fuchs & Fuchs (1994) argued that 'the field's rhetoric has become increasingly strident and its perspective increasingly insular and dissociated from general education's concerns' (p.295). They felt that radical proponents of full inclusion, such as Skrtic et al. (1996) and Lipsky & Gartner (1996, 1999) want nothing less than the elimination of special education and its continuum of placements. In a similar vein, other US writers asserted, like Kavale & Mostert (2003), that the ideology of full inclusion has influenced policy and practice disproportionately to its claims of efficacy, with its proponents often rejecting empirical evidence in favour of the postmodern. Likewise, Sasso (2001) and Kauffman (1999) have presented swingeing attacks on what they perceive as postmodern and cultural relativist doctrines in special education in general and inclusive education in particular. Kauffman (1999) went on to question the validity of some assumptions made by 'full inclusionists', suggesting they have 'lost their heads about place, about the spaces occupied by people with disabilities' (p.246) and that physical access does not necessarily imply instructional access. At the very least, these writers urge caution in the implementation of full inclusion. Preferably, as Kavale & Mostert (2003) argued, empirical evidence

should be the cornerstone of deciding where students with special needs should be served. Or, as Sasso (2001) suggested, rather than treating inclusion as an outcome measure, it would be more logical and helpful to view it as a treatment variable.

Other criticisms have been advanced. These include the challenge of Fuchs & Fuchs (1994) to the view that the mainstream can incorporate students with disabilities when it has so many difficulties in accommodating existing student diversity. From an English perspective, Norwich (2002) adopted a similar, albeit somewhat less critical, position, arguing that there is properly a duality about the field of educating SWSEN. While the field should have integral connections to general education, its distinctiveness should also be recognised. This relationship, he argued, is best conceptualised as a 'connective specialisation', a term which refers to an interdependence of different specialisms and a sharing of a relationship to the whole. Norwich felt that his position stood somewhere between both the 'separatist' and the 'radical or full inclusion' positions. Hall (2002) has presented a more radical view, arguing that proponents of inclusion overlook the value of the 'disability culture' in fostering opportunities for students with disabilities to associate with and learn alongside others who share similar identities and life experiences. She concluded by suggesting that changes to the existing special education system, rather than a movement to full inclusion, would be more effective in supporting the disability culture.

For a recent critique of inclusive education, see Farrell (2010).

11.7 Summary

1. *Inclusive education is one of the most dominant issues in the education of SWSEN.*
2. *It is not unproblematic, both conceptually and practically.*
3. *A commonly accepted definition of inclusive education is: SWSEN having full membership in age-appropriate classes in their neighbourhood schools, with appropriate supplementary aids and support services.*
4. *In recent years, the concept of inclusive education has been broadened to encompass not only students with disabilities, but also all students who may be disadvantaged.*
5. *Advocacy for inclusive education revolves around three main arguments:*
   a inclusive education is a basic human right;

> *b in designing educational programmes for students with disabilities, the focus must shift from the individual's impairments to the social context, a key feature of which should be a unitary education system dedicated to providing quality education for all students; and*
>
> *c since there is no clear demarcation between the characteristics of students with and without disabilities, and there is no support for the contention that specific categories of students learn differently, separate provisions for such students cannot be justified.*

6. *The characterisation, purpose and form of inclusive education reflect the relationships among the social, political, economic, cultural and historical contexts that are present at any one time in a particular country and/or local authority.*

7. *While many countries seem committed to inclusive education in their rhetoric, and even in their legislation and policies, practices often fall short.*

8. *The United Nations and its agency, UNESCO, have played, and are playing, a significant role in promoting inclusive education.*

9. *Inclusive education goes far beyond the physical placement of children with disabilities in general classrooms, but requires nothing less than transforming regular education by promoting school/classroom cultures, structures and practices that accommodate to diversity.*

10. *The evidence for inclusive education is mixed but generally positive, the majority of studies reporting either positive effects or no differences for inclusion, compared with more segregated provisions.*

11. *In general, the presence of SWSEN in regular classrooms does not have a negative impact on the achievement of other students.*

12. *Criticisms of inclusive education have focused on what some writers consider to be an emphasis on ideology at the expense of empirical evidence and challenges to the view that the mainstream can incorporate students with disabilities when it has so many difficulties in accommodating existing student diversity.*

CHAPTER TWELVE

NON-INCLUSIVE EDUCATIONAL SETTINGS

Obviously, the reciprocal of inclusive education, which was addressed in the previous chapter, is *non*-inclusive education. Therefore, many of the issues that were traversed in that chapter have relevance for the present one. In particular, the evidence that related to student outcomes in inclusive education was usually compared with outcomes in some form of non-inclusive settings, such as special schools or units.

In this chapter, the focus will be on the following non-inclusive educational approaches: special schools, special classes/units, streaming, setting, within-class ability grouping, and individual instruction, some of which are used in combination.

12.1 The 'Where to Learn' Dilemma

As Shaddock et al. (2009) pointed out, debates about what constitutes an appropriate setting for SWSEN have had a long and turbulent history, dating back at least to the seminal article of Dunn (1968). These debates illustrate what Norwich (2008) referred to as the 'where to learn' dilemma. As indicated in Chapter Eleven, the value of various placements, from segregation to total inclusion, has been interrogated on ideological, philosophical and empirical grounds. For example, strong supporters of special education (and, by inference, non-inclusive settings), Kauffman and Hallahan (2005) made the following case:

> Since its inception, special education has been conceptualised as special instruction. But those who invented special education recognized that special instruction sometimes requires a special place, simply because no teacher is capable of offering all kinds of instruction in the same place and at the same time and that some students need to be taught things that others don't need. So, as has been recognised all along, the specialized places in which special education sometimes occurs are necessary for special instruction, especially if it is to be done well. There is no magic in any place, either the regular classroom or a special class. Place, by itself, does not represent good special education. Special education is neither good nor bad because of *where* it is offered. The *instruction* is what matters and what makes special education (p.63).

12.2 Special Schools and Special Classes

Special schools are normally considered to be schools that cater exclusively for SWSEN with severe learning difficulties, physical disabilities, sensory disabilities, behavioural problems or multiple disabilities. Students attending such schools generally do not

attend any classes in mainstream schools. They are usually specifically designed, staffed and resourced to provide the appropriate special education and related services for SWSEN. Qualifiers to all of the foregoing were used deliberately for, as we shall see, the character of special schools is undergoing considerable changes in many parts of the world. Special classes/units (sometimes referred to as 'self-contained classrooms' in the US) are normally considered to be separate rooms dedicated solely to the education of SWSEN within a larger school. Such classrooms are typically staffed by specially trained teachers who provide individualised or group instruction to students with a particular disability.

Firstly, let us consider some of the statistics on special school and special class/unit placements. The OECD (2005) has presented a comprehensive set of data on educational provisions for SWSEN in 31 countries for around 1999-2003. These are shown in Table 12.1. Several points should be mentioned:

a   The data related to different age groups, as the compulsory starting age for school differs across countries.

b   'Segregated provisions' referred to special schools and fulltime, or almost fulltime, special classes.

c   The varying percentages of SWSEN (from a low 0.9% in Greece to a high of 15.0% in Iceland) reflected different definitions of such students. For example, in England the 3.2% of SWSEN referred only to students with statements; another 13.8% were identified less formally as having special educational needs, while Sweden did not gather data for SWSEN who were fully included.

d   The percentages of SWSEN in non-inclusive settings ranged from several countries with less than 1% (Cyprus (0.7%), Greece (0.5%), Iceland (0.9%), Italy (under 0.5%), Norway (0.5%), Portugal (0.5%) and Spain (0.4%)) to several with 4-6% (French –speaking Belgium (4.0%), Dutch-speaking Belgium (4.9%), Czech republic (5.0%) Germany (4.6%), and Switzerland (6.0%)).

e   The likely fluidity of these provisions must be noted. For example, non-inclusive placements in the Netherlands had fallen sharply compared with a few years before the period portrayed in Table 12.1 as a result of changes in legislation (see Chapter Seven, section 7.4.1). Also, there is some evidence that the Swedish figure might have under-represented the later situation of a rising number of SWSEN attending special schools (Emanuelsson et al., 2005).

Table 12.1: Provisions for SWSEN (OECD data)

A	B	C	D	E
Austria	848,126	3.2%	1.6%	2000/2001
Belgium (DE)	9,427	2.7%	2.3%	2000/2001
Belgium (F)	680,360	4.0%	4.0%	2000/2001
Belgium (NL)	822,666	5.0%	4.9%	2000/2001
Cyprus	N/A	5.6%	0.7%	2000/2001
Czech Repub	1,146,607	9.8%	5.0%	2000/2001
Denmark	670,000	11.9%	1.5%	2000/2001
England	9,994,159	3.2%	1.1%	1999/2000
Estonia	205,367	12.5%	3.4%	2000/2001
Finland	583,945	17.8%	3.7%	1999
France	9,709,000	3.1%	2.6%	1999/2000/2001
Germany	9,159,068	5.3%	4.6%	2000/2001
Greece	1,439,411	0.9%	< 0.5%	1999/2000
Hungary	1,191,750	4.1%	3.7%	1999/2000
Iceland	42,320	15.0%	0.9%	2000/2001
Ireland	575,559	4.2%	1.2%	1999/2000
Italy	8,867,824	1.5%	< 0.5%	2001
Latvia	294,607	3.7%	3.6%	2000/2001
Liechtenstein	3,813	2.3%	1.8%	2001/2002
Lithuania	583,858	9,4%	1.1%	2001/2002
Luxembourg	57,295	2.6%	1.0%	2001/2002
Netherlands	2,200,000	2.1%	1.8%	1999/2000/2001
Norway	601,826	5.6%	0.5%	2001
Poland	4,410,516	3.5%	2.0%	2000/2001
Portugal	1,365,830	5.8%	< 0.5%	2000/2001
Slovakia	762,111	4.0%	3.4%	2001/2002
Slovenia	189,342	4.7%	(:)	2000
Spain	4,541,489	3.7%	0.4%	1999/2000
Sweden	1,062,735	2.0%	1.3%	2001
Switzerland	807,101	6.0%	6.0%	1999/2000
USA	54,603,324	11.5%	3.0%	2003

Key
A Country
B Number of compulsory school-aged pupils
C Percentage of SWSEN
D Percentage of students in segregated provision
E Year of reference

As noted by Riddell et al. (2006), countries differed in their placement of SWSEN, according to the three-way classification described in Chapter Three, section 3.1 of the present review. Overall, for reporting countries in another set of OECD data, they observed the following:

- Category A (disabilities): there was considerable variation across countries,

between a preference for regular classes (Canada (New Brunswick)) to a preference for special schools (Belgium (Flemish Community)). Most countries had a mix of the three types of placements (e.g., US, Turkey, France, Slovak Republic, Japan, Hungary, Czech Republic and Korea).

• Category B (difficulties): there was a considerable variation across countries, between a preference for regular classes (Canada (New Brunswick) to a preference for special schools (Belgium (French Community).

• Category C (disadvantages): there was a definite preference for regular classes in all countries.

When one drills down into country statistics, further interesting patterns emerge. For example, in England, there is clear evidence that not only are fewer students being educated in special schools (1.1% in 2003, compared with 1.5% in 1983, according to the Pupil Level Annual Schools Census in 2003), but the population of special schools is undergoing change. Recent data from that country shows a gradual increase in the number and percentages of SWSEN attending special schools as having behavioural, emotional and social difficulties (BESD) and autistic spectrum disorder (ASD), as can be seen in Table 12.2. This table shows that the two categories combined constituted 30.9% of the special school population in 2008, compared with 25.0% in 2005, with the greatest increase being recorded for students with ASD (from 11.1% to 16.0%).

These data reflect the rapid increase in the number of young people receiving a diagnosis of ASD and BESD in all jurisdictions of the UK as documented by Lloyd (2003) and Pirrie et al. (2006).

Table 12.2: Special schools and number and percentage of SWSEN by type of need

Year	Type of need				
	BESD		**ASD**		**BESD/ASD**
	N=	%	N=	%	Total %
2008	13,240	14.9	14,200	16.0	30.9
2007	13,160	14.9	12,550	14.2	29.1
2006	12,740	14.4	11,260	12.7	27.1
2005	12,470	13.9	9,900	11.1	25.0

Source: http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000793/index.shtml

Another example of an analysis of the population of SWSEN in non-inclusive settings is embedded in US data for 1995, which shows the distribution of students by the number of their disabilities. This information is outlined in Table 12.3.

Table 12.3: Number and percentage of students receiving special education and related services in various educational environments, by number of disabilities in the US

Number of disabilities	Regular classroom setting	Resource room	Separate class	More than one of these locations	Total
One	393,705	510,734	289,744	212,235	1,406,418
Percent	28.0	36.3	20.6	15.1	100.0
Two or more	147,774	118,030	188,118	207,602	661,524
Percent	22.3	17.8	28.4	31.4	99.9
Total	541,479	628,764	477,862	419,837	2,067,942
Percent	26.2	30.4	23.1	20.3	100.0

Source: 22nd Annual Report to Congress (U.S. Department of Education, 2000), which acknowledges the 1995 National Health Interview Survey

Note: Special day schools, special residential schools, homes, hospitals or institutions, were excluded due to small sample sizes.

The Department of Education drew attention to the following (a) a larger percentage of children with co-occurring disabilities than of students with one disability received their educational services in a separate classroom located in a regular school (for either all or part of the day) (b) students with only one disability received their educational services primarily in a resource room located in a regular school, and (c) compared to students with only one disability, a greater proportion of those with two or more co-occurring disabilities received services in more than one of the specified locations (31% compared to 15%).

Another interesting pattern emerged in an analysis of the influence of population density on the percentage of students being educated in non-inclusive settings, carried out in Europe by Meijer et al. (2003). They found a high correlation between these two variables (0,60, N=15 countries). In other words, 'about 36% of the variance of the percentage of segregated children is explained by population density' (p.80). The authors explained this finding in terms of the disadvantages of special school placements in countries with low population density: greater travel distances, negative social consequences as children are taken out of their social environments, and the higher costs incurred.

12.3 New Roles for Special Schools

In their recent review of special education in the ACT, Shaddock et al. (2009) noted that special schools accounted for 0.9% of students in public schools or 0.5% of the total government and non-government enrolments. They went on to propose new roles for some special schools, and different models for meeting the needs of students who currently attend them. Their rationale was to '(a) capitalise on the expertise and resources in these facilities; (b) extend the schools' connections with their communities and surrounding schools; (c) reduce travel for students with disabilities; and (d) give students the opportunity to receive an appropriate education (including school friendship opportunities) in their own neighbourhood' (p.17).

Shaddock et al. presented quite a lengthy review of possible new roles for special schools, making the following points:

- In the UK, Warnock (2005) encouraged special schools to become 'specialist schools', offering services to a broader section of the school population.
- The NSW Public Education Inquiry (2002) encouraged special schools to form linkages with regular schools, suggesting that teachers in special schools could accept roles as co-ordinators to assist regular schools with inclusion, sharing resources and their expertise with teachers and assistants and providing outreach services.
- Innovative practices documented by Farrell (2008) and by Gibb (2007) included suggestions that 'exemplary special schools' could share best practice in:
    o teaching multi-age and diverse classes,
    o mentoring and working collaboratively with regular schools,
    o training teachers and assistants how to differentiate work,
    o teaching specific skills to students individually and in groups,
    o developing individual learning and behavioural programmes,
    o providing outreach services to support the integration, transition or the enrolment of students with disabilities through information on the student or the impact of the disability on the student's capacity to learn,
    o developing individual programmes for students,
    o assessing students for assistive technology,
    o screening the speech and language of students,
    o establishing new special units in regular schools,
    o organising parent information sessions, IEP meetings and visits from professionals to support their mainstream colleagues,
    o offering specialist college-level vocational courses on car repairs, hospitality, building, sport and gardening to students and adults after school hours
    o offering short-term placements to students to develop an effective behaviour management programme, with ongoing support when the student returns to the regular school.

In a similar vein, an earlier report from the European Agency for Development in Special Needs Education (2003) noted a trend in European countries in which special

schools and institutes were being transformed into resource centres, with such functions as (a) training teachers and other professionals, (b) developing and disseminating materials and methods (c) supporting mainstream schools and parents, (d) providing short term or part-time help for individual students, and (e) supporting students to enter the labour market. (See Chapter Fourteen, section 14.1 for more details on eight European countries in which teachers from special schools are utilised to support regular class teachers.)

In England, the 1997 Green Paper, *Excellence for All Children*, signalled the government's commitment to inclusive education and the need to rethink the role of special schools within that context. The subsequent document, *Every Child Matters* (Department for Education and Skills, 2003) envisaged special schools as 'providing education for children with the most severe/and complex needs and sharing their specialist skills and knowledge to support inclusion in mainstream schools' (p.26). They would pursue the latter role through regional centres of expertise to be developed in association with local authority support services. This could be achieved by setting up 'federation, cluster and twinning arrangements with their mainstream counterparts' (p.35). According to Farrell (2008), a schools' building programme scheduled for 2016-2021 will enable secondary schools to have specialist facilities and schools contained within or adjacent to them, which will facilitate relationships between special and regular schools. Already, educational authorities have established a specialist schools programme involving more than 50 special schools. Each school specialises in one area: cognition and learning; communication and interaction; physical and sensory; or behavioural, emotional and social difficulties and has been allocated the necessary time, funding and resources to share their expertise and resources with other schools, agencies, services and the community (Farrell, 2008). However, with the recent change of government in the UK, it will be interesting to see how special schools fare in the future. Some indication of what might occur can be found in a recent Conservative Party commissioned report (Balchin, 2007), which included the comment that 'The saddest and most serious result of the present Government's Inclusion policy has been the closure in the last decade of special schools and the concomitant destruction of special school places' (chapter Six). The report went on to 'demand not just a moratorium on the closure of special schools, but also an active exploration of how we might recreate the number of places that have been destroyed' (ibid.).

In Sweden, too, special schools are being transformed. In 2001, all special schools, except for those providing sign language education, were re-designated as special needs resource centres. These were being developed to support inclusion in mainstream classes. A specialist teacher working as a member of the mainstream school staff mainly provides support. Municipalities are responsible for ensuring that necessary expertise is available and may request support from the Swedish Institute for Special Needs Education (European Association for Development in Special Needs Education, 2003).

When it emerged from the apartheid era, South Africa was determined to create special needs education as a non-racial and integrated component of its education system. In a 2001 White Paper (Department of Education, 2001, 1:14), several findings of commissions on special needs education were reported. These included: policies aimed, *inter alia*, at bringing about qualitative improvements in special schools and their phased conversion to resource centres and the establishment of district-based support teams (Department of Education, 2001).

12.4 Research into Non-Inclusive Settings

As mentioned in the introduction to this chapter, the evidence that related to student outcomes in inclusive education was usually compared with outcomes in some form of non-inclusive settings, such as special schools or units. This won't be repeated here, apart from reiterating the conclusion that 'the evidence for inclusive education is mixed but generally positive, the majority of studies reporting either positive effects or no differences for inclusion, compared with more segregated provisions'.

Even so, some writers continue to argue for special units and classes for students with particular disabilities, for example, students with learning disabilities, those with ASD and students with profound sensory impairment. Some research support can be found for this case in Swanson & Hoskyn's (1998) report on 180 interventions with students with learning disabilities that found a slight benefit for some students in 'pull-out programs'. However, the researchers explained the benefits in terms of the quality of the instruction rather than where it was provided.

Shaddock et al. (2009) have summarised other arguments in favour of non-inclusive settings. Thus, they drew attention to writers who argue that regular classrooms may not be set up to assist students with ASD, many of whom need

specialised curricula and teaching approaches (Mesibov & Shea, 1996; Sainsbury 2000). They also noted that despite the lack of evidence for the beneficial effects of non-inclusive placements on learning, many Australian parents continue to want more special units in primary and secondary schools, not fewer (Nitschke & McColl, 2001) and that reviews have shown that parents and teachers strongly support a continuum of services (McRae, 1996; NSW Public Education Inquiry, 2002; Commonwealth of Australia, 2002; Nitschke & McColl, 2001). Again according to Shadock et al., parents want the option to move their child to a special education setting if the regular class proves to be problematic, and the inclusion of some students has certainly proved to be problematic for some sectors (Department of Education and Training Western Australia, 2001). Parents and teachers have reported bullying, peer rejection, inappropriate curricula, failure/inability to differentiate, lack of teacher time, inadequate teacher training, limited funding and resources, students with disabilities being taught by assistants - especially in secondary schools (Commonwealth of Australia, 2002). Conversely, some parents speak in appreciation of special schools, citing such advantages as positive expectations, ease of administering medicines, fully accessible physical environments, better behaviour management, and access to specialists (Department for Education and Skills, 2003). As Warnock (2005) pointed out, too, students with disabilities may be excluded socially and academically in a regular school and so special schools may be the salvation for many students. Indeed she went so far as to describe inclusion as 'possibly the most disastrous legacy of the 1978 Report' (p.20), claiming that 'There is increasing evidence that the ideal of inclusion, if this means that all but those with the most severe disabilities will be in mainstream schools, is not working' (p.32). And, finally, Shaddock et al. noted that another rationale for the continued existence of special schools or classes may be, as suggested by Sorrells et al. (2004), that separate classes for 'difficult to teach' children may function as a safety valve for *schools* rather than as a preferred place of learning for *students*. These authors further suggested that specialised programmes may simply be part of the repertoire that public schools have for dealing with problems.

Thus, one has to look beyond the empirical evidence of educational efficacy to other more complex motivations for justifying the retention of non-inclusive educational settings.

12.5 Ability Grouping

There are two aspects to placing learners in ability groups: (a) ability grouping *between* classes, sometimes referred to as 'tracking' or 'streaming' or 'setting', and (b) ability grouping *within* classes. The relevance of such grouping for SWSEN is that they are highly likely to be placed in 'lower streams or groups, thus constituting a form of de facto segregation.

According to Benn & Chitty (1996), most secondary schools in the UK employ some form of ability grouping, usually setting, for at least some subjects, while in the US, tracking in various forms has been among the predominant organising practices in public schools for the last century (Rubin, 2008).

In a recent review, Duckworth et al. (2009) concluded that 'much of the available evidence suggests that the effects of ability-grouping on pupil attainment is limited and no firm conclusions can be drawn from its use' (p.30). This conclusion reflects the results of a meta-analysis carried out by Lipsey & Wilson (1993), who reported on the impact on learners' achievement of within-class ability grouping and between-class ability grouping. Their results showed a negligible overall effect size of less than 0.10, with a range of -0.03 to 0.22. A similar result was reported by Hattie (2009), whose meta-analysis yielded an effect size of 0.21 for ability grouping's impact on student achievement. In other words, these two reviews showed that ability grouping had little or no significant impact on student achievement. Unfortunately, in neither of these reviews were separate results reported for SWSEN.

A recent Dutch review of the literature, however, did differentiate between high- and low-achieving learners (Houtveen & Van de Grift, 2001), It concluded that although the mean results of studies showed higher achievement in ability groups than in mixed-ability groups, this was mainly due to the fact that high-achieving students benefitted more than low-achieving students. The authors cited several studies where low-achieving learners performed more poorly in between-class ability groups than in mixed-ability groups (e.g., Gamoran, 1992; Hallam & Touttounji, 1996).

There is evidence, too, that ability-grouping practices may widen gaps in achievement, with students in high-ability streams doing better than in mixed-ability groups, while placements within low-ability groups has a negative impact on student attitudes towards school and their motivation and achievement (Duckworth et al. 2009;

Feinstein & Symons, 1999, Robertson & Symons, 2003). Also of relevance is an early UK study by Fogelman et al. (1978), which found that in comprehensive schools with mixed ability grouping practices, a higher proportion of lower attaining students were entered for national examinations.

Ability grouping is not an all or nothing idea, for it is possible to have ability groups for some subjects and mixed ability groups for others. This arrangement is sometimes referred to as 'setting'.

Another drawback of ability grouping, as indicated by Duckworth et al. (2007), is that although the importance of students being able to move sets (in the UK) has been stressed, in practice there is very little movement, even when teachers become aware that students are wrongly allocated. Another interesting finding reported by Duckworth et al. was that among secondary school students studying mathematics in ability-grouped sets, 83% either wanted to return to mixed ability sets or to change their set. Their own research with over 8,000 students in 45 secondary schools also showed that a high proportion of them were unhappy with their set or class placement. For example, in mathematics, where there was the highest level of ability grouping, 38% were unhappy with their set or class placement; unsurprisingly, more students in the bottom set (62%) wished to change their set. Significantly, their reasons for wanting to change were more related to learning than status. For many of them they felt there was a mismatch between the work set and what they perceived was appropriate.

A UK study investigated the effects of setting in English, mathematics and science on the academic self-concepts of secondary school learners (Ireson et al., 2001). The results showed that students' self-concepts were higher in schools with moderate levels of setting. It was also found that the degree of setting in mathematics and science had no effect on academic self-concepts, but setting in English tended to lower the self-concepts of the higher attaining learners and raise the self-concepts of lower attaining learners.

In summarising their interpretation of the research, Houtveen & Van de Grift (2001), put forward a range of arguments as to why ability grouping is detrimental to low-achieving learners:

- Being assigned to low-ability groups communicates low expectations to students, which might be self-fulfilling.
- Because ability groups often parallel social class and ethnic groupings, they may increase divisions along class and ethnic lines.

- Between-class ability grouping reduces students' opportunities to move between groups.
- Low-achieving students tend to receive less instruction when placed in ability groups than when placed in mixed ability groups.
- Ability groups composed of low-achieving students do not provide a stimulating learning environment and lack positive role models.

In a similar vein, MacIver et al. (1995) pointed out that in US research there is evidence that 'low-track' classes are much more likely to receive course content that focuses on below-grade level knowledge and skills than high-track classes.

In reporting the results of two meta-analyses that examined the impact of ability grouping and mixed ability grouping on student learning at the elementary and secondary school levels, Slavin (1996) drew the following conclusions:

- use mixed ability groups for most content areas;

* encourage learners' identification with mixed ability groups in order to promote acceptance of diversity; and

* use ability-grouping only when it will increase the efficacy of instruction or provide more time for instruction on a specific skill.

Due to the disadvantages of streaming (or tracking) outlined above, many schools in the US are implementing what is referred to as 'detracking', which involves students being deliberately positioned into classes of mixed ability (Rubin, 2008; Argys & Rees, 1996).

Finally, the inconsequential impact of separate settings on the educational outcomes of most students, together with the negative effects on SWSEN, have refocused researchers' attention on the variables that *do* make a difference, many of which are summarised in Chapter Ten. Once again, as Shaddock et al. (2009) emphasised, 'the research refocuses attention on one critical variable – *how teachers teach in their own classrooms'* (p.86, emphasis in original).

12.6 Individual Instruction

As noted by Shaddock et al. (2009), a research synthesis by the Best Evidence Encyclopaedia (BEE) of approaches for helping struggling readers found that classroom instructional approaches produced effect sizes of over 0.5, while one-to-one tutoring by teachers, paraprofessionals and by volunteers produced effect sizes of 0.38, 0.24 and

0.16, respectively. Similarly, Hattie (2009) concluded that, 'The evidence supporting individualised instruction…is not so supportive' (p.198). These finding seem counter intuitive: surely individual instruction should be better! Obviously, the *social context* of the classroom is an important contributor to learning and the need for resource-intensive one-to-one instruction should be reconsidered (Shaddock et al., 2009).

12.7 A Final Word

After their thorough review of non-inclusive educational settings, Shaddock et al. 2009) arrived at a conclusion that is supported by the present writer:

> Leading practice does not strongly support the further development of separate placements for students with a disability, in general. As the logic supporting separate provision – preparing students to take their place in society by educating them separately - is somewhat elusive, and as separate placements are not strongly supported by empirical research, the case for such placements should always be the one to be argued (p.87).

Ultimately, to quote Shaddock et al. (2009) again:

> …the development and continuation of such [separate] programs should be based on the extent to which they improve student learning outcomes in ways valued by the students, parents and carers, and teachers. Data and evidence, not conviction and ideology, are the key considerations (p.16).

The same criteria should, of course, apply to inclusive educational programmes, indeed to all teaching strategies, as argued throughout this review.

12.7 Summary

1. *The evidence related to student outcomes in inclusive education is usually compared with outcomes in some form of non-inclusive settings.*

2. *Non-inclusive educational settings range from special schools, through special classes/units and various forms of ability grouping, to individual instruction.*

3. *The 'where to learn debate' has been interrogated on ideological, philosophical and empirical grounds.*

4. *According to OECD data, the percentages of SWSEN in non-inclusive settings range from several countries with less than 1% to several with 4-6%.*

5. *There is evidence that the population of special schools is undergoing change. For example, recent data from England shows a gradual increase in the number and percentages of SWSEN attending special schools as having behavioural, emotional and social difficulties and autistic spectrum disorders.*

6. *Many countries are developing new roles for special schools by converting them into resource centres with a range of functions replacing direct, full-time teaching of SWSEN.*

7. *Despite the lack of evidence for the beneficial effects of non-inclusive placements on learning, many parents and teachers strongly support a continuum of services, including special schools and units.*

8. *Research into ability grouping shows that, overall, it has little or no significant impact on student achievement, although high-achieving students appear to benefit more than low-achieving students, who suffer from disadvantages in being placed in low ability groups.*

9. *Paradoxically, individual instruction has a low impact on student achievement, suggesting that the social context of the classroom is an important contributor to learning.*

10. *A fitting conclusion would be that the continuation of non-inclusive educational settings should be based on the extent to which they improve student learning outcomes in ways valued by the students, parents, and teachers. Data and evidence, not conviction and ideology, should be the key considerations.*

CHAPTER THIRTEEN

TEACHER EDUCATION[26]

Many of the topics in this review have implications for the design and delivery of teacher education programmes so as to take account of the challenges of educating SWSEN. In this chapter, after outlining some of the main issues in teacher education, a series of country descriptions will be provided.

13.1 Issues in Teacher Education

Those responsible for the design and implementation of training programmes for professionals involved in the education of SWSEN have to give consideration to a range of factors, chief of which are the following:

- *The nature of initial teacher education (ITE) for general education teachers and special education teachers.* Issues here include: (a) should there be categorical or a non-categorical programmes for teachers of SWSEN? (b) what relationship should there be between ITE programmes for special education teachers and general education teachers? (c) should special education teachers be trained as general education teachers before being trained as special education teachers? (d) what should be the content of such training courses? (e) who should set expectations for such training?

- *Specialist qualifications for professionals working in an advisory or consultancy capacity.* Here consideration has to be given to such issues as (a) what roles are the various professionals expected to perform? (b) what prerequisite professional experience should they have before receiving their training? (c) at what level should such training be pitched? (d) what should be the content of such training courses?

- *The training of paraprofessionals.* Issues here include: (a) what roles are these people expected to perform? (b) what prerequisite qualifications and/or experience should they have? (c) at what level should their training be pitched? (d) who should deliver their training?

- *Professional development for professionals working with SWNEN.* Issues include: (a) should there be a prescribed set of professional development expectations for the various professional groups? (b) who should be responsible for setting such

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[26] Training programmes for SENCOs (in England) and educational psychologists are covered in Chapter Thirteen.

expectations? (c) who should design and deliver such professional development, in what locations?

In the remainder of this chapter, many, but not all, of the above issues will be traversed. Space and time limitations, as well as gaps in available information, preclude a systematic comparison of various countries' approaches to the issues.

13.2 Country Descriptions

This section summarises some of the main features of teacher education programmes in nine countries: Australia, Belgium, Canada, Finland, Greece, Scotland, Sweden, England, and the United States. The latter two will be dealt with in more detail.

Australia. According to Forlin (2006), in her review of inclusive education in Australia, and citing Loreman et al. (2005), teachers have concerns about their perceived inability to cater for the needs of SWSEN when placed in regular classes. In particular, they feel they lack skills in modifying or differentiating the curriculum, providing suitable instruction, or using suitable assessment strategies. According to these authors, many of the four-year ITE courses in Australia included compulsory courses on inclusive education, but most of the post-graduate one- or two-year end-on courses did not. Of the total of 73 ITE courses reviewed, 45.5% included a compulsory element of study on an aspect of special or inclusive education, with a further 12% offering elective units.

Forlin pointed out the difficulties in obtaining consistency in ITE across Australia, with over 400 programmes in 36 universities. While some jurisdictions require registration of teachers (e.g., Queensland and NSW), others do not. In the former case, registration bodies have greater control over the content of training courses, being able to require specific units of study related to diversity. Other states rely on teacher education institutions to make their own decisions about the content of courses.

In the following, brief summaries of two states' provisions will suffice. The source for this material is http://inca.org.uk/australia-initial-special.html#7.5[27]

In Queensland, qualification as a special education teacher usually requires the completion of a pre-service teacher preparation programme, such as a Bachelor of

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[27] This source is INCA, the *International Review of Curriculum and Assessment Frameworks: Internet Archives*, a website funded by the Qualifications and Curriculum Development Agency in England and managed and updated by the International Information Unit at NFER. It is the primary source of several of the countries' provisions summarised in this chapter.

Education specialising in special educational needs, or a pre-service programme, followed by completion of a postgraduate qualification in learning support, special needs or inclusive education. All ITE programmes in Queensland address issues of inclusivity and diversity of student need. There is only one initial teacher training programme focused exclusively on special educational needs, based at Griffith University. There are, however, a number of ITE programmes that provide a specialisation/major in special needs/inclusive education. In addition, there are a number of postgraduate programmes for established teachers. The Queensland Board of Teacher Registration Professional Standards for pre-service teachers include requirements that graduates will exhibit such as skills (a) creating supportive and intellectually challenging learning environments to engage all learners, (b) drawing upon pedagogical, curriculum and assessment knowledge and skills to engage all learners, and (c) using knowledge about learners, and (d) learning to create meaningful learning opportunities that lead to desired learning outcomes for individuals and groups.

In Victoria, to become a special education teacher it is usually necessary to complete a postgraduate diploma or degree in special education, after completing an initial degree in teaching. The Victorian Department of Education and Training also requires special education graduates to have completed the equivalent of at least 45 days of appropriate practical experience, including a minimum of 30 days of supervised special education school experience and professional practice in a variety of settings. In addition, the Department runs teacher professional development programmes, which are specially designed for practising teachers. The duration of one such professional development course is seven hours per day over three days. The course provides participants with the skills and knowledge to enable them to write and implement an IEP for students with special needs. Topics covered include: (a) eligibility criteria for the Victorian Disabilities and Impairments Programme's aims and responsibilities, (b) the impact of specific disabilities and impairments on learning, (c) writing long, intermediate and short term goals, (d) prioritising what needs to be taught, (e) assessment and evaluation of student progress, (f) teaching and learning strategies, and (g) developing behaviour management plans.

Belgium. Preparation in ITE in Belgium includes general information and basic knowledge about SWSEN, with some practical training in the final year. Training is

very practical and includes knowledge about teaching techniques, curricular adaptations, knowledge about particular disabilities (sensory impairments, intellectual disabilities, etc.) and specific techniques such as sign language (Riddell et al., 2006).

Canada. Since education comes under the jurisdiction of Provincial governments, a description of two provincial arrangements for teacher education relating to special education will be sufficient to give some idea about Canadian arrangements. The source for this material is http://inca.org.uk/canada-initial-special.html37.5.

In British Columbia, to teach in the public school system or in a government agency, two qualifications are usually required. These are an undergraduate degree in education or in one of the social sciences, with a specialisation in working with people who are disabled, and a teaching certificate. ITE focused on special education is provided through a number of post-secondary institutions, such as the University of Victoria, which offers a Bachelor's degree in education with a focus on special education, and UBC, which provides courses in special education within a undergraduate degree in education. The Ministry of Education works with professional organisations to set standards for specialists working in the education system, such as speech language therapists, physiotherapists, occupational therapists, sign language interpreters and orientation and mobility instructors.

In addition, the Special Education Branch of the Ministry of Education has responsibilities to foster the professional development of teachers, administrators, and support staff related to meeting the educational needs of such students. School districts are expected to provide in-service training to ensure that all staff can develop the skills and understanding needed to work in an inclusive environment and that staff remain current in their knowledge and understanding of special education. The Ministry of Education supports school districts with in-service training through the provision of funds specifically for staff development. Teachers and other professionals are also expected to maintain and develop their knowledge.

In Alberta, special needs teachers generally have a Bachelor of Education degree with a specialisation related to special education. In addition, institutions such as the University of Alberta in Edmonton offer a one-year Diploma in Inclusive Education programme for teachers interested in the area of special educational needs. This

programme contains such core subjects as: assessment and instruction of exceptional learners, behavioural management of severely disruptive children, consultation and collaboration in special education, and advanced assessment and instruction of exceptional learners.

Finland. According to Hausstatter & Takala (2008), universities offer a one-year special teacher training programme after a master's degree (usually a Masters in Education) The core of the special education qualification includes consideration of (a) difficulties in learning to read, write and do mathematics, (b) socio-emotional and behavioural challenges, (c) communication challenges, (d) professional cooperation in the design of IEPs, and (e) cooperation with parents. However, inclusion is not prominently represented, but is embedded in many courses.

Greece. According to Riddell et al. (2006), in Greece, there are no central standards or regulations for ITE, each university determining its own programme. However, ITE usually includes some input on SWSEN or learning difficulties and visits to special schools. Five years of teaching experience is needed before teachers can apply to do specialist training in SWSEN. This is a thorough two-year programme and is aimed at primary teachers. Secondary teachers can do a forty-hour course that provides them with general information about SWSEN; some secondary teachers also have a postgraduate degree in SWSEN. The European Agency for Development in Special Needs Education (2001) indicated that there is a shortage of properly trained special needs teachers affecting the support available to mainstream teachers working in inclusive classrooms. Ordinary teachers, it was reported, have great difficulty in implementing the IEP, with the problem being particularly acute in rural areas.

Scotland. As with several of the countries reviewed, he primary source of information here is INCA (http://inca.org.uk/scotland-initial-special.html) In Scotland it is not possible to train specifically as a special needs teacher during ITE. Specialisation in this area is gained through continuing professional development courses. However, some ITE programmes do offer courses in SWSEN. All teachers working with children with SWSEN must be qualified initially to teach in mainstream primary or secondary schools and registered with the General Teaching Council Scotland as primary or secondary teachers. Further specialist qualifications can be gained following completion of the probationary period, although teachers can be employed in teaching children with

special educational needs without these additional qualifications. However, teachers of deaf or partially deaf children in special schools or special classes are required by the Schools (Scotland) Code 195613 to be qualified teachers and to hold a special qualification to teach deaf children. Broadly similar requirements apply to teachers in special schools or special classes working with others, such as children who are blind or are mentally or physically handicapped. There is no mandatory requirement for an appropriate specialist teaching qualification where children are taught in a mainstream setting.

In-service professional development is offered in a variety of ways; nationally through Scottish Executive Education Department seminars, or courses offered by teacher training institutions, education authorities, and locally in consortia of schools or individual educational establishments. (All teachers in Scotland are required to undertake 35 hours of professional development per year, according to the General Teaching Council for Scotland.) Postgraduate courses in SWSEN are available at many faculties of education in Scottish universities. These range from a general Master's degree in Special Educational Needs to more specific specialist courses, such as a Master's degree in speech therapy.

Sweden. According to Riddell et al. (2006), in Sweden the education of SWSEN is a priority area that permeates aspects of ITE programmes. The 2001 reforms of initial teacher training strengthened the position of special education needs within mainstream training. All students receive the equivalent of half a term training in special educational needs and should also be offered the opportunity to study special educational needs as an area of specialisation. However, government policies requiring extensive knowledge of the education of SWSEN have been 'difficult to implement because of an overly full curriculum' (Emanuelsson et al., 2005, p.127). In addition, students can take further specialised options in SWSEN. In-service training is compulsory for teachers and courses available in SWSEN offer support on working with pupils with particular needs and on classroom strategies for inclusion. Sweden also has also training programmes for *begeleiders* (special needs coordinators).

Norway. In a recent article, Hausstatter & Takala (2008) compared special teacher education in Finland and Norway. They noted that in Norway some 21 university colleges and universities offered some kind of special needs teacher training, with 13 of them offering a masters-level qualification in this area. The major training in special

education is at the master's level, but these do not have a common core of content, although perspectives on inclusion are often present.

United Kingdom (England and Wales[28]). As mentioned earlier, developments here will be explored in some detail, given their particular relevance to New Zealand. Special educational needs teachers are specifically employed to work with SWSEN For example, they may work with students who are physically disabled, sensory impaired (i.e., deaf/blind), have speech and language difficulties such as dyslexia, have a mental disability such as autism, are emotionally vulnerable, have behavioural difficulties, or have a combination of these disabilities. They may also work with gifted and talented individuals.

A key aspect of their work is to identify individual needs and be responsible for creating a safe, stimulating and supportive learning environment that enables students to succeed in their learning, and it may involve the following work activities:

- teaching either individuals or small groups of pupils within or outside the class;
- preparing lessons and resources;
- marking and assessing work;
- developing and adapting conventional teaching methods to meet the individual needs of pupils;
- using special equipment and facilities, such as audio-visual materials and computers, to stimulate interest in learning;
- using specialist skills, such as teaching Braille to pupils with visual impairments or sign language and lip reading to students who have hearing impairments;
- collaborating with the classroom teacher to define appropriate activities for the pupils in relation to the curriculum;
- assessing children who have long or short-term learning difficulties and working with colleagues to identify individual pupils' special needs;
- liaising with other professionals, such as social workers, speech and language therapists, physiotherapists and educational psychologists;
- liaising closely with parents and guardians;
- organising learning outside the classroom in activities such as community visits, school outings or sporting events;
- assisting in severely disabled pupils' personal care/medical needs;
- administration, including updating and maintaining records on pupils' progress;
- attending statutory annual reviews, or other related meetings such as Looked After Child (LAC) reviews, regarding students with an SEN, which may involve reviewing statements of special educational needs;
- receiving in-service training;
- behaviour management.

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[28] Sources include:
http://ww2.prospects.ac.uk/p/types_of_job/special_education_needs_teacher_job_description.jsp
http://www.tda.gov.uk

To become a special educational needs teacher in England and Wales, Qualified Teacher Status (QTS) is required. There is a one-year statutory induction for all newly qualified teachers, which includes those who start teaching in special educational needs as their first position after qualifying.

From 2002, those awarded QTS must demonstrate that they can: (a) understand their responsibilities under the *Special Educational Needs Code of Practice*, and know how to seek advice from specialists on less common types of special educational needs, (b) differentiate their teaching to meet the needs of pupils, including those with special educational needs, and (c) identify and support pupils who experience behavioural, emotional and social difficulties. Standards for the Induction Support Programme require that those awarded qualified teacher status must: (a) understand the duties and responsibilities schools have under the Disability Discrimination Act 1995 to prevent discrimination against disabled pupils, (b) spend time with the school's Special Educational Needs Coordinator (SENCO)[29] to focus on specific and general special educational needs matters, and (c) demonstrate that they plan effectively to meet the needs of pupils in their classes with special educational needs, with or without statements.

There are additional mandatory requirements for special educational needs teachers who specialise in teaching pupils with visual, hearing or multi-sensory impairment. These qualifications are available only from specific approved institutions and can be completed full time or part time. Courses are also available for qualified teachers to teach pupils with other special educational needs. Some of these focus generally on special educational needs, while other courses are more specific, focusing on a particular learning difficulty, such as dyslexia or autism. These courses are generally part-time, lasting several months.

Further postgraduate professional development is possible. Options include certificates as well as a Diploma or Masters in Special Educational Needs. Course content and titles vary according to the type of special education or disability being covered. Courses are usually offered part-time but some full-time courses are also possible. In-service training is also available. Many local authorities provide special needs courses for teachers working in the field. There is a special educational needs element to all ITE courses.

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[29] See Chapter Fourteen for further information about SENCOs.

As well as the development of a SENCO award (see Chapter Fourrteen), the Department of Children Schools and Families has taken steps such as the following to develop workforce knowledge, skills and understanding of SWSEN (Rose, 2009):

Working with the Training and Development Agency for Schools:
- Encouraging initial teacher training providers to build on their coverage of SWSEN by offering specialist units for primary undergraduate ITE, launched in June 2008 to aid dissemination. These include a Unit entitled 'Learning and teaching for dyslexic pupils'. Similar units for secondary undergraduate courses and for post-graduate teacher training courses were rolled out in September 2009.
- Developing materials enabling subject/curriculum tutors to check their knowledge of SWSEN and disability in relation to their subject area.
- Promotion of enhanced opportunities for student teachers to gain experience of working in special schools or other specialist provision.
- Promoting the use of specialist materials for the induction of new teachers'.

Working through the National Strategies:
- Investing further in the Inclusion Development Programme, which started in 2008, to raise the knowledge, awareness and confidence of teachers and other school staff in working with children with SWSEN. Materials issued so far have focused on training on children's communication difficulties (including dyslexia), autism, with materials focused on students with behavioural, emotional and social difficulties to be issued in 2010.

Other initiatives:
- Developing Trusts to promote best practice in relation to dyslexia, communication needs and autism, in partnership with voluntary sector organisations.
- Encouraging special schools to provide outreach services to mainstream schools.

Finally, in this outline of developments of teacher education in England and Wales, the conclusions of the Department for Education and Skills (DfES) (2004) publication, *Removing barriers to achievement*, is worth describing in some detail. After noting that since every teacher should expect to teach SWSEN, they must be equipped with the skills to do so effectively. This will require action at three levels:

- Core skills for ALL teachers in ALL schools

- Specialist skills in SOME local schools

- Advanced skills for SOME teachers in ALL schools

Level I. Improving core skills – for all teachers. ITE should provide a good grounding in the core skills needed for teaching in today's diverse classrooms, including: (a) planning and teaching for inclusion and access to the curriculum, (b) behaviour management and awareness of the emotional and mental health needs of pupils, (c) assessment for learning, and (d) an understanding of where professional advice may be needed. The DfES undertook to work with (what became) the Training

and Development Agency for Schools to explore the scope for introducing practical guidance on how inclusive practice might be embedded across the ITE curriculum. It also recommended that newly qualified teachers continue to develop the skills of inclusive teaching during their induction year.

Level II. Developing advanced skills – in all schools. In order to support their colleagues in delivering improvements for children with SWSEN in the classroom, the Department wanted to develop staff with advanced skills in special educational needs (i.e., SENCOs), describing them as key members of the senior leadership team, able to influence the development of policies for whole school improvement. As well local authorities were encouraged to create a new cadre of staff with particular expertise in special educational needs and dealing with students' emotional, mental and behavioural difficulties.

Level III. Developing specialist skills – within each community of schools. In order to support the inclusion of children with increasingly complex difficulties, the Department wanted to build up the specialist expertise within each community of schools. It proposed doing this by working with higher education institutions to support the development of specialist qualifications for those wishing to specialise in special education needs in the mainstream or special sectors. It was envisaged that these qualifications would cover both the theory and practice of working with children with particular needs, such as behavioural, emotional and social difficulties or severe learning difficulties.

As well, the Department noted that it had developed induction-training materials on special educational needs for teaching assistants working in both primary and secondary schools.

United States. According to INCA (http://inca.org.uk/usa-initial-special.html) and Ackerman et al. (2002), around 700 colleges and universities in the US have ITE programmes to prepare students to become special education needs teachers. Most states require special education teachers to complete a Bachelor's Degree programme, although some will require a Master's Degree for special education licensure. Other states require licensure in general education first, then additional coursework in special education. All are designed to ensure that students meet the requirements of state licensing regulations. Colleges and universities are not only accredited by their state,

but those providing the teacher training programmes at these institutions may also choose to seek accreditation from the National Council for Accreditation of Teacher Education (NCATE). In addition, during general ITE, trainee teachers normally have the option of undertaking specific optional courses relating to special education.

Training institutions accredited by NCATE have to meet rigorous standards established by those working in the field. The Council for Exceptional Children (*CEC*), the professional organisation representing those who work with children with disabilities, has developed guidelines for special education teacher training programmes that are used by the NCATE. These require students in special education teacher training programmes to study the following areas[30]:

- Philosophical, historical and legal foundation of special education
- Characteristics of learners
- Assessment, diagnosis and evaluation
- Instructional content and practice
- Planning and managing the teaching and learning environment
- Managing student behaviour and social interaction skills
- Communication and collaborative partnerships
- Professionalism and ethical practice
- Experience with children, including a student teaching placement lasting between eight to 10 weeks.

As INCA (2010) points out, there is a great deal of variation in individual states' requirements and standards for the licensing of special needs teachers. Some require teachers of SWSEN to have a categorical licence, while some expect them to hold a non-categorical/generic licence. The holder of a latter can teach a student with any disability, while a categorical licence enables a teacher to teach children with a particular disability, such as hearing impairments or physical disabilities. Most states use a blend of both types of licence. To take one example, the state of Kentucky, requires a categorical licence. Teachers of students with special educational needs usually have an 'Exceptional Children Licence', which allows them to teach or

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[30] In its 'red book', the Council for Exceptional Children (CEC*)* sets out detailed standards for special education teachers, available online at: http://www.cec.sped.org/bk/catalog2/Red_book_5th_edition.pdf

collaborate with teachers to design and deliver programmes for children from primary to Grade 12. Their training usually includes one or more of the following specialisations: (a) learning and behaviour disorders, (b) moderate and severe disabilities, (c) hearing impaired, (d) hearing impaired with sign proficiency, (e) visually impaired, or (d) communication disorders.

Ackerman et al. (2002) noted that there is debate over categorical or non-categorical licensure, with proponents of the former arguing that each disability category is substantially different from others and that teachers should be highly specialised in that area, while proponents of the latter arguing that teachers should be prepared to teach all children and should have the expertise to address differing abilities and disabilities.

Ackerman et al. pointed to two other controversial issues in US approaches to teacher education in special education. Firstly, given the critical teacher shortage in special education, alternative licensure programmes have evolved in recent years. Thus, for example, army personnel are being trained for a second career in teaching and drastically intensified and accelerated summer programmes are replacing four-year licensure programmes. Also, some districts have been filling special education positions with teachers who have either no prior education experience or have only general education experience and providing provisional or conditional licensure to these newly hired teachers. (For a review of best practices in these 'alternative route' special education teacher preparation programmes, see Wasburn-Moses & Rosenberg, 2008). Secondly, there have been moves in higher education to merge special education teacher education programmes into the general education programmes, doing away with special education altogether. As argued by Arthaud et al. (2007), the move towards inclusive education requires greater collaboration among general education and special education teachers, and this should be reflected in teacher preparation programmes The arguments for and against this teacher education structure are similar to those for categorical versus non-categorical licensure.

Finally, in this section on US teacher education, attention should be drawn to the recommendations of the influential President's *Commission on Excellence in Special Education* (2002). In a hard-hitting criticism of existing teacher education programmes in the US, the Commission argued that 'curricula and methodologies utilised in colleges

of education are not empirically connected to improved student achievement' (p.53). As a consequence, 'the current system of pre-service and in-service education is not sufficient to produce personnel who can ensure students with disabilities achieve satisfactory outcomes' (ibid.). To correct this situation, the Commission urged colleges of education to 'move from folk wisdom, weak research and opinion on what are important characteristics of effective teachers and begin to focus on helping to strengthen the teacher competencies that have clear data for producing student gains' (ibid.). Further, 'both pre-service and professional development training must ensure that instruction in pedagogy is research-based and linked directly to student learning and achievement' (ibid.).

On the basis of these and other arguments, the Commission advanced a range of recommendations, including the following:

'Recruit and train highly qualified general and special education teachers. States and districts must devise new strategies to recruit more personnel who are highly qualified to educate students with disabilities. State licenses and endorsements for all teachers should require specific training related to meeting the needs of students with disabilities and integrating parents into special education services. States must develop collaborative, career-long professional development systems that conform to professional standards.

Create research and data-driven systems for training teachers of special education. Formal teacher training should also be based upon solid research about how students learn and what teacher characteristics are most likely to produce student achievement. State Education Agencies (SEAs) and institutions that train teachers and administrators should implement data-driven feedback systems to improve how well educators educate children with disabilities.

Institute ongoing field experiences. Post-secondary institutions and state and private organizations that train teachers should require all students to complete supervised practicum experiences in each year of their training. These practices provide them with a comprehensive view of the full range of general education, special education and inclusive settings or service delivery models for students with disabilities.

Require rigorous training in reading. States and school districts must implement more rigorous requirements for training educators in scientifically based assessment and intervention in reading. General and special education teachers must implement research-based practices that include explicit and systematic instruction in phonemic awareness, decoding, fluency, vocabulary and comprehension.

Require public reporting. Title II of the Higher Education Act should require programs for teacher education, administrative personnel to publicly report the performance of general education and special education program graduates relative to educating students with disabilities.

Increase special education and related services faculty. Institutions of higher

education should recruit and train more fully qualified professors of special education to address the shortage of special education and related services doctorate holders who are qualified to teach our nation's future educators and prepare them to achieve better results for diverse learners.

Conduct research. The Department of Education, in collaboration with other federal agencies, should conduct research to identify the critical factors in personnel preparation that improve student learning and achievement in schools. While recent research has begun to determine critical factors in instruction, more high-quality research is needed on instructional variables that improve achievement by students with disabilities' (pp.50-51).

13.3 Summary

1. *Teacher education in the field of SWSEN involves consideration of four main areas:*

   a   *The nature of initial teacher education (ITE) for general education teachers and special education teachers.*

   b   *Specialist qualifications for professionals working in an advisory or consultancy capacity.*

   c   *The training of paraprofessionals.*

   d   *Professional development for professionals working with SWNEN*

2. *There is considerable variability with respect to all of these issues between and even within countries.*

3. *Many countries are adapting their teacher education programmes to take account of the recent emphasis on inclusive education.*

4. *Many jurisdictions are prescribing in considerable detail what is expected of various training programmes.*

5. *In England and Wales, a three-level model of teacher education is being implemented. This involves developing the following:*

   a   *Core skills for ALL teachers in ALL schools*

   b   *Specialist skills in SOME local schools*

   c   *Advanced skills for SOME teachers in ALL schools*

6. *In the US, there is debate over categorical vs non-categorical licensure and the extent to which special and general teacher education should and can be merged.*

7. *In the US, the 2002 President's Commission was highly critical of colleges of education for not ensuring that their curricula and methodologies were*

empirically connected to improving student achievement and, accordingly, recommended sweeping reforms in teacher education.

CHAPTER FOURTEEN
COLLABORATION

Kotahi te kohao	There is but one eye
O te ngira	of the needle
E Kahuna ai	Through which passes
Te miro ma	The white thread
Te Miro pango	The black thread
Te miro Whero	The red thread

Educating SWSEN requires collaboration among many people – several professionals and parents in particular. Indeed, there are few areas of education that call upon so much collaboration and teamwork. This is particularly true in inclusive education where, ideally, general classroom teachers may work with various combinations of specialist teachers; special needs advisers; educational psychologists; therapists and other specialists; community agencies such as welfare services, police and advocacy groups; paraprofessionals; technology consultants; and, of course, parents (Rainforth & England, 1997). Indeed, there are many threads to pass through the eye of the needle. To put it more technically, collaboration can be defined as a process that enables groups of people with diverse expertise to combine their resources to generate solutions to problems over a period of time (Idol et al., 1994).

In this chapter, eight topics will be addressed: (1) different forms of educational support, (2) the importance of collaboration, (3) principles of collaboration, (4) co-teaching, (5) paraprofessionals, (6) special needs advisers, (7) educational psychologists, and (8) service integration. The role of parents will be discussed in the next chapter.

14.1 Different Forms of Educational Support to Teachers

Collaborative approaches to educating SWSEN are increasingly becoming embedded in education systems around the world. This is well illustrated in the following outline of the sources of support for regular class teachers in their work with SWSEN in 23 European countries (European Agency for Development in Special Needs Education, 2003). Several interesting patterns of support emerge: (a) 17 of the countries utilised outside agencies, including psychological services (e.g., Austria Belgium, Czech Republic, France, Germany, and Norway), (b) 16 referred to specialist teachers within schools (e.g., Cyprus, Finland, Iceland, Portugal, and Sweden), and (c) 8 utilised teachers from special schools to support their regular class teachers (e.g., Austria,

Belgium, Germany, Greece, Leichtenstein, and Switzerland). Nearly two-thirds (14) utilised two or more sources of educational support.

Austria. Support was mainly provided by specialist teachers from special schools or from visiting services. They supported both the class teacher and the pupil. Classroom and specialist teachers worked as a team, sharing the planning and organisation of the educational work. Professionals from visiting services offered temporary direct support to included pupils presenting specific disabilities.

Belgium. Support was mainly provided by specialist teachers from special schools and from Centres for Pupil Guidance. They provided information, advice and support to the class teacher. It was possible to find remedial teachers working as school staff members. They mainly supported pupils presenting short-term difficulties, but more and more providing direct support to class teachers and the school, trying to coordinate provision of support, working methods and educational programmes.

Cyprus. Support was provided by specialist teachers fully or partially attached to the school and by specialists, such as speech therapists, who had specific time allocated to each school. Outside the school, central services, such as inspectors, SENCOs, education and psychology specialists, or health and social services, also provided the necessary support.

Czech Republic. Support was mainly provided by specialist teachers or other professionals, such as psychologists. They provided advice and support to class teachers, parents and direct support to the included pupil. Support was provided through special educational centres or pedagogical psychological advice centres according to the specification of the pupil's need. These specialist advice and guidance centres were in charge of determining, proposing and providing support and of elaborating the individual educational plan in close co-operation with the class teacher, the parents and the pupil (in accordance with his/her impairment and level of active participation).

Denmark. Support was mainly provided by a specialist teacher working as a school staff member. They co-operated inside the class with the class teacher on a part-time basis. 'Group teaching' outside the classroom was another possibility where the pupil needs regular support in more than one subject. Local pedagogical psychological services were in charge of determining, proposing and following the type of support to be provided to the pupil in close co-operation with the mainstream school.

England and Wales. All schools had a member of staff who was the designated special educational needs co-ordinator with a wide range of responsibilities, articulated in the Special Educational Needs Code of Practices, including: overseeing provision, monitoring pupils' progress, liaising with parents and external agencies, and supporting colleagues. Support was also provided by external agencies – specialist support services (from the education department and the health authority), colleagues in other schools, and other LEA personnel. Peripatetic staff worked increasingly with teachers, in order to develop teaching approaches and strategies within the school, rather than directly with pupils.

Finland. Support was mainly provided by a specialist teacher working as a school staff member. A counselling teacher, school social worker or school nurse, depending on the local educational authorities, could also provide support to the school in general, to the teacher and/or the pupil. A pupil welfare team was set up involving the pupil, their parents, all teachers and any other experts involved in order to prepare an individual educational programme to be implemented in the mainstream school. There also existed a 'pupil support group' involving all professionals and the principal of the school to ensure good educational conditions and progress.

France. Support was mainly provided by specialist professionals from various services. They supported included pupils on a short- or long-term basis. They also helped the class teacher and the school staff. Specialist teachers from special support networks also provided support to pupils presenting temporary or permanent learning difficulties.

Germany. Support was mainly provided by a specialist teacher from a special school or from a social service. Support was diverse and included preventive measures, joint education actions in mainstream schools, education co-operation between special and mainstream schools etc.. There could also be a support teacher working as a school staff member. They were mainly teachers specialising in language or behaviour problems. They worked mainly with pupils inside or outside the classroom according to the pupils' needs.

Greece. Support was mainly provided by a specialist teacher from a special school. Their work consisted of directly helping the pupil, assisting the teacher with the variety of teaching materials and in differentiating the curriculum – informing other pupils and ensuring good co-operation between the

school and the family.

Iceland. Support was mainly provided by a remedial teacher working as a school staff member. Other types of support were also provided by specialist teachers, psychologists or other professionals from the local municipalities. They provided general advice on the curriculum and on the teaching of the main subjects; guidance for pupils and psychological counselling. Their aim was to support teachers and head teachers on daily schoolwork and school improvement.

Ireland. Support could be provided by a specialist or resource teacher working as a school staff member. They were dealing with pupils with assessed learning disabilities. Support could also be provided by a remedial teacher working as a school staff member. Their main aim was to work with pupils with difficulties in reading and mathematics. All primary and post-primary schools had such a teacher. Another type of support was a visiting teacher from the Visiting Teacher Service (Department of Education). They worked with individual pupils, both inside and outside the classroom, and advised teachers on teaching approaches, methodology, programmes and resources. They also provided support for parents. The Psychological Service of the Department of Education and Science provided assessment and advisory service for mainstream schools with a focus on pupils with emotional and behaviour problems and with learning difficulties.

Italy. Support was mainly provided by a specialist teacher working as a school staff member. They acted as class teachers, providing support in the mainstream school after obtaining parental authorisation. Support teachers shared responsibility with the class teacher concerning the work to be done with all pupils. Implementation of an individual education plan was one of their main tasks. They also supported pupils inside the classroom; pupils with disabilities were not to be pulled out of their classes unless absolutely necessary.

Liechtenstein. Support was mainly provided by a specialist teacher from a special school. They mainly provided support to pupils but also to teachers and parents.

Lithuania. Support was mainly provided by specialist teachers, school psychologists, speech therapists, social pedagogues from special schools or from pedagogical psychological services. Specialist teachers provided class teachers with information and practical support: elaborating an individual educational programme, selecting educational materials etc.. Support could also be provided by a remedial teacher, speech therapists, school psychologists working as school staff members. These specialists were mainly available in mainstream schools in big cities or towns; there was still a lack of specialists in rural areas. Pedagogical psychological services at local or national levels provided assessment of pupils and guidance for education of included pupils.

Luxembourg. Support was mainly provided by specialist support professionals from the SREA (Ambulatory Remedial Department). They were professionals in education and rehabilitation and shared responsibilities with class teachers with regard to direct support to the pupil. Class teachers were always in charge of the organisation of the class.

Netherlands. Support was mainly provided by a support teacher from a special school. They worked with the class teachers to develop educational programmes, to prepare and provide additional materials, to work with pupils individually and to contact parents. Support may also be provided through mainstream schools with experience in inclusion. Support focused on information to teachers, assessment and providing teaching materials. Support teachers may also be one of the mainstream schoolteachers providing direct help and support to the pupil.

Norway. Support was mainly provided by a specialist teacher working as a school staff member. They co-operated with the class teacher part-time or full time. Support could also be provided by an assistant in the classroom. There was close cooperation between the three of them. The local educational psychological services were the ones to advise school and parents on the content and organisation of the education required for the pupil. They were the people mainly responsible for advising teachers on the daily work.

Poland. Teachers working with disabled pupils received support from the National Centre of Psychological and Pedagogical Support or from regional Teaching Methodology Centres. These centres provided training courses for teachers. Mainstream schools were to provide psychological and pedagogical support to pupils, parents and teachers, organising, for example, remedial classes.

Portugal. Support was mainly provided by specialist teachers, or other professionals either from local support teams or internal school staff members. National policy gave priority to the second situation. The aim was to create co-ordinated teams which would provide guidance to class teachers. They co-

operated with the head teacher and the school to organise the necessary educational support; they co-operated with class teachers in order to reorganise the curriculum in a flexible way; to facilitate differentiation of educational methods and strategies; to support teachers and pupils and contribute to educational innovation.

Spain. Support was mainly provided by a specialist support teacher working as a school staff member. They worked in primary and secondary schools and played an important role with the pupil and the teacher, planning together the curriculum differentiation and its implementation. They also supported families and worked in cooperation with other professionals. Another type of support was a remedial teacher for learning support, present in all primary schools. Support could also be provided by local psychological pedagogical support teams. They were responsible for the assessment of pupils, advising teachers and school staff on the measures to be taken, following pupils' progress and involving families.

Sweden. Support was mainly provided by a specialist teacher working as a school staff member. Municipalities were responsible for providing and financing support to schools. If needed, support to build up knowledge in the municipalities could be provided at a national level through the Swedish Institute for Special Needs Education.

Switzerland. Support was mainly provided by support teachers, specialist teachers or specialist professionals from special schools or mainstream schools (milder forms of SEN). They provided support to included pupils and their teachers

14.2 The Importance of Collaboration

Collaboration has three main benefits for SWSEN:

(1) It has potential to create synergy – where 'the whole is greater than the sum of the parts'.

(2) It has the potential to provide opportunities for the participants to learn new ways of addressing barriers to learning.

(3) It increases the coordination of services for SWSEN.

As indicated by Mitchell (2008), to release the potential of collaboration, participants have to learn the skills of working as a team member for at least part of their work. For those who have been used to working alone as a sole professional, it is a big step to develop new ways of working in which one is expected to share responsibility and expertise with other professionals in other disciplines. The 'private' now becomes the 'public'; what was once implicit and unexpressed in professional practice now has to become explicit and explained to others. One's autonomy may even seem to be lessened, as one has to adapt to other people's ideas and personalities.

14.3 Principles of Collaboration

Successful collaborative arrangements depends on several factors (Friend & Cook, 1992; Mitchell, 2008; Idol, et al., 1994):

• Establishing clear, common goals for the collaboration.

• Defining the respective roles and who is accountable for what, but accepting of joint responsibility for the decisions and their outcomes.

- Adopting a problem-solving approach – with a sense that all those in the collaborative arrangement share ownership of the problem and its solution.

- Establishing an atmosphere of trust and mutual respect for each other's expertise.

- Being willing to learn from others.

- Aiming for consensus decision-making.

- Asking for and giving immediate and objective feedback to others in a non-threatening and non-judgemental manner.

- Giving credit to others for their ideas and accomplishments.

- Developing procedures for resolving conflicts and managing these processes skilfully.

- Arranging periodic meetings to review progress in the collaborative arrangements.

14.4 Co-teaching

Sometimes known as *cooperative teaching*, this occurs in inclusive education settings when a general education teacher and a special education teacher combine their expertise to meet the needs of all learners in the class. Both assume the roles of equal partners. It does not normally mean that the special education teacher takes exclusive responsibility for SWSEN and the general teacher the rest of the class. Rather, it means respecting each other's expertise in order to benefit all students in the class. From the descriptions of the European countries above, Italy most closely fits this pattern of collaboration. In addition to the points in the previous section, to make co-teaching work, there needs to be:

- active support from the school's leadership;

- adequate, regular joint planning time;

- agreement on procedures for handling learners' disruptive or off-task behaviours;

- agreement on lesson objectives and structures, including teaching strategies and assessment methods;

- clear communication with parents about the co-teaching arrangement.

(Dieker & Barnett, 1996; Reeve & Hallahan, 1996; and Walter-Thomas et al., 1996)

In their meta-analysis of the effects of co-teaching on student outcomes, Murawski & Swanson (2001) reviewed 89 articles published between 1989 and 1999. Only six of these provided enough information for effect sizes to be calculated and these ranged from 0.24 to 0.95, with an average of 0.40. Thus, on the basis of a small database, co-teaching is moderately effective at best. There is a need for more experimental research to be conducted, especially in the light of the regularity with which co-teaching is cited in the literature as an effective service delivery option in inclusive classrooms.

14.5 Paraprofessionals

Paraprofessionals – referred to variously as 'teaching assistants', 'teacher aides' and 'learning support assistants' - are commonly utilised in special and, increasingly, in inclusive education. Despite this significant and growing role, Giangreco & Doyle (2002) claimed that too many of them have been inadequately appreciated, compensated, oriented, trained, and supervised. They lamented the fact that there are negligible data on student outcomes related to the utilisation of paraprofessionals. Many questions need to be addressed, both at the policy and research levels. For example, to what extent should paraprofessionals be involved in direct teaching SWSEN? What impact does their presence have on such students? How does the utilisation of paraprofessionals' support affect teacher engagement? And what should be done to improve paraprofessional supports?

As summarised by Riddell et al. (2006), a number of studies have found that effective and inclusive pedagogies were supported by a team approach in classrooms where teachers and teaching assistants (TAs) worked together to support all children. However, whilst recognising how important this strategy has been in promoting classroom inclusion, Riddell et al. noted that commentators also recognise the complexities of managing TAs in the classroom and the fact that teachers are untrained in managing classroom teams. In addition, there is a risk of increased learner dependency. According to Groom & Rose (2005) there is no single model of classroom teamwork that should be endorsed but the aspects of the TA role that contributed to effective practice included:

- time for establishing individual positive relationships with students;
- good listening skills;
- working with pupils in class, in a one-to-one, and across contexts including lunchtimes/playgrounds;
- qualities of fairness, patience and tolerance;
- understanding of students' difficulties;
- access to a range of support strategies (Groom and Rose, 2003: 12)

In their review of special education in the ACT, Shaddock et al. (2009) spent some time in discussing the role of Learning Support Assistants (LSAs). They noted that Australian research shows that in classrooms where there are students who are complex and/or challenging the LSA was much appreciated (e.g., Shaddock, et al. 2007). However, despite the generally strong support for LSAs, there are concerns

about the role:

- there is insufficient role clarity, training and professional development opportunities;
- system policy around the skills LSAs need to assist teachers with curriculum and pedagogy are unclear;
- there are issues around the current and future availability of appropriately qualified and experienced LSAs.
- LSAs perform a wide range of roles for which not all may have adequate training;
- the involvement of LSAs can have unintended, negative effects on student engagement, learning, independence and/or social acceptance;
- in some situations, LSAs are exploited personally, professionally and/or in terms of salary and conditions;
- the presence of LSAs has been associated with teachers devolving responsibility to them for students with a disability;
- some teachers do not have the skills to direct and supervise LSAs; and
- role confusion, blurring and overlap are frequently reported.
  (Shaddock et al. 2007, p.213).

Shaddock et al. (2009) went on to point out that the lack of research support for the positive impact of LSAs on student learning outcomes has prompted the search for alternatives to LSAs and/or to more carefully define their roles. They cited the following proposal from Giangreco et al. (2004):

- using the resources currently devoted to LSAs to employ more teachers, improve teacher professional learning and networking, reduce class sizes and/or purchase therapy, equipment, consultancy and other supports for inclusive practice;
- establishing a mobile pool of LSAs who are available for time-limited involvement and whose support is systematically phased out and replaced with mainstream supports;
- clarifying the LSA role to be *indirect* support for the teacher;
- implementing peer-support strategies that replace some roles currently performed by LSAs; and
- consulting students about the way they would prefer to receive support.

In the US, the No Child Left Behind Act (NCLB) of 2001 clarified the job of paraprofessionals with an official title and job description. Prior to this act, qualifications for teacher's assistants were made at the district and state level. Section 119 of the NCLB Act governs the qualifications of paraprofessionals for schools receiving federal funds. This law states that paraprofessionals must have an associate's degree (equivalent to two years of study in an institution of higher

education) and pass a 'state or local academic assessment,' including knowledge of assisting in the instruction of reading, writing and mathematics. These requirements created a distinction between aides and paraprofessionals, with the paraprofessional job description becoming much more defined. Paraprofessionals are allowed to engage in one-on-one tutoring, manage instructional materials, act as a translator and provide assistance with computers and library activities. They must remain under the direct supervision of a licensed teacher. They can still perform non-instructional duties and work with non-disabled children so long as the time spent is balanced evenly.

14.6 Special Needs Advisers

Various countries have developed cadres of professionals to act as advisers/consultants to teachers of SWSEN. They provide an indirect service delivery model, in that the consultant does not necessarily work directly with students, except to occasionally demonstrate a teaching strategy. The essence of this approach is that a special education teacher/adviser (or some other specialist) provides advice and guidance to the general classroom teacher on the programme to be followed by any SWSEN. Both teachers normally meet outside classroom teaching time (admittedly, a logistical problem, which has to be solved by the school leadership: see Idol, 1997) and discuss any curricular, teaching and assessment adaptations required for such students As well, the special education adviser may provide additional instructional materials and help to modify the classroom environment. In all of this the classroom teacher carries the main responsibility (see Elliott & McKenney, 1998). To make this consultation model work, the special education teacher must be thoroughly familiar with the curriculum being followed in the classroom and the classroom teacher must continue to have chief responsibility for educating all students in his or her class.

In this section, two countries' provisions will be discussed: England and Australia.

England. Here, a special educational needs teacher working in a mainstream school can become a Special Education Needs Coordinator (SENCO). Applicants for that position usually need two-plus years of post-qualification experience. The SENCO is expected to have a good understanding of the three stages of special educational

needs: school action, school action plus, formal assessments and statementing[31]. The SENCO is usually the head of the special needs department and is responsible for day-to-day provision for pupils with special educational needs. This involves coordinating work with a range of agencies and parents, gathering appropriate information on children with special needs and ensuring individual education plans are in place. A SENCO in mainstream schools will allocate learning support assistants or teaching assistants to support individual students in the classroom and may hold the budget for these resources. A SENCO may also be the deputy head teacher or head teacher.

From 1 September 2009, new regulations from the Department for Children, Schools and Families required all new SENCOs to achieve the national award for SEN coordination[32]. The Training and Development Agency for Schools has developed a framework of nationally approved training for teachers new to the role of SENCO. Training will take approximately a year to complete and SENCOs will have up to three years to achieve the qualification. To achieve the National Award for SEN Coordination the Department for Children Schools and Families requires that teachers should meet all the learning outcomes from a specified list of 13 topics, as follows:

1. Statutory and regulatory frameworks and relevant developments at national and local level

2. High incidence SEN and disabilities and how they can affect pupils' participation and learning

3. Using evidence about learning, teaching and assessment in relation to pupils with SEN to inform practice

4. Working strategically with senior colleagues and governors

5. Strategic financial planning, budget management and use of resources in line with best value principles

6. Strategies for improving outcomes for pupils with SEN and/or disabilities

7. Developing, using, monitoring and evaluating systems

8. Using tools for collecting, analysing and using data

9. Deploying staff and managing resources

10. Providing professional direction to the work of others

11. Leadership and development of staff

12. Drawing on external sources of support and expertise

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[31] See Chapter Five, section 5.5 for a description of these three stages.
[32] http://www.tda.gov.uk/about/newsletter/sep2009/Articles/workingforchange.aspx

13. Consulting, engaging and communicating with colleagues, parents and carers and pupils to enhance pupils' learning and achievement.

For example, #3 specifies that training should enable SENCOs to:

- Analyse, interpret and evaluate critically, relevant research and inspection evidence about teaching and learning in relation to pupils with SEN and/or disabilities and understand how such evidence can be used to inform personal practice and others' practice.

- Identify and develop effective practice in teaching pupils with SEN and/or disabilities, e.g. through small-scale action research based on evaluating methodologies, developing critiques and, where appropriate, developing new hypotheses.

- Have a critical understanding of teaching, learning and behaviour management strategies and how to select, use and adapt approaches to remove barriers to learning for pupils with SEN and/or disabilities.

- Have a critical understanding of approaches, strategies and resources for assessment (including national tests and examinations) and how to select, use and adapt them to personalise provision and remove barriers to assessment for pupils with SEN and/or disabilities.

Australia. In their recent review of special education in the ACT, Shaddock et al. (2009) proposed the development and trialling of a school-based, Learning Support Coordinator (LSC), a role designed to improve classroom pedagogy with a particular focus on students functioning in the lowest quartile. They cited recent Australian research in support of this role; for example, Shaddock et al. (2007) found that schools in which an experienced special educator managed learning support across the school achieved good outcomes for students with a disability.

Shaddock et al. (2009) noted that some school systems in Australia (Western Australia and NSW) were beginning to employ LSCs who have special education knowledge and experience and who have school-wide responsibilities for raising the quality of teaching and learning, with particular focus on students who struggle with the curriculum. In Western Australia, for example, the LSCs' functions included:

- facilitating the work of Learning Support teams;
- consulting and collaborating with teachers with regard to meeting the educational needs of students with disabilities and learning difficulties;
- supporting classroom teachers to develop, implement and monitor learning plans for individual and groups of students with disabilities or learning difficulties; and
- modeling effective teaching and supporting classroom teachers who have students requiring significant teaching and learning adjustments.

The Western Australian LSCs are appointed from existing staff in schools and

receive ongoing training and participate as part of the *Building Inclusive Classrooms* Professional Learning Program. This involves an initial 12 days of fully funded professional learning in their first two years.

In recommending the development of LSC positions in the ACT, Shaddock et al. (2009) noted that although LSCs were not widespread there, some schools had organised their services and appointed staff who fulfilled similar roles. They also noted that in WA and NSW the LSCs were 'disability, and learning difficulties-specific'. Instead, 'one implication of the ACT's broader understanding of inclusivity is that if the LSC approach were to be adopted 'a major aim would be to build pedagogical capacity at the school and classroom level' (p.116). This would mean LSCs supporting classroom teachers to meet 'the individual learning needs of any students, for example, students with a disability or learning difficulty; those experiencing temporary difficulties with learning because of personal or family circumstances; and, if necessary, students with gifts and talents who were not performing to potential' (ibid.).

14.7 Educational Psychologists

In many countries, educational psychologists (referred to as 'school psychologists' in some countries, and 'school counsellors' in Australia) are considered to play a vital role, not only in the education of SWSEN, but also in education more generally. In their review of special education in the ACT, Shaddock et al. (2009), for example, commented on 'the need for a more strategic use of these valuable, generic, resources for schools' (p.208).

In the UK, the 2001 *Code of Practice* described the educational psychologist as having 'a key role in assessment and intervention and in providing support and advice to parents' (p.36) in early years education. At the school level, the *Code of Practice* had this to say:

> the educational psychologist can be a very important resource for the school. The psychologist's knowledge of the school and its context is key. Through regular consultation with schools educational psychology services can provide help in clarifying problems and devising problem solving strategies; in carrying out specialised assessments, including techniques in managing behaviour, and evaluating individual pupil progress. In addition to working with individual children, the educational psychologist can work with groups of pupils or teachers and learning support assistants at the classroom or whole school level, for example assisting schools with the development of SEN and behaviour policies, helping to develop knowledge and skills for school staff and assisting with projects to raise achievement

and promote inclusion (p.136).

In their recent review of the functions and contributions of educational psychologists in England and Wales, Farrell et al. (2007) placed it in the context of the *Every Child Matters* (ECM) legislation. They pointed out that the ECM agenda makes outcomes for children central to the recently established integrated children's services that form a team around the child and family in the context of community and school. Outcomes for children are specified through aims, targets, indicators and inspection criteria, which are grouped around five main areas:

Be healthy: children and young people are (a) physically healthy, (b) mentally and emotionally healthy, (c) sexually healthy, (d) live healthy lifestyles, and (e) choose not to take illegal drugs

Stay safe: children and young people (a) are safe from maltreatment, neglect, violence and sexual exploitation; (b) are safe from accidental injury and death; (c) are safe from bullying and discrimination, (d) are safe from crime and anti-social behaviour in and out of school, and (e) have security, stability and are cared for.

Enjoy and achieve: children and young people (a) are ready for school, (b) attend and enjoy school, (c) achieve stretching national educational standards at primary school, (d) achieve personal and social development and enjoy recreation, and (e) achieve stretching national educational standards at secondary school.

Make a positive contribution: children and young people (a) engage in decision-making and support the community and environment, (b) engage in law-abiding and positive behaviour in and out of school, (c) develop positive relationships and choose not to bully or discriminate, (d) develop self confidence and successfully deal with significant life changes and challenges, and (e) develop enterprising behaviour.

Achieve economic well-being: Children and young people (a) engage in further education, employment or training on leaving school, (b) are ready for employment, (c) live in decent homes and sustainable communities, (d) have access to transport and material goods, and (e) live in households free of low incomes.

The majority of respondents in the review indicated that educational psychologists' work contributed to meeting each of the above five ECM outcomes through individual assessment, consultancy, intervention and training. There was a universally held view that educational psychologists had been too heavily involved in statutory assessments and that this had prevented them from making more effective contributions to maximising the ECM outcomes for children. Nevertheless, all respondent groups identified an important role for educational psychologists as working with individual children who have severe, complex and

challenging needs. Respondents typically referred to educational psychologists' academic background and training in psychology as being the factors that enabled them to offer a distinctive contribution. Most respondent groups valued highly the contact that they had, but would have welcomed more, particularly in the area of therapy and intervention.
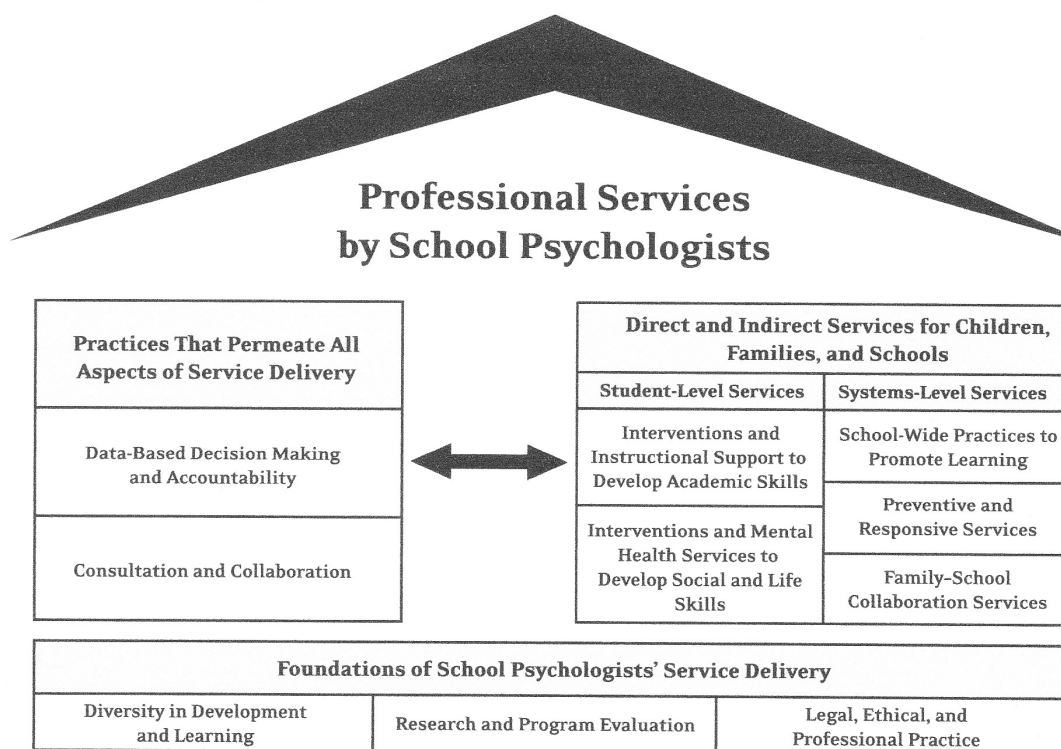
As well, Farrell et al. pointed out a number of other ways in which the developments embodied within the ECM agenda impact on the role of educational psychologists. Among the most significant, they felt, was the restructuring of local authorities into children's services, which combined educational and social services. This involves locating the work of educational psychologists more centrally within community contexts where schools form only one of the settings in which they would work. A further consequence was a renewed emphasis on the importance of multi agency work.

Among the recommendations advanced by Farrell et al. (2007) were that (a) 'all educational psychology service development plans should be based around meeting the five ECM outcomes and that annual reviews of services should assess the extent to which these plans have been successfully implemented', and (b) 'educational psychologists and other agencies working with children should engage in joint planning around the five outcomes so that each agency can assess the potential and actual contribution that they can make' (p.10).

Since 1978, in the US, the National Association of School Psychologists (2010) has promulgated successive revisions of guidelines for the provisions of school psychological services. In its latest iteration, the Association presented a model for the delivery of comprehensive school psychological services across 10 domains (see Figure 14.1). These domains reflect the following principles:

- A foundation in the knowledge bases for both psychology and education, including theories, models, research and techniques.
- Use of effective strategies and skills to help students succeed academically, socially, behaviourally, and emotionally.
- Application of knowledge and skills by creating and maintaining safe, supportive, fair and effective learning environments and enhancing family-school collaboration for *all* students.
- Knowledge, skills and professional practices reflect understanding and respect for human diversity and promote effective services, advocacy, and justice for all children, families and schools.

- Integrate knowledge and professional skills across the 10 domains that result in direct, measurable outcomes for children, families and schools.

Professional Services by School Psychologists

Practices That Permeate All Aspects of Service Delivery		Direct and Indirect Services for Children, Families, and Schools	
		Student-Level Services	Systems-Level Services
Data-Based Decision Making and Accountability		Interventions and Instructional Support to Develop Academic Skills	School-Wide Practices to Promote Learning
			Preventive and Responsive Services
Consultation and Collaboration		Interventions and Mental Health Services to Develop Social and Life Skills	Family–School Collaboration Services

Foundations of School Psychologists' Service Delivery		
Diversity in Development and Learning	Research and Program Evaluation	Legal, Ethical, and Professional Practice

Available online at: http://www.nasponline.org/standards/2010standards.aspx

Figure 14.1 Model of comprehensive and integrated school psychological services in the US

In summary, the 10 domains are as follows:

Data-based decision-making and accountability: knowledge of varied models and methods of assessment and data collection methods for identifying strengths and needs, developing effective services and programmes, and measuring progress and outcomes.

Consultation and collaboration: knowledge of varied models and strategies of consultation, collaboration, and communication applicable to individuals, families, groups, and systems.

Interventions and instructional support to develop academic skills: knowledge of biological, cultural, and social influences on academic skills, human learning, cognitive, and developmental processes; and evidence-based curricula and instructional strategies.

Interventions and mental health services to develop social and life skills: knowledge of biological, cultural, developmental, and social influences on behaviour and mental health, and evidence-based strategies to promote social-emotional functioning and mental health.

School-wide practices to promote learning: knowledge of school and systems

structure, organization, and theory; general and special education; technology resources, and evidence-based school practices that promote learning and mental health.

Preventive and responsive services: Knowledge of principles and research related to resilience and risk factors in learning and mental health, services in schools and communities to support multi-tiered prevention, and evidence-based strategies for effective crisis response.

Family-school collaboration services: knowledge of principles and research related to family systems, strengths, needs, and culture; evidence-based strategies to support family influences on children's learning and mental health; and strategies to develop collaboration between families and schools.

Diversity in development and learning: Knowledge of individual differences, abilities, disabilities, and other diverse characteristics, including factors related to culture, context, and individual and role differences, and evidence-based strategies to enhance services and address potential influences related to diversity.

Research and program evaluation: knowledge of research design, statistics, measurement, varied data collection and analysis techniques, and programme evaluation sufficient for undertaking research and interpreting data in applied settings.

Legal, ethical, and professional practice: knowledge of the history and foundations of school psychology, multiple service models and methods; ethical, legal, and professional standards, and other factors related to professional identity and effective practice as school psychologists.

14.8 Service Integration

It is clear from the material reviewed so far in this chapter that the challenge of educating SWSEN is a multidisciplinary enterprise, requiring the highest possible levels of collaboration, both at the individual level and at the system level. In the preceding section, for example, reference was made to educational psychologists and other agencies working with children engaging in joint planning around the five *Every Child Matters* outcomes.

According to Shaddock et al. (2009), a feature of leading practice throughout the world is a move towards 'integrated support', 'service integration' or 'wraparound services', all of which are concerned with the delivery of specialised services in a more coordinated and integrated manner (see, for example, Peterson, 2009). Such coordination can take place at an institutional level, at an agency level, or at a government level.

In South Africa, the writer was impressed by the idea of institution-level support teams – an idea that many other countries have adopted in various forms. In the South

African model, the primary function of these teams is to put in place 'properly co-ordinated learner and educator support services that will support the learning and teaching process by identifying and addressing learner, educator and institutional needs' (Department of Education, 2001).

A key to the success of such teams is the support and encouragement offered by the school principal and other senior leaders. The chief function of school-wide teams is to develop a school-wide supportive culture and policies on learners with special educational needs, as well as focussing on identifying and supporting individual learners. Such teams need a dedicated leader/facilitator and a recorder of decisions and plans, utilising advanced technology where available to facilitate communication (Ademan & Taylor, 1998).

According to Schaddock et al. (2009), the literature on service integration highlights the following factors:

- the active involvement of the child and support for parents as the primarily responsible party;
- conceptualisation of schools as the predominant living and learning environment for youth and as a community resource;
- co-location of services where possible;
- alignment of client assessments and case management; and
- clear and realistic objectives of service integration; leadership support; time allocation for joint planning; and clarity around administrative arrangements, funding and resources.

14.9 Summary

1. *Educating SWSEN requires collaboration among many people – several professionals and parents in particular.*

2. *Collaborative approaches to educating SWSEN are increasingly becoming embedded in education systems around the world. This is well illustrated in the sources of support for regular class teachers in their work with SWSEN in 23 European countries, which included school-based specialists, community-based agencies and special schools.*

3. *Successful collaboration depends on such factors as establishing clear goals, defining respective roles, adopting a problem-solving approach and establishing mutual trust and respect.*

4. *Co-teaching occurs in inclusive education settings when a general education teacher and a special education teacher combine their expertise to meet the needs of all learners in the class.*

5. *Paraprofessionals are generally inadequately appreciated, compensated, oriented, trained, supervised, and researched. Since 2001, paraprofessionals in the US have had more defined job descriptions and are expected to have a college level qualification.*

6. *Various countries have developed cadres of professionals to act as advisers/consultants to teachers of SWSEN, providing advice and guidance to the general classroom teacher on the programme to be followed.*

7. *In many countries, educational psychologists are considered to play a vital role, not only in the education of SWSEN, but also in education more generally and in community contexts.*

8. *A feature of leading practice throughout the world is a move towards 'integrated support', 'service integration' or 'wraparound services', all of which are concerned with the delivery of specialised services in a more coordinated and integrated manner. Such coordination can take place at an institutional level, at an agency level, or at a government level.*

CHAPTER FIFTEEN

PARENT INVOLVEMENT[33]

Parents[34] play important, if not critical, roles in educating and supporting SWSEN. 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 education (Hornby, 2000). Parents have played and continue to play a critical role in advocating on behalf of their children for better educational services. One of the earliest advocates of family involvement in rehabilitation and special education, Dybwad (1982) recounted how parents of children with mental retardation banded together in many countries during the 1940s and 1950s to demand justice for their children and an end to discriminatory practices.

15.1 The Story So Far

So far in this review, parents have been mentioned in a range of contexts. In brief, the following comments have been made:

- Educators should create collaborative relationships with students and their families, by recognising parents/family members as valuable partners in promoting academic progress and by working with them from a posture of cultural reciprocity (Chapter Four).

- The strong focus on disability, difference and deficit is upsetting for parents and has deleterious effects on inclusive culture and practice (Chapter Seven).

- Parents should be involved in the decision-making processes in Response to Intervention (Chapter Five and Chapter Fifteen).

- Many parents of SWSEN do not have the knowledge, skills and contacts to comprehend an increasingly deregulated system (Chapter Six).

- The coexistence of inclusive education provisions and special schools (which is the case in almost every country) suggests that choices must be exercised as to where SWSEN are 'placed'. In this process, the relative weight given to the preferences of

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[33]This chapter draws on Mitchell (2008, chapter7) and Mitchell et al. (2010), as well as other sources mentioned in the text.

[34] The term 'parent' encompasses a range of people, including natural parents, adoptive or foster parents, guardians, extended family, carers and caregivers. Here 'parent' will be used to cover all categories of such relationships.

SWSEN and their parents and those who administer education systems constitutes a major point of tension (Chapter Six).

- Subsidiary issues centre on how parents negotiate any choices that are at least nominally available to them and how they can be assisted to make informed choices (Chapter Six).

- In countries where funds are tied to individual children, there is more evidence of strategic behaviour by parents and teachers to secure resources (Chapter Seven).

- Voucher-based funding models provide a direct public payment to parents to cover their child's public or private school costs. The payment can be made either directly to the parents or to a school on behalf of the parents. The aim of these models is to increase parental choice and to promote competition between schools in order to increase the quality of educational services (Chapter Seven)

- A 1996 meta-analysis of the effects of behavioural parent training on anti-social 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 (Chapter Ten).

- In the UK, the SEN and Disability Act 2001 made it clear that where parents want a mainstream place for their child, everything possible should be done to provide it (Chapter Eleven).

- Countries with more segregated provision report parental pressure for inclusion and there is positive parental support in countries with inclusive education policies. However, parents whose children have more severe special needs are said to prefer segregated settings for their children (Chapter Twelve).

- Developing school support networks has been identified as an important facilitator of inclusive education, as has encouraging a strong sense of community with professionals and paraprofessionals working collaboratively with parents (Chapter Fourteen).

- Parents play a critical role in bestowing social validity on inclusion and in facilitating its implementation (Chapter Eleven).

- Research indicates that parents of children with disabilities believe that inclusion promoted acceptance by non-disabled peers and helped their children's social, emotional and academic development. Concerns include a loss of access to specialised personnel (Chapter Eleven).

- Parents of children without disabilities value their children's greater awareness of others' needs and their enhanced acceptance of human diversity through inclusion. Some, however, were concerned that their children would not receive sufficient assistance from their teachers and they might emulate inappropriate behaviours of children with disabilities (Chapter Eleven).

- Australian parents continue to want more special units in primary and secondary schools, not fewer and strongly support a continuum of services (Chapter Twelve).

- One of the roles of SENCOs in the UK is 'Consulting, engaging and communicating with colleagues, parents and carers and pupils to enhance pupils' learning and achievement' (Chapter Fourteen).

15.2 Levels of Parental Involvement

Five different levels of parent involvement have been identified (Department of Education 1988):

Level 1: Being informed. At this most basic level, the school informs parents about its programmes and, in turn, is asked for information.

Level 2: Taking part in activities. At this level, parents are involved in activities, but to a limited extent. For example, they may be invited to attend various functions.

Level 3: Participating in dialogue and exchange of views. Here, parents are invited to examine school or classroom goals and needs.

Level 4: Taking part in decision-making. At this level, parents are asked about their views when decisions affecting their child are being made. A clear case of this level of involvement is the IEP conference and when parents exercise choice as to their child's placement.

Level 5: Having responsibility to act. This is the highest level, with parents making decisions in partnership with the school and being involved in both planning and evaluating parts of the school programme. A good example of this would be involving the parents of children with special educational needs in formulating and evaluating school policies. Another example of involvement at this level is the role that parents may play as tutors for their own children.

As well, as we shall see in a later section of this chapter, many parents of SWSEN benefit from behavioural parent training, parent-child interaction therapy and the Triple P Positive Parenting programme.

15.3 Policies on Parent Involvement

Many countries have legislation and/or policies on parent involvement in the education of SWSEN, at a minimum their participation in decisions regarding their children's placements and their IEPs. In this section, consideration will be given to just one country: the UK.

In the UK, there are quite explicit prescribed statutory duties and guidance about various roles and responsibilities concerning parents' involvement in the education of their children with special educational needs. The former are expressed in the Special Educational Needs and Disability Act 2001 and the Education Act 1996, and the latter in the *Special Educational Needs Code of Practice* of 2001 (hereafter referred to as the *Code*).

One of the fundamental principles underpinning the *Code* is stated as 'parents have a vital role to play in supporting their child's education' (p.8). Similarly, critical success factors include 'special education professionals and **parents** work in **partnership**' and 'special education professionals take into account the **views of individual parents** in respect of **their child's particular needs**' (ibid., emphasis in original).

Key principles in communicating and working in partnership with parents included the following guidance for professionals:

- acknowledge and draw on parental knowledge and expertise in relation to their child
- focus on the children's strengths as well as areas of additional need
- recognise the personal and emotional investment of parents and be aware of their feelings
- ensure that parents understand procedures, are aware of how to access support in preparing their contributions, and are given documents to be discussed well before meetings
- respect the validity of differing perspectives and seek constructive ways of reconciling different viewpoints
- respect the differing needs parents themselves may have, such as a disability, or communication and linguistic barriers
- recognise the need for flexibility in the timing and structure of meetings.

The different roles and responsibilities of local education authorities (LEAs) and schools include the following, as outlined in Chapter 2 of the *Code*:

LEAs

- have a statutory duty to provide parent partnership services;
- should ensure that parents and schools receive clear information about services and providers (including where relevant the involvement of voluntary groups);
- have responsibility for the provision of a wide range of information material for parents;
- should inform all parents that all maintained schools are required to publish their SEN policy; and
- have a statutory duty to provide disagreement resolution arrangements that can demonstrate independence and credibility in working towards early and informal dispute resolution*.*

Schools

- should recognise that teachers, SENCOs, pastoral and other staff all have an important role in developing positive and constructive relationships with parents;
- should accept and value the contribution of parents and encourage their participation;
- make every effort to identify how parents prefer to work with schools, with the recognition that some families will require both practical help and emotional support if they are to play a key role in the education of their children;
- should seek to develop partnerships with local parent support groups or voluntary organizations;
- have a statutory duty to publish their SEN policy*;*
- should have a clear and flexible strategy for working with and encouraging parents to play an active role in the education of their children; and
- in publishing their SEN policy, should seek to ensure it is presented in parent friendly formats.

The Parent Partnership Service[35] should

- provide flexible services for parents, including access to other agencies and organisations, and, for all parents who want one, access to an Independent Parental Supporter;
- provide accurate, neutral information on parents' rights, roles and responsibilities within the SEN process, and on the wide range of options available, to enable them to make informed decisions;
- provide training for parents, Independent Parental Supporters and school staff;
- work with schools, LEA officers and other agencies to help them develop positive relationships with parents;
- establish and maintain links with voluntary organisations; and
- ensure that parents' views inform and influence the development of local SEN policy and practice.

Despite these policies, a recent UK survey found that 72% of parents wanted more involvement in their children's schooling (Department for Education *&* Skills, 2007).

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[35] As of 2009, over 2000 Parent Support Advisors had been employed to work across over 8000 schools (Training and Development Agency for Schools, 2009).

15.4 Parents' Participation on the IEP Process

The writer and his colleagues at the University of Canterbury (Mitchell et al., 2010) recently completed a review of the literature on IEPs, which contained a section on parental involvement. In summary, the following points were made from the international literature:

- Professionals need to build a partnership with family members based on mutual respect, open communication, shared responsibility, and collaboration (Zhang & Bennett, 2003).
- Effect sizes for the impact of parent involvement on children's academic achievement have been calculated from meta-analyses to be 0.51 (Hattie, 2009).
- There is an extensive research literature on parental participation in the IEP process, which indicates that the reality of parental participation is problematic (e.g., Garriott et al., 2000; Harry et al., 1995).
- The gap between the rhetoric and the reality of parent involvement is considered to be because there are various barriers to the meaningful participation of parents, both generically and those specifically related to IEPs (Hornby & Lafaele, in press).
- Strategies for overcoming barriers and facilitating the participation of parents in the IEP process are summarised, but no studies could be located which evaluated whether implementing such strategies has led to increased participation of parents in the IEP process.

15.5 Parent Training Programmes

As well as participating in decisions regarding their child's placement and in the design of IEPs, parents of SWSEN may be offered various types of programmes aimed at increasing their skills in working with their children. Three stand out:

Behavioural parent training. In this programme (sometimes referred to as *parent management training*), 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 modeling, and role-plays. As its name implies, an important element of behavioural parent training is the effective administration of reinforcement. This involves reinforcement being 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. For reviews of some of the vast literature on parent management training, see, for example, Kazdin & Weisz (1998) and McCart et al. (2006).

Parent-child interaction therapy. This strategy is closely related to behavioural parent training, 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.

Triple P-Positive Parenting Programme. This is a multi-level parenting and family support strategy aimed at reducing children's behavioural and emotional problems. It 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).

15.6 The Evidence on Parental Involvement

As outlined in Mitchell (2008), there is quite an extensive international literature on the efficacy of parental involvement in their children's education:

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

A 1996 meta-analysis of the effects of behavioural parent training on anti-social 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).

Another study combined parent involvement and cognitive behavioural therapy. Three groups were compared: (a) those receiving cognitive behavioural therapy with parent involvement (N=17), (b) those receiving cognitive behavioural therapy without parent involvement (N=19), and (c) a waiting list control group (N=14). The children involved in the study were aged from seven to 14 years and all were diagnosed with school phobia. Both treatment conditions resulted in reductions in the children's social and general anxiety at the end of the treatment and on follow-up after six and 12

months, with no corresponding improvements for the waiting list group. These results do appear, however, to favour cognitive behavioural therapy, as the parental involvement had no additional positive effect (Spence et al., 2000).

A US study examined changes in parent functioning as a result of participating in a behavioural parent training programme designed for children aged 6 to 11 with attention-deficit hyperactivity disorder (ADHD). 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 (Anastopolous et al., 1993).

A review of outcomes of parent-child interaction therapy (see above) 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).

An Australian paper reports on studies of the Triple P-Positive Parenting Program (outlined above), 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% of the children had disruptive behaviour, this figure reducing to 20% after intervention (Sanders, 1999).

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).

As well as the foregoing, which appeared in Mitchell (2008), Shaddock et al. (2009) drew attention to Risko and Walker-Dalhouse's (2009) summary of research on methods for addressing the power imbalance that sometimes exists between parents and teachers. They found that teachers strengthened partnerships by communicating with families frequently; focusing on student success; linking health and social services to families; establishing parent networks; providing a parent meeting room; developing parent programmes in leadership, language and literacy with the parents; and involving parents in the creation and evaluation of school programs. These teachers also visited families and attended community events to learn about their students, families and community, then worked on joint literacy projects with parents, such as dialogue journaling, newsletters, anthologies of poetry, stories and plays.

Also, as summarised in Mitchell et al. (2010), there is extensive evidence for the effectiveness of parent involvement in facilitating children's achievements as has been reported in several reviews and meta-analyses of the international literature (Cox, 2005; Desforges & Abouchaar, 2003; Fan & Chen, 2001; Henderson & Mapp, 2002; Jeynes, 2003, 2005).

15.7 Summary

1. *Parents play important, if not critical, roles in educating and supporting their children's education.*
2. *Parents have been considered in almost every chapter of the current review.*
3. *Many countries have legislation and/or policies on parent involvement in the education of SWSEN, at a minimum their participation in major decisions affecting their children, such as their IEPs and decisions regarding placements.*

4. *Five different levels of parent involvement have been identified: (a) being informed, (b) taking part in activities, (c) participating in dialogue and exchange of views, (d) taking part in decision-making, and (e) having responsibility to act.*

5. *Parents of SWSEN often require support and guidance in managing their children's challenging behaviour. There is clear evidence that when this is provided both children and parents can benefit.*

6. *Three parent training programmes stand out as having good outcomes: (a) behavioural parent training, (b) parent-child interaction therapy, and (c) Triple P-Positive Parenting Programme.*

CHAPTER SIXTEEN

UNIVERSAL DESIGN FOR LEARNING

It is fitting that the final chapter be devoted to the concept of universal design for learning since it encapsulates many of the principles traversed in the earlier chapters of this review.

In recent years, the importance of universal design (UD), which had its origins in architecture and engineering, has been increasingly emphasised in education, where it is referred to as universal design for learning (UDL). In a nutshell, UDL involves planning and delivering programmes with the needs of all students in mind. It applies to all facets of education: from curriculum, assessment and pedagogy to classroom and school design. Hence, in their recent review, Shaddock et al. (2009) gave considerable prominence to it, describing it as a 'leading practice [that] should pervade policy, planning and delivery' (p.15).

The theme of this chapter is that educational services and policies should be universally designed and inclusive of the needs of SWSEN, along with those of all other students. In other words, regular education should be accessible to *all* students in terms of pedagogy, curriculum and resourcing, through the design of differentiated learning experiences that minimise the need for subsequent modifications for particular circumstances or individuals.

In this chapter, two topics will be discussed: (a) universal design, and (b) universal design for learning.

16.1 Universal Design

The American architect and designer Ronald L. Mace and his co-workers, at what became the Center for Universal Design at North Carolina State University, first used the term 'universal design' in the 1980s. Their original aim was to create built environments and tools that are accessible to as many people as possible. As defined by the Center, 'universal design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for [subsequent] adaptation or specialized design'. Seven principles for UD have been developed:

1. *Equitable use:* The design is useful and marketable to any group of users. For example, a website that is designed so that it is accessible to everyone, including students who are blind and using text-to-speech software, employs this principle.
2. *Flexibility in use*: The design accommodates a wide range of individual preferences and abilities. An example is a museum that allows a visitor to choose to read or listen to the description of the contents of a display case.
3. *Simple and intuitive use*: Use of the design is easy to understand regardless of the user's experience, knowledge, or language skills. Science laboratory equipment with control buttons that are clear and intuitive is a good example of an application of this principle.
4. *Perceptible information:* The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities. An example of this principle being employed is when multimedia projected in a noisy academic conference exhibit includes captioning.
5. *Tolerance for error:* The design minimises hazards and the adverse consequences of accidental or unintentional actions. An example of a product applying this principle is educational software that provides guidance when the student makes an inappropriate selection.
6. *Low physical effort*: The design can be used efficiently and comfortably with a minimum of fatigue. Doors that are easy to open by people with a wide variety of physical characteristics demonstrate the application of this principle.
7. *Size and space for approach and use:* Appropriate size and space is provided for approach and use, regardless of the user's body size, posture or mobility. A science laboratory work area designed for use by students with a wide variety of physical characteristics and abilities is an example of employing this principle.

(Centre for Universal Design, 2010; Ginnerup, 2009)

Although UD standards address the needs of people with disabilities, its originators emphasised that it is a comprehensive concept designed to benefit *all* users. Thus, it involves developing products (appliances, settings, systems, and processes), which can be used by a wide variety of persons with different levels of abilities in a wide variety of settings, conditions, and circumstances. It goes beyond the issue of mere accessibility of buildings for people with disabilities and should become an integral part of policies and planning in all aspects of society (Ginnerup, 2009).

16.2 Universal Design for Learning

In the US, one of the key recommendations of the *President's Commission* (2002) was to incorporate universal design in accountability tools: 'all measures used to assess accountability and educational progress [should] be developed according to principles of universal design so that modifications and accommodations are built into the test that will not invalidate the results' (p.27).

But, as we shall see, UDL goes well beyond assessment. It recommends ways to provide cognitive, as well as physical, access to the curriculum, assessment and pedagogy. In education, it is usually referred to as 'Universal Design for Learning' (UDL), which 'refers to the creation of differentiated learning experiences that minimise the need for modifications for particular circumstances or individuals' (Villa et al., 2005, p.35). Thus, rather than adapting things for individuals at a later time, UDL environments are created from the outset to be accessible to everyone. In other words, 'pre-fitting' not 'retro-fitting' is the aim.

The Center for Applied Special Technology (2010) provides a useful definition of UDL as being:

> the design of instructional materials and activities that allows the learning goals to be achievable by individuals with wide differences in their abilities to see, hear, speak, move, read, write, understand English, attend, organize, engage, and remember. It is achieved by means of flexible curricular materials and activities that provide alternatives for students with disparities in abilities and background as well as those with no visible disabilities. [It] applies not only to the content, but also to goals, methods, and manner of assessment.

The Center goes on to point out that in UDL, (a) alternatives should be built into instruction and should not have to be added on later; (b) it is intended to be inclusive, not solely for those who have disabilities; and (c) it should comprise more than accommodations for physical, sensory, or cognitive disabilities, but should include students with differing abilities, cultural and linguistic backgrounds, and approaches to learning.

According to the Center on Universal Design for Learning, three overarching primary principles guide UDL:

- *Principle I: Provide Multiple Means of Representation* (the 'what' of learning). Students differ in the ways that they perceive and comprehend information that is presented to them. For example, those with sensory disabilities (e.g., blindness or deafness); learning disabilities (e.g., dyslexia); language or cultural differences, and so forth may all require different ways of approaching content. Others may simply grasp information better through visual or auditory means rather than printed text. In reality, there is no one means of representation that will be optimal for all students; providing options in representation is essential.
- *Principle II: Provide Multiple Means of Action and Expression* (the 'how' of learning). Students differ in the ways that they can navigate a learning environment and express what they know. For example, individuals with significant motor disabilities (e.g. cerebral palsy), those who struggle with strategic and organizational abilities (executive function disorders, ADHD), those who have language barriers, and so forth approach learning tasks very differently and will demonstrate their

mastery very differently. Some may be able to express themselves well in writing text but not oral speech, and vice versa. In reality, there is no one means of expression that will be optimal for all students; providing options for expression is essential.

- *Principle III: Provide Multiple Means of Engagement* (the 'why' of learning). Students differ markedly in the ways in which they can be engaged or motivated to learn. Some students are highly engaged by spontaneity and novelty while other are disengaged, even frightened, by those aspects, preferring strict routine. In reality, there is no one means of engagement that will be optimal for all students; providing multiple options for engagement is essential.

The Universal Design for Learning Guidelines on the next page further expands on these principles.

More specifically, citing Lance & Wehmeyer (2001), Wehmeyer et al. (2002) identified six criteria of UDL:

Equitable use: materials can be used by students who speak various languages; they address a variety of levels in cognitive taxonomies and provide alternatives that appear equivalent and, thus, do not stigmatise students.

Flexible use: materials provide multiple means of representation, presentation and student expression.

Simple and intuitive use: materials are easy to use and avoid unnecessary complexity; directions are clear and concise; and examples are provided.

Perceptible information: materials communicate needed information to students independent of ambient conditions or students' sensory abilities; essential information is highlighted; and redundancy is included.

Tolerance for error: students have ample time to respond, are provided with feedback, can undo previous responses, can monitor progress, and are provided with adequate practice time.

Low physical and cognitive effort: materials present information in chunks that can be completed in a reasonable time frame.

Elsewhere, the present writer pointed out that as rehabilitation services expand, particularly in the area of assistive technology, there will be an increasing need for some degree of international standardisation (Mitchell, 1999).

Universal Design for Learning Guidelines

I. Provide Multiple Means of Representation

1. Provide options for perception
- Options that customize the display of information
- Options that provide alternatives for auditory information
- Options that provide alternatives for visual information

2. Provide options for language and symbols
- Options that define vocabulary and symbols
- Options that clarify syntax and structure
- Options for decoding text or mathematical notation
- Options that promote cross-linguistic understanding
- Options that illustrate key concepts non-linguistically

3. Provide options for comprehension
- Options that provide or activate background knowledge
- Options that highlight critical features, big ideas, and relationships
- Options that guide information processing
- Options that support memory and transfer

II. Provide Multiple Means of Action and Expression

4. Provide options for physical action
- Options in the mode of physical response
- Options in the means of navigation
- Options for accessing tools and assistive technologies

5. Provide options for expressive skills and fluency
- Options in the media for communication
- Options in the tools for composition and problem solving
- Options in the scaffolds for practice and performance

6. Provide options for executive functions
- Options that guide effective goal-setting
- Options that support planning and strategy development
- Options that facilitate managing information and resources
- Options that enhance capacity for monitoring progress

III. Provide Multiple Means of Engagement

7. Provide options for recruiting interest
- Options that increase individual choice and autonomy
- Options that enhance relevance, value, and authenticity
- Options that reduce threats and distractions

8. Provide options for sustaining effort and persistence
- Options that heighten salience of goals and objectives
- Options that vary levels of challenge and support
- Options that foster collaboration and communication
- Options that increase mastery-oriented feedback

9. Provide options for self-regulation
- Options that guide personal goal-setting and expectations
- Options that scaffold coping skills and strategies
- Options that develop self-assessment and reflection

16.3 Summary

1. *Universal Design (UD) had its origins in architecture and engineering, and has been increasingly emphasised in education, where it is usually referred to as Universal Design for Learning (UDL).*

2. *UD may be defined as 'the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design'.*

3. *UDL involves planning and delivering programmes with the needs of all students in mind from the outset. It applies to all facets of education: from curriculum, assessment and pedagogy to classroom and school design.*

4. *Three overarching principles guide UDL: (a) provide multiple means of representation, (b) provide multiple means of action and expression, (c) provide multiple means of engagement.*

5. *More specifically, UDL requires that the following criteria be met (a) equitable use, (b) flexible use, (c) simple and intuitive use, (d) perceptible information, (e) tolerance for error, and (f) low physical and cognitive effort.*

CHAPTER SEVENTEEN

CONCLUSIONS

The purpose of this review was to outline international trends in the education of students with special educational needs (SWSEN), with the aim of informing the New Zealand Ministry of Education's current review of special education. It focused on countries other than New Zealand, particularly the UK, the US, Australia, Canada and those in continental Europe. It is noteworthy that developments in special and inclusive education show similar trajectories across countries, especially those in the developed western world.

The review investigated a range of issues, including paradigms of special needs; definitions and categorisation; disproportionality in the populations of those identified as SWSEN, response to intervention; the nature of educational contexts, with particular reference to features arising from educational reforms; funding and resourcing, the trilogy of curriculum, assessment and pedagogy; inclusive and non-inclusive settings, teacher education, parental involvement, and universal design for learning.

It did not include early childhood or post-school sectors, behaviour services, or giftedness, as these fall outside the scope of the current review of special education.

From the international literature surveyed, the following conclusions emerged:

1. *The education of SWSEN is a complex process with many inter-related elements, most of which apply to education in general and some of which are specific to SWSEN.*

2. *Educational provisions for SWSEN should not be primarily designed to fit the student into existing systems, but rather, they should also lead to those systems being reformed so as to better accommodate diversity, i.e., education should fit the student.*

3. *Inclusive education goes far beyond the physical placement of SWSEN in general classrooms, but requires nothing less than transforming regular education by promoting positive school/classroom cultures and structures, together with evidence-based practices.*

4. *New roles for special schools, including converting them into resource centres with a range of functions replacing direct, full-time teaching of SWSEN, should be explored*

5. *Educational policies and practices for SWSEN (indeed all students) should be evidence-driven and data-based, and focused on learning outcomes.*

6. *International trends in the education of SWSEN should be carefully studied and interpreted through the prism of local culture, values and politics to determine their relevance for New Zealand.*

7. *Issues in the education of SWSEN should be comprehensively researched.*

8. *Determining valid and reliable ways for measuring learning outcomes for SWSEN should be given high priority.*

9. *All decisions relating to the education of SWSEN should lead to a high standard of education for such students, as reflected in improved educational outcomes and the best possible quality of life, for example as outlined in the UK's Every Child Matters outcomes for children and young people.*

10. *The rights of SWSEN to a quality education and to be treated with respect and dignity should be honoured.*

11. *National curricula and assessment regimes should be accessible to SWSEN, taking account of the principles of universal design for learning.*

12. *Educational provisions for SWSEN should emphasise prevention and early intervention prior to referral for more costly special educational services, through such processes as graduated response to intervention.*

13. *All educational policies should be examined to ensure that any unintended, undesirable consequences for SWSEN are identified and ameliorated.*

14. *Any disproportionality in groups represented in special education, especially ethnic minorities and males, should be carefully monitored and ameliorated where appropriate.*

15. *Partnerships with parents of SWSEN should be seen as an essential component of education for such students.*

16. *Collaborative approaches involving wraparound service integration for SWSEN should be planned for and the respective professionals trained for its implementation.*

17. *The roles of educational psychologists are going beyond the assessment and classification of SWSEN to incorporate broader pedagogical and systems-related activities, not only with such students, but also in education more generally and in community contexts.*

18. *Initial teacher education and ongoing professional development for teachers and other educational professionals should take account of the recent emphasis on inclusive education.*

19. *In order to improve the quality of education for SWSEN, leadership must be exercised throughout the education system, from legislators to school principals.*

20. *Finally, in order to give expression to the above conclusions, it is vital that a comprehensive national policy document, along the lines of the UK's* **Code of Practice***, be developed.*

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