CHAPTER SEVEN

FUNDING AND RESOURCING

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. 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.
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

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

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.