

school funding

a review of existing models in European and OECD countries

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Local Government Association



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Published in February 2005
by the National Foundation for Educational Research,
The Mere, Upton Park, Slough, Berkshire SL1 2DQ

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ISBN 1 903880 91 2

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Acknowledgements

The authors would like to thank Henry Jackson, Manager (Resources) in the Directorate of Lifelong Learning at East Riding of Yorkshire Council for his contribution to consultation and discussion around the issues highlighted by the literature. We would also like to thank our colleagues at NFER: Ann Black and Hilary McElderry for providing secretarial support and library staff Hilary Grayson, who conducted the literature search, and Christine Taylor. Thanks are also due to NFER's Communications, Marketing and Information Services staff for production and dissemination of the report. Finally, the authors would like to thank the Local Government Association (LGA) for providing the NFER with the opportunity to undertake this piece of research and, more specifically, Roger Sykes and Ian Elliott for their contribution to discussions about the project and the issues raised.

Executive summary

Introduction

The methods of funding schools have been an issue of debate in England since the introduction of local management of schools in the early 1990s. Since then, delegation of funding to schools has increased. More recently, changes to the system of school funding have fuelled the debate in England about how schools should be financed. Information from other countries may be valuable in informing the future direction and development of the school funding system in England. It is therefore timely to interrogate the literature for alternative models of educational funding from other countries, as well as examining the literature for their strengths and weaknesses. The purpose of this research is to provide a review of existing models of school funding in European and Organisation for Economic Co-operation and Development (OECD) countries and the advantages and disadvantages of each model.

Financial source and flow

In Chapter 2, funding models based mainly on the initial source of public funding for education are discussed, together with the transfer of resources between levels of government and the final responsibility for financing schools.

- Three models based on the main initial financial source were identified. Public funding for education may originate mainly from central, regional or local sources. However, various sub-models within these models exist depending on the transfer of resources to other government levels, which may then have some influence over the allocations schools receive.
- For those countries for which OECD data was available, about half were mainly centrally funded, whilst the other half were regionally or locally funded.
- In a few OECD countries, public education funding originates solely from central government sources and, in these countries, schools receive their resources

directly. Whilst this model may appear to be consistent with greater school autonomy, experience from New Zealand suggests that this may lead to an increasingly centralised system.

- Also notable, in only one country examined (Belgium), which is mainly regionally funded, there was no funding at all from central government.
- In countries associated with extensive decentralisation, such as the Nordic countries, the majority of school funding comes from local authorities. In other larger countries, such as the USA, the majority of funding comes from regional government sources.
- Local authorities generally make use of a global allocation from the central authority and their own resources, such as taxes and other forms of income. This sometimes corresponds to only a very minor proportion of the total funds.
- Centrally allocated funding is most typically either earmarked for specific items of expenditure or takes the form of a block grant with which the local authority has considerable discretion.
- Regardless of the actual source of finance, central and/or local authorities may be responsible for distributing funding and making decisions about the amount of resources schools receive. This gives rise to three overarching models: central, local or shared responsibility.
- In the majority of European countries, responsibility for the financing of schools is shared between central and local government.

Division of responsibilities

This section of the report focuses on the roles of local authorities and schools and their financial autonomy. Models of local authority and school autonomy are presented, together with their pros and cons. Finally, the

governance and management issues that arise from increasing financial autonomy are discussed.

- In the great majority of European countries, local authorities have an important part to play in the financing and distribution to schools of their operational, capital and, sometimes, staff resources.
- Three local authority autonomy models were identified: financial autonomy (the most autonomous); shared responsibility and autonomy in the use of allocations (the least autonomous).
- The most financially autonomous European countries are the UK and the Nordic countries as they are empowered to establish the education budget for some or all of the expenditure linked to school service provision and thus exercise considerable responsibility and decision-making power as regards most expenditure on education.
- Between the two, however, power is more limited in the UK than the Nordic countries, since the award of resources to schools has to comply with formal requirements established by central government and the government regulates the way in which decision making is shared between schools and local authorities, whereas the Nordic municipalities themselves decide what they will delegate to schools.
- In contrast, in some countries, local authorities have no role in determining school funding allocations or in the delegation of responsibilities to schools, although they may be responsible for distributing allocations amongst schools.
- Schools tend to have a degree of freedom in the use of allocations. Three models were identified: autonomy in establishing budgets (the most autonomous); autonomy in the use of allocation and limited autonomy (the least autonomous).
- Autonomy relating to the management of operational resources and to a lesser extent, staffing, is most widespread. The management of capital resources is less frequently a school responsibility.
- Where autonomy is most limited, schools receive resources from central government which acquires goods and services whose quantity and nature it determines itself.

- Increasing autonomy within schools and local authorities raises a number of issues concerning accountability, monitoring and the time, skills, knowledge and information to engage in effective strategic financial planning.

Allocation of funding to schools

Chapter 4 examines the different models associated with the way in which funding is allocated to schools. Models that reflect the method of allocation, the range of factors taken into account and the way in which funding is allocated for pupils with special needs are discussed, together with their strengths and weaknesses.

- Three models, based on the method of allocation, were identified. Countries may adopt a common rule (e.g. a mathematical formula) for one or more resource categories (mainly teaching staff), or they may have no systematic rule for this purpose. In addition, the rule used may be local authority dependent. Some countries adopt several models depending of the level of education concerned or the kind of resources being allocated.
- Where there is a systematic rule, this would suggest a firm basis on which to allocate resources, however, where there is no systematic rule and decisions are taken on an ad hoc basis this may have the advantage of providing a more appropriate response to individual school circumstances.
- Where extensive decentralisation has occurred, municipalities act with relative autonomy when deciding the amounts allocated. They may apply a systematic rule, but there is no general rule across the whole country. This applies to all types of resources in some Nordic countries.
- Countries may use a limited range of basic indicators (e.g. pupil numbers) to allocate resources to schools or they may use a broad range of indicators, taking into account other factors (e.g. the geographical area). The range of indicators taken into account may be local authority dependent.
- More commonly, a broad range of indicators rather than a limited number of basic indicators is used on which to base school allocation, allowing greater

sensitivity and fairness, but this may also compromise simplicity and transparency.

- Countries may target resources for pupils with special needs by weighting the general school allocation, through centrally defined activities or through locally proposed projects or schemes.
- The most commonly used model for targeting resources for special needs in Europe is through centrally defined activities, giving central government control and ensuring that resources are directed towards national policies.
- The main difficulty with targeting special needs pupils through the general allocation is that these resources may not be used for the purposes intended, since schools have discretion as to how they use this funding.
- Since moves towards the direct funding of schools through a national funding formula have been mooted in the UK, there may be value in further exploration of such systems. What can be learnt, for example, from the experience of New Zealand, where a system designed to increase autonomy for schools appears to have reverted to a more centralised system?
- Equally, there may be value in further exploration of the funding systems in countries which are further down the local autonomy route than the UK at present. Are there, for example, lessons to be learned from a more detailed examination of the way in which Nordic countries operate their highly localised system of education funding?
- Further work on the relationship between funding models and educational performance, taking into account value added measures, may provide useful information. It may be that this is an area that could be examined in more depth at local authority level.

Recommendations

The literature review highlighted the dearth of available information on funding models and their strengths and weaknesses. Since this review has focused on a broad overarching exploration of the funding models used in many different countries, only broad recommendations can be made. However, areas for potential future research have been highlighted.

- In addition and in line with the recommendations made by the Audit Commission (2004), further research into the management and governance issues associated with school autonomy may prove valuable. For example, by examining in depth at local authority and school level the issues of accountability and financial decision making and the management of inter-school issues, which were raised by the literature.

1 Introduction

The methods of state funding of schools have been an issue of debate in England since the introduction of Local Management of Schools (LMS) in the early 1990s. Since then, delegation of funding to schools has increased and schools have been allowed to develop self government further (DfES, 2003). The Audit Commission (2000) called for clarification of the roles of schools, local authorities and government in determining how school resources are distributed and managed and others have also highlighted flaws within the system (e.g. West *et al.*, 2000). Options for changing the funding system have been highlighted (DETR, 2000) and there has been speculation about moves towards the direct funding of schools (e.g. Anderson *et al.*, 2001). More recently, changes to the system of school funding have fuelled the debate in England about how schools should be financed. In accordance with this, the LGA commissioned the NFER to conduct a research study into local authorities' and schools' views about the new funding system. The findings from this study are presented separately in two reports – an interim report, which is available online (Atkinson *et al.*, 2004) and this final report, published in February 2005.

These issues can also be set within a European context. The exchange and sharing of information across Europe and other countries would seem to be essential to promote understanding of existing methods of funding, how they have evolved and the promotion of good practice. According to Eurydice (The Information Network on Education in Europe) (2001), 'The financing and management of school resources are at the heart of the debate on the future of compulsory education. This is a concern shared by all policy makers in the European Union' (p.5). A number of educational funding issues have been highlighted as pertinent across Europe, including the extent to which decision making is centralised or decentralised, the most appropriate kind of allocation and the methods for calculating how resources should be distributed amongst schools to cater effectively for their needs (European Commission, 2000).

It is therefore timely to interrogate the literature for alternative models of educational funding, whilst extending its scope beyond the European Union to

countries comprising the Organisation for Economic Co-operation and Development (OECD), as well as examining the literature for the pros and cons of various models. This information may be valuable in informing the future direction and development of the school funding system in England.

1.1 Aims

The purpose of this research was to provide a review of existing models of school funding in European and OECD countries and to consider the strengths and weaknesses of each model. In this way, this study aims to inform the present debate about the future funding of education. Commensurate with this, the research aims were:

- to identify the main funding models in order to understand how the money flows from the taxpayer to the government and out to schools
- to ascertain the role of local government in such models
- to evaluate the pros and cons of each funding model
- to examine the governance and management issues around school funding.

The remainder of this chapter provides details about how the literature review was conducted, the various definitions used throughout the report and the scope of the study, before leading into the report with the overall structure.

1.2 Methodology

This section outlines the details of how the review was conducted. There were three phases to the review:

1. acquiring the relevant sources
2. identifying the research for inclusion
3. summarising the literature.

1.2.1 Acquiring the relevant sources

Initial discussions were held with NFER's library staff to establish the parameters of the review. The review was to be of published research literature relating to existing models of school funding in European and OECD countries. The main focus was on research specific to models of funding and their pros and cons, but research outlining backgrounds and trends in education funding, focusing on issues concerning decentralisation/centralisation and on management and governance issues was also included.

Studies to be considered for the review dated from 2000 (at least in the first instance) and were limited to compulsory education so as not to include further and higher education. Research was drawn from a range of different sociological, educational and psychological databases covering the UK and Australia. These included:

- Australian Educational Index (AEI)
- British Education Index (BEI)
- British Education Internet Resources Catalogue (BEIRC)
- PROCITE and Educational Resources Information Centre (ERIC).

Library staff also systematically searched the EURYDICE website and the World Wide Web and included searches on the following countries:

- Australia
- Canada
- France
- Germany
- New Zealand
- USA.

A range of literature was trawled, including: published studies (books and journals), conference reports, manuals/guidance documents, committee papers and unpublished reports, 'opinion' pieces (e.g. press releases and newspaper articles).

Search strategies for all databases were developed by using terms from the relevant thesauri (where these were available), in combination with free-text searching. The key words used in the searches are given in Table 1.1, and a brief description of each of the databases searched is given in Appendix 1.

Table 1.1 Key words for the literature review

Keywords for the literature review	
Budgeting	School Finance
Budgets	School Funding
Education Expenditure	Educational Governance
Educational Economics	Governance
Educational Expenditure	Governing Boards
Educational Finance	School Boards
Educational Funding	School Governance
Finance	School Governing Bodies
Financial Management	School Governors
Financial Policy	Local Education Authorities
Financial Support	Local Management of Schools
Funding	School Districts
Funding Formulas	School District Spending
Grants	
Resource Allocation	
School Accounting	

A record of the searches undertaken for the various databases has been documented in full and is outlined in Appendix 1.

1.2.2 Identifying the research for inclusion

The initial database searches using the identified key words produced 1367 results in total. In addition, the web-based searches produced 66 website references. Researchers also identified ten additional web-based sources. The results from EURYDICE produced a further 12 summary sheets on the education systems of France, Germany and the ten new European Union member countries. Given this, the researchers devised a literature review selection criteria based on the key areas most pertinent to the review. The criteria included:

- school funding approaches/models
- pros/cons of different funding approaches/models
- management and governance issues
- decentralisation/centralisation
- trends in financing.

Sources which met the established criteria were requested from the library. Of the 1367 studies obtained through the initial search, 61 were short-listed. All web-based sources were read and articles pertinent to the research were selected and downloaded. Of the 76 website references identified, 53 were downloaded. These were subsequently re-read for consideration for inclusion.

1.2.3 Summarising the literature

Having established the criteria for inclusion in the review and considered each of the articles which had been short listed, a number of publications were then selected to be summarised using the template shown in Appendix 2. The template was constructed to describe the research according to:

- focus/description
- country
- methodology
- background/trends in funding
- funding approach/model
- pros/cons of funding approach/model
- management and governance issues
- decentralisation/centralisation
- source
- other references.

Not every area of the template was relevant to every article and where an article focused on a particular area, e.g. a specific funding model, the other areas of the template did not require completion.

Forty-eight items were summarised for inclusion in the review, with those also short-listed having been read and considered for inclusion. Table 1.2 illustrates the number of summarised sources per country. Those items selected for summary were those which were seen as most relevant to the focus of the research, that is, they examined and provided examples of school funding models. In addition, a number also identified the advantages and disadvantages of such models. Many of

the items that were not summarised, however, informed the writing on school funding and provided useful background information.

Table 1.2 Number of summarised sources for each country

Countries	Number of summaries
Australia	7
Europe	5
New Zealand	4
United Kingdom	17
USA	11
Canada	2
Other (comparison of two or more countries)	2

For some countries, notably the United Kingdom (the UK), Australia and the USA, considerably more literature on school funding was identified. In the latter two cases, however, the number of sources obtained reflected the fact that school funding within those countries differed according to the numerous states within them. In this way, articles referring to funding models applicable to different states were obtained. In contrast, for New Zealand and Canada, there was a relatively small amount of literature overall.

1.3 Definitions

Since the levels of education, levels of government and types of schools vary across countries and may not be exactly equivalent, some clarification of the terminology used within the report for these three areas is required. In addition, the different types of resources referred to in the text are defined.

1.3.1 Levels of education

The number of years involved in compulsory schooling varies across different countries, as does what constitutes primary and secondary education. **Primary education** (the point at which formal studies, such as reading, writing and mathematics, start) usually begins at the age of five, six or seven and lasts for four to six years. In OECD countries it typically lasts for six years. In order to remain within the arena of compulsory schooling as far as possible, where the term **secondary education** is used throughout the report this refers to the OECD definition of 'lower secondary' education, which generally continues the basic programmes of

primary level, although teaching tends to be more subject-focused (OECD, 2003). This level usually consists of two to six years of schooling (the mode of OECD countries is three years). Lower secondary education may prepare students directly for work or for upper secondary education (for which the entrance age is typically 15 or 16 years). Where the term secondary education is used in a broader sense to apply to all secondary education (i.e. both lower and upper secondary education) this is specified within the text.

1.3.2 Levels of government

Generally, three levels of government can be distinguished: central, regional and local. It is important to note, however, that these levels and their definitions may not apply uniformly across all OECD countries. **Central government** includes all bodies at national level which make decisions regarding education. In the main, for the purposes of this study, the top level authority for education is generally considered to be the central government, since it usually involves central government or central government departments. However, in reality, this can include other top level authorities, since this responsibility may be entrusted to other bodies. **Regional government** (e.g. the provinces in Canada and the territories in Australia) is the first territorial unit below the national level in countries that do not have a federal type of governmental structure and the second territorial unit below the nation in countries that do (since the first territorial unit below the nation in federal countries is the state government). **Local government** (e.g. local authorities in England or the municipalities in Sweden) is the smallest territorial unit in the nation with a governing authority. In the main, throughout the report, a primary distinction is made between central government (or the top level authority for education) and intermediate authorities (at regional and local level).

1.3.3 Types of schools

This study relates to the schools involved in full-time compulsory education and deals mainly with those in the public sector. This does not always match the definitions in various countries. Schools also have to be defined according to the various bodies that take decisions regarding the management and award of resources (e.g. school boards, governing bodies) since many of these are actively involved in decision making

about resources. In addition, funding models or methods may vary between different types of schools in a single country and, where relevant, this is highlighted within the text. The focus of the study was on public schooling and public sources of finance. Private schooling and private sources of finance have only been touched on briefly where necessary in the country illustrations in order to provide a complete picture.

1.3.4 Categories of school resources

Since models or methods of funding often vary with the types of resources involved, it is important to classify the different types referred to within the text. In the main, these are staff, operational and capital resources. **Staff resources** refer to all the human resources available for use by a school, whether focused on teaching, administration or other duties. Where teaching and non-teaching staff need to be distinguished, this is noted within the text. **Operational resources** include all services and supplies written off over a year (water, electricity, heating, photocopies, telephone and maintenance etc.). **Capital resources** refers to durable facilities (buildings and premises, playing fields, furniture, computers etc.) and they include both fixed assets (immovables) and movables.

1.4 The scope of the study

A number of important points need to be made about the scope of this study.

The focus of this study centred on identifying models of school funding, together with their pros and cons and illustrating these models with examples from different European and OECD countries. It is important to note that it was never intended that this study provide a comprehensive comparative study of the funding systems in different countries. Information about the different funding models in all OECD countries was by no means uniformly available. More directly comparable data was available for the countries in the European Union. The examples used to illustrate the models therefore tend to reflect this imbalance.

The financing of education is complex and in order to describe useful theoretical models of funding systems

and relate them to different countries, it has therefore been necessary to break down different aspects of education funding systems and to make broad generalisations and simplifications. Where the detail is important or where there are additional factors to be considered that have a bearing on the value of the models discussed, this is highlighted within the text. In order to demonstrate the overall complexity, overarching models have been applied to three contrasting countries and these have been presented in the overview in Chapter 5.

Whilst many of the sources of literature used were up to date, because of the inevitable delay between collecting data and reporting (particularly where this was from a range of different countries), the point of reference was often some years earlier. This means that a large part of the financial information used to compile this report dated from around the year 2000. Financial systems (particularly in the UK more recently) are changing all the time and it is inevitable that, in some cases, things have moved on since this data was collated. However, the most up to date information available at the time of writing has been utilised.

In addition, as part of the sections on the strengths and weaknesses of the different models, an attempt has been made to examine the relationship between these models and the overall educational performance of different countries. For this purpose, for those countries for which data was available, the means of students' performance on the Programme for International Student Assessment (PISA) literacy, mathematical literacy and scientific literacy scales have been used (OECD, 2003). These three scores have been used to produce an overall mean value and countries were given a ranking according to this mean. Clearly, many other factors apart from funding systems (e.g. curriculum organisation, teacher/pupil ratio etc.) will affect these scores and this takes no account of any type of 'value added' evaluation and may simply reflect different levels of social deprivation amongst different countries. It must also be borne in mind throughout this report that the relatively small numbers in each of the model types and the variation in numbers of countries in different model types means that the findings in relation to performance will not be statistically significant. Where points of possible variation and interest emerged, however, these have been highlighted.

1.5 Structure of the report

The report is divided into two parts. Part one presents the funding models that were identified from the literature review and part two contains the country illustrations, which exemplify the models. The country illustrations are also referred to where relevant throughout the text.

Part one considers the funding models identified and is divided into four chapters.

Chapter 2 begins with examination of the models associated with the initial sources of finance for compulsory schooling and the transfer of resources to schools. It then looks at where the overarching responsibility for school financing lies. Different models are described based on whether this is the responsibility of central or local government or whether this is a shared responsibility between the two.

Chapter 3 focuses more specifically on the roles and responsibilities of local authorities and schools. In each case, models based on varying degrees of autonomy are described and their advantages and disadvantages highlighted. Linked to the advantages and disadvantages, increasing local autonomy gives rise to a number of governance and management issues and therefore the final section of this chapter is devoted to the issues raised for local authorities and schools.

Chapter 4 examines the way in which funding is allocated to schools. First, it describes different models based on the methods of allocation (i.e., whether a common rule is applied across all schools or not) and their pros and cons. It then focuses on whether a broad or limited range of factors are taken into account, the associated models and their strengths and weaknesses. Finally, broad models for the allocation of funding for pupils with special needs, together with their advantages and disadvantages, are discussed.

Chapter 5 provides an overall summary. First, an overview of the funding models described throughout the report is presented. This overview incorporates diagrams which pull together the models as they apply to three contrasting European countries and presents some analysis of the relationship between the different funding models. Finally, it presents some recommendations.

Part two contains nine country illustrations. Five countries have been included from Europe. These were selected to reflect contrasting funding systems (i.e. those with less to more autonomy) as identified within the literature. Country illustrations are also provided for four other key OECD countries: the USA (with two states as examples examined in more depth), Canada (with two provinces as examples examined in more depth); New Zealand and Australia. It may be important to note, since Japan ranks highly in terms of

overall educational performance compared to other OECD countries, the searches undertaken failed to highlight information about its funding systems. The structural outline of each country illustration is largely based on the outline of the main body of the report. Following the presentation of some key educational statistics and contextual information for each country, the illustrations include sections on financial source and flow, division of responsibilities and allocation of funding to schools.

part one: funding models

2 Financial source and flow

This chapter considers where the finances for compulsory schooling come from, how resources get to schools and who has the final responsibility for the financing of schools. The first section focuses on where school funding **originates** from and, since the body which funds schools may not be the same as the body which distributes resources to schools, it also takes into account the way in which resources are **transferred** to the authorities responsible for distribution. Models based on the initial source and transfers are thus identified. The second section touches on the overall final **responsibility** for the financing of schools, (i.e. who is responsible for **distributing** resources and for making decisions about the amount schools receive?). The role of local authorities and schools is discussed in more depth in Chapter 3.

2.1 Financial source and transfer

Compulsory schooling may be funded from central, regional or local sources and, most frequently, a combination of these. Local authorities generally make use of their own resources (e.g. local taxes and other forms of income), as well as the funding they receive directly or indirectly from the central authority. In Germany, for example, besides the allocation they receive from central government (the *Land*), the bodies that maintain schools (the *Schulträger*) are funded by their constituent municipalities, which themselves possess their own revenue (European Commission, 2000). In France, the municipalities or *départements* obtain funds from the Ministry of the Interior but are also able to use resources corresponding to a variety of local taxes. The same applies to the municipalities in Italy. In Luxembourg, Portugal, Finland, Sweden, Iceland, Liechtenstein and Norway, municipalities funded by the government also levy their own taxes. Similarly, in the UK (England, Wales and Scotland), the local authorities raise money from local taxes. However, the proportion of funding from central, regional and local sources varies from one country to another. The contribution from regional and local sources can constitute a very small proportion of the total resources available to schools, with the central authority providing the majority of funding. On the other

hand, the contribution from local authorities can be more significant. On average, across all OECD countries, only 49 per cent of the initial public funding comes from central rather than regional or local sources suggesting that decentralisation is a significant factor in the funding for primary and secondary education (OECD, 2003). It should be noted that the OECD figures quoted here relate to funding for primary, secondary and post-secondary non-tertiary education.

In addition, in many instances, the body which purchases educational resources for schools is not necessarily the same body which actually provides the financing, thus a transfer of resources has to take place between the levels of government involved (usually from central government to intermediate authorities or direct to schools) (European Commission, 2000). Where the same authority both provides funding and purchases educational resources, no financial transfer of resources is necessary. Where an intermediate authority is responsible for the acquisition of goods and services for schools, financial resources are transferred to the intermediate authority from central government. Where schools themselves acquire the goods and services they use, the necessary financial resources may be transferred to them from central government, either directly or indirectly via intermediate authorities. Three scenarios are possible:

1. local authorities purchase the resources with funding they receive from central government
2. schools purchase the resources with funding they receive indirectly from central government via local authorities
3. schools purchase the resources themselves with the funding they receive directly from central government.

Three factors, therefore, have to be taken into account when considering the influences on the financing of schools: the initial source of finance, the levels of government involved (both in financing and the transfer of resources to schools) and who is finally responsible for the financing of schools. All these factors may have a

bearing on the financial decisions made. The initial source of funds has been used as the main basis for the development of models, however, the levels of government involved and the way in which resources are transferred give rise to a number of sub-models. The models will be described and then their pros and cons examined.

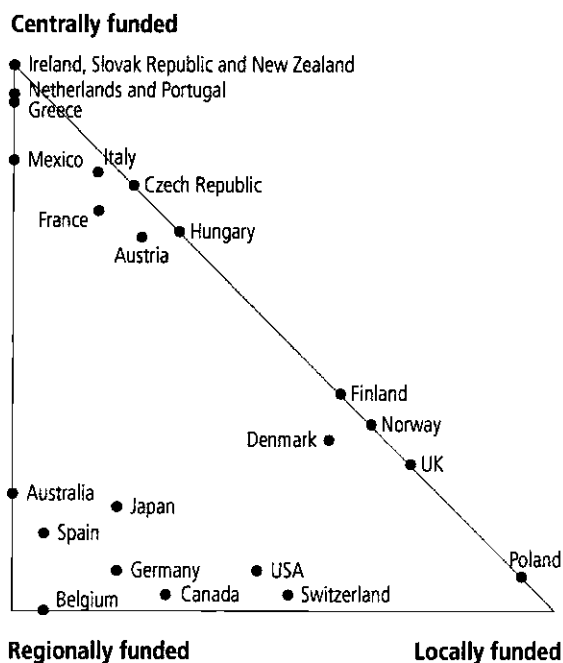
2.1.1 Financial source and transfer models

In the countries examined, three main models were identified, based mainly on the initial source of funding, i.e. funded:

- mainly by central government
- mainly by regional government
- mainly by local government.

Figure 2.1 provides a diagrammatic representation of the spread of countries in relation to these models, showing that the majority of countries tend to be either mainly centrally or regionally funded.

Figure 2.1 Diagrammatic representation showing the financial source models



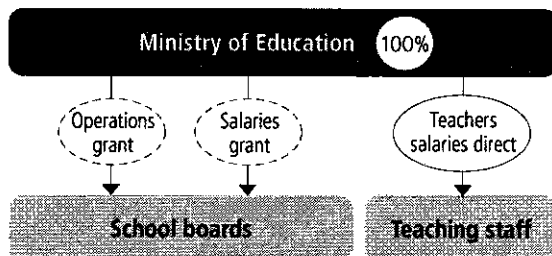
Funded mainly by central government

In 12 out of the 30 OECD countries for which data was available, public educational funds came mainly from central government sources, despite the fact that, as stated above, on average, across all OECD countries, only

49 per cent of the initial funding comes from central rather than regional or local sources (OECD, 2003). This was the most common model.

According to OECD data relating to 2000, three countries (New Zealand, Ireland and the Slovak Republic) were notable in that they have entirely centralised education funding systems, where public funds come solely from central government sources (OECD, 2003). This inevitably has implications for government control over education. Although virtually 100 per cent of the funding for schools in New Zealand is provided by the government, schools may also raise a percentage of revenue themselves through various means, including voluntary fees, fund raising activities, foreign fee-paying students and parental donations. Revenue through these means accounted for seven per cent of school revenue in 2002 (Harrison, 2004). In the main, resources in these countries are transferred direct from central government to schools. Figure 2.2 shows the funding source and flow in New Zealand. School boards are provided with an operations grant and a salaries grant (to remunerate staff holding designated management positions) direct from central government. The operations grant is used to employ administrative staff, for school maintenance, for services (e.g. electricity), for books and can be used for extra teaching staff and learning resources (Harrison, 2004). Teaching staff receive their salaries direct from central government. A further example of this highly centralised model can be found in country illustration 2 (Ireland). However, it should be noted that the vocational schools and community colleges in Ireland receive their resources from the government via the Vocational Education Committees (VECs) of the local authorities.

Figure 2.2 Funding source and flow in New Zealand

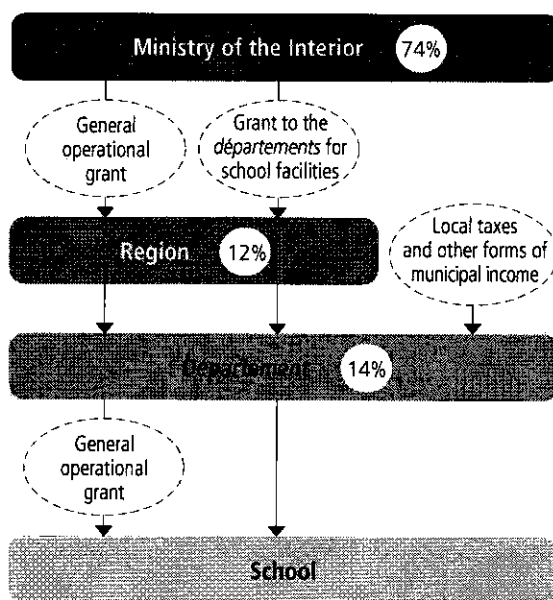


Source: Various

In nine of the 25 countries for which OECD data was provided, the main, but not the sole source of public educational funds was the central government and thus

the central government is the main financial stakeholder in education. According to OECD data, this is the case for Portugal and Greece, where a small amount of additional funding comes from regional sources and in France, Italy, Hungary and the Czech Republic, where a slightly more significant contribution comes from local government sources (OECD, 2003). Schools in Italy obtain some of their financial resources directly from the Minister for Public Education, some from the *provveditorato agli studi* (regional government) and some from the *consiglio comunale* (local government) (European Commission, 2000). Both these intermediate authorities are funded by the Ministry. In France and Italy, the municipalities and *départements*, which obtain funds from the Ministry of the Interior are also able to use resources corresponding to a variety of local taxes. Figure 2.3 shows the financial source and flow in the French system for lower secondary schools. Secondary schools receive most of their grants (e.g. the general operational grant) from the *départements*, which are themselves largely financed by the government. The *départements* also receive, for example, a grant from the government for school facilities.

Figure 2.3 Funding source and flow in French lower secondary schools



Source: Diagram adapted from European Commission (2000)

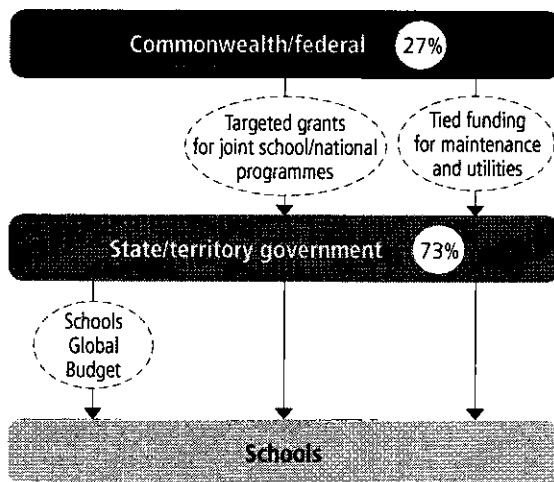
Different variations of this model are not only dependent on the extent of financial contributions from regional and local government, but also on whether the intermediate authority (i.e. regional or local government) or schools themselves are responsible for the acquisition of goods and services. Where an

intermediate authority is responsible for the acquisition of goods and services for schools, financial resources are transferred from central government to the intermediate authority (European Commission, 2000). Such transfers may be earmarked for a specific item of expenditure, or take the form of a block grant that the intermediate authority has to share out across various headings, sometimes related to areas other than education. On the one hand, this may allow the intermediate authority greater discretion in the distribution of resources to schools, but, on the other, this may restrict funding because of the pressure on resources from other services. Where schools are responsible for the acquisition of goods and services, resources may be transferred to them via the intermediate authorities, which may possess a significant measure of managerial autonomy and may use this to influence the allocation of resources.

Funded mainly by regional government

In eight of the 25 countries for which OECD data was available, the greatest proportion of public funding came from regional sources, usually with much smaller proportions from central and local government (OECD, 2003). According to OECD data, in Belgium, Spain, Germany, Switzerland, the USA, Canada, Australia and Japan a significant proportion (in most cases, over 70 per cent) of public funding comes from regional government. In some instances, notably, the USA and Switzerland, funding from regional and local government is more equal, although most still comes from regional sources. Figure 2.4, which shows the financial source and flow in Australia for government schools, is an example of this type of model. The commonwealth government in Australia provides funding through the collection of income tax. It provides a source of tied, supplementary funding for specific utilities and maintenance use and also for targeted grants for joint school or national programmes. Government schools receive the majority of their funding from state and territory governments, who collect their own income tax, through the Schools Global Budget. Further examples of this regional model can be found in country illustration 6 (the USA) and 7 (Canada). This tends to be the case for larger countries and, in these cases, all three levels of government are involved in some way in the financing of education. In most cases, for example, the states and territories of Australia, the regional government has 'considerable' discretion over the actual amount they will spend on education.

Figure 2.4 Funding source and flow in Australia



Source: Various

In Europe, it is notable that Belgium, which is mainly regionally funded, is the only country with no central initial source of funding. In Belgium, the provinces and municipalities possess their own tax resources in addition to the allocation they receive from the regional government (European Commission, 2000). In Germany, besides the money that they receive from the *Land* (regional government) the bodies that maintain schools are funded by their constituent municipalities, which themselves possess their own revenue (European Commission, 2000).

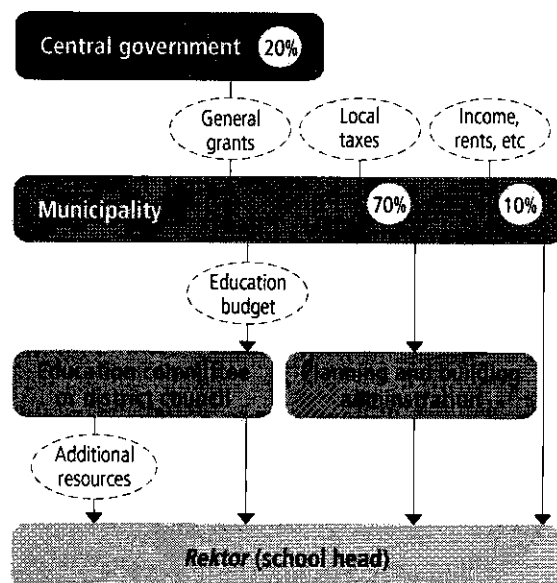
In Canada, education is the responsibility of each province or territory (regional level) and education is financed through a combination of provincial and local revenues with the greater proportion coming from provincial sources (OECD, 2003). Individual provinces vary in the proportion of funding provided by the province and local taxes. In Ontario, for example, education funding comes from provincial revenue, including personal and corporate income tax, retail sales tax and other general taxes (e.g. alcohol, petrol) and local property tax revenue (see Figure 7b in the country illustrations). In 1998-9, 57.5 per cent of total school board expenditure was financed by provincial grant and 42.5 per cent financed by education property tax (local revenue) (National Center for Education Statistics, 2000). Provincial grants supplement the difference between school boards' funding allocation and the education tax revenue raised. However, nationwide, provincial governments provide the greater proportion (70 per cent compared to 26 per cent from local taxes etc, with the remaining four per cent coming from central government) (OECD, 2003).

In the USA, education funding is primarily the responsibility of the state (or region), which provides 51 per cent of resources and local government or school districts, which provide 41 per cent of the resources, with the federal government providing only eight per cent of the total funding for education (OECD, 2003). Furthermore, the funding for education provided by the federal government is an effort to supplement, not supplant state support. The levels of funding provided by the state and local district are primarily raised through property tax. Individual states vary enormously in the proportion of funding provided by state and local taxes (see examples in country illustration 6) however, nationwide, the state and local shares have been relatively equal for over 20 years (Sugarman, 1999).

Funded mainly by local government

Five out of the 25 countries for which OECD data was available were funded mainly from local sources. In this model, the majority of funding comes from local authorities, giving them the main stake in education and this appears to be linked to countries in which, perhaps inevitably, local authorities have significant autonomy. According to OECD data, this applies, for example, to most Nordic countries, Poland and the UK (OECD, 2003). Romania, prior to 2001, was the only country in which the financing of compulsory education by the local authorities came solely from their local sources (European Commission, 2000). Figure 2.5, which shows the financial source and flow in Sweden, is an example of this type of model.

Figure 2.5 Funding source and flow in Sweden



Source: Diagram adapted from European Commission (2000)

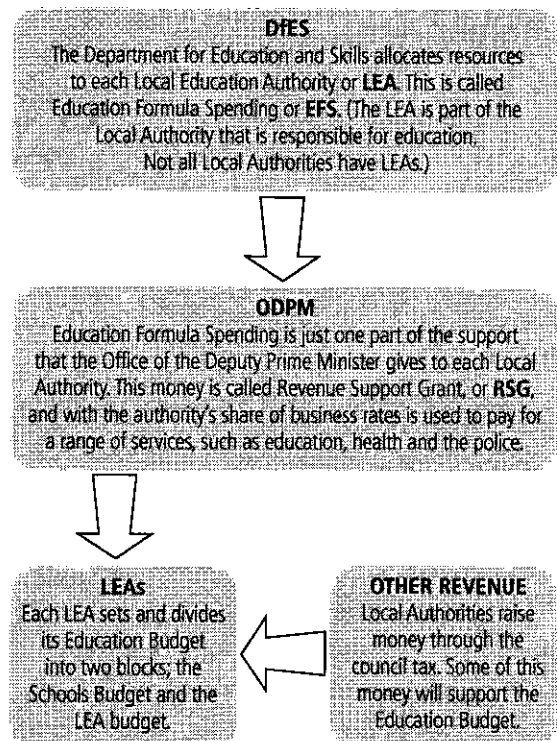
In Sweden, municipal tax revenues are the municipality's main source of income apart from income taxes, which finance the majority of municipal education. The municipalities also receive a state grant, but this is not earmarked for a specific activity (Eurydice, 2004). The structural element of the grant is determined by several underlying factors, such as the size of the population in the municipality, its age structure, population density, social structure and number of immigrants. Tax revenues and state grants thus provide most of the resources for compulsory education in the municipalities. In Denmark, the municipalities levy a property tax as well as income tax. In Denmark, schools receive money from the local authorities, which obtain some of their funding from central government in the form of a block grant to cover a wide variety of services.

Whilst OECD figures suggest that the UK also conforms to a mainly locally funded model, this does not appear to take account of the fact that local government funds are derived mainly from central government grants, with the balance raised through local taxes. All maintained schools in England and Wales, for example, receive their revenue funding from their local authority (Eurydice, 2004) and the school governing body is financed by the local authority. Local authorities receive this funding from two principal sources: grants from central government in the form of a Revenue Support Grant (RSG) and a share of the money raised by the National Non-Domestic Rate. Money is raised by the local authority itself through the council tax charge levied on householders to cover the cost of local services, from its capital receipts and from the income from charges for services. The RSG is paid to local authorities by the Office of the Deputy Prime Minister (ODPM) to cover the full range of local services, including education (see Figure 2.6). Local authorities therefore have a considerable degree of discretion in terms of the amount of resources which are then allocated overall for education, compared to other services, such as Health and Social Services etc.

2.1.2 Financial source and transfer models: pros and cons

Review of the literature did not reveal overt expressions of the relative implications of the different models described. However, implicit with the main source of funding and whether the majority of funding for compulsory schooling is provided by central, regional or local government level, is that such bodies may have a greater influence over educational matters relative to

Figure 2.6 Diagram showing the flow of funds to local authorities in England



Source: Adapted from Office of the Deputy Prime Minister (ODPM) (2004)

other levels. With regard to the USA, Carey (2002) notes, for example, that many states still rely most heavily on local property taxes and therefore there is more local control. Similarly, the National Center for Education Statistics (2000) highlights that, in Ontario, the province determines the total spending allocation for school boards as well as the education tax rates on all taxable property and school boards may not raise any property taxes for their own purposes. As such, the province has ultimate control over the financing of education. Where local authorities are the main source of finance (e.g. the Nordic countries), local authorities inevitably have significant financial autonomy.

Where schools are funded solely by central government and receive their resources direct, this model would seem to lend itself to having clear accountability. However, whilst this approach might also seem, on the surface, to offer schools greater autonomy, the experience in New Zealand suggests otherwise. In New Zealand, the decentralisation of government funding for education involved the provision of resources directly to schools. The principle behind this approach was that it would increase schools' autonomy and, consequently, enhance efficiency and effectiveness. However, since the move towards decentralisation, more and more items have been transferred into the operations grant. In this way,

the state has been able to keep much central control over the education system and individual schools, particularly in terms of funding. As such, the current system in New Zealand remains in many respects highly centralised (Wylie, 1998).

Where it is necessary, the nature of the transfer of resources may influence the amount of leeway the receiving body has in the allocation of resources, i.e. whether, in the transfer of resources, for example, the central government or the intermediate authority determines the amount which has to be allocated for each type of resource. For example, where the main source of finance is central government and schools receive their resources via local authorities, the latter may be allocated resources as a block grant for other services as well as education and this gives them considerable discretion over their use (European Commission, 2000).

In addition, the number of bodies involved and the different levels of government involved may have implications for complexity and the possibility of fragmentation of the funding which eventually reaches schools (Eurydice, 2001). In the regional model in particular, for example, where a number of levels of government may be influential in the resources that schools finally receive, this may lead to greater complexity and uncertainties regarding accountability within the system.

Data for the initial source of finance and overall performance rankings was available for 23 OECD countries (see Appendix 3). When the models (i.e. determined mainly by the source of funding) were examined for different countries in relation to their overall educational performance data, there appeared to be no relationship between whether schools were mainly financed from central, regional or local sources and their overall educational performance ranking. This suggests that other factors may be more significant in determining educational performance.

2.2 Responsibility for financing

The last part of this chapter looks at the models associated with the overarching responsibility for the financing of education, before moving on to examine this division of responsibilities in more depth in Chapter 3. Regardless of the actual source of finance, following

the transfer of resources, financing may be the responsibility of central and/or local authorities. It is these authorities which distribute funding and make decisions about the amount of resources schools receive. Models of financial responsibility will be described and their advantages and disadvantages discussed.

2.2.1 Models of financial responsibility

The European Commission (2000) identified three models concerning the financial responsibility for compulsory schooling. These were where the responsibility was:

- with the central government
- shared by central and local (or regional) authorities
- with the local (or regional) authority.

Responsibility of central government

In this model, financing is the exclusive responsibility of the central authority. In Europe, for example, this is the case with regard to Greece and Ireland in the case of vocational schools and community colleges (Eurydice, 2001). The financing of compulsory education is only decentralised in the sense that the regional and local authorities may be responsible for distributing allocations to schools, but the amounts of the allocations are determined by central government. This is also the case in New Zealand, where financing is primarily the responsibility of the Ministry. Further discussion relating to this model can be found in country illustrations 2 (Ireland) and 8 (New Zealand).

Shared by central and local (or regional) authorities

In this model, the financing of compulsory education is shared between the central and local authorities. The funding of teaching staff and/or non-teaching staff resources, is, in most cases, the responsibility of the central government, whereas operational and/or capital resources are allocated by the local authorities (Eurydice, 2001). This applies to the vast majority of European countries. However, some types of resources, in some countries, may be financed jointly by central and local authorities. For example, this applies to Slovenia, where teaching staff and non-teaching staff, operational resources, moveables and immoveables are financed by the central government and the local authorities.

In Australia, the responsibility for financing is also shared between the central and regional authorities. The central authorities pass both tied and untied grants to the territories and states which dictate the flexibility at state level. For example, the states and territories have 'considerable' discretion over the actual amount they will spend on education from untied grants. They are more restricted over their use of tied grants, however, where funding is aimed at capital or recurrent expenditures, such as staffing. Operations and maintenance in Australia is controlled by both the commonwealth and state through the Statement of Resource Entitlement.

Responsibility of local (or regional) authorities

In this model, the financing of all categories of resources is undertaken by the local authorities. In Europe, in the five Nordic countries, the UK, Bulgaria, Lithuania and Poland, decentralisation of financing to the local authorities (and, in the case of Poland, to the regional authorities as well) is extensive (Eurydice, 2001). They are in charge of financing all categories of resources (staff, operational and capital resources). See country illustration 5 (Sweden) for further details.

This model also applies to the majority of US states (see country illustration 6). The financing of compulsory education is primarily a state (regional) and local matter. In recent years, the general trend has been toward a larger portion of state funding and control, however, the proportions and funding structures (including the degree of centralisation of funding at the state level) vary. Many states, including New York and Massachusetts, still rely most heavily on local property taxes and therefore there is more local control. Other states (e.g. California and Michigan) have state controlled school finance systems. Hawaii is unique in that it has a 'full state funding' system whereby the state pays for everything and local districts have no control over funding levels (Carey, 2002).

In Canada, financing education is generally the responsibility of the province/territory (regional level), although this may differ according to each provincial system. In Ontario, for example, the province determines the total spending allocation for school boards as well as the education tax rates on all taxable property. In addition, school boards may not raise any property taxes for their own purposes. As such, the province has ultimate control over the financing of education.

(National Center for Education Statistics, 2000). See country illustration 7 (Canada) for further details.

2.2.2 Models of financial responsibility: pros and cons

Review of the literature did not reveal overt expressions of the relative implications of the specific models described. However, the major implication, as with the source of finance, concerns the extent of control over educational matters. Where the responsibility for the financing of education falls mainly to central government, the latter exerts more control and where the responsibility lies with local government, local authorities have more control.

Models of financial responsibility were examined in relation to the educational performance of different countries and this information is presented in Appendix 4. As with financial source and transfer models, it was difficult to discern any pattern because of the limited information available. However, there were more countries in which responsibility for financing resided with local government in the top half of the ranking table compared to the bottom half. Overall, however, it is likely that factors other than the models of financial responsibility are more influential in overall educational performance.

It is when we examine in more depth the roles and responsibilities of local authorities and schools in the financing of compulsory schooling and different models of local authority and school autonomy, in Chapter 3, that the pros and cons of different models emerged from the literature.

2.3 Summary

In this chapter we considered funding models based on the initial source of funding for education, the levels of government involvement and who is responsible for its distribution and their advantages and disadvantages. Then we examined funding models based on where the final responsibility for the financing of schools resided. The following key points emerged:

- for those countries for which OECD data was available, about half were mainly centrally funded, whilst the other half were regionally or locally funded

- only in a very small number of OECD countries (notably, Ireland and New Zealand) is compulsory schooling financed solely from central government sources and, in these countries, schools receive their resources directly. Whilst this model may appear to be consistent with greater school autonomy, experience suggests that this may lead to an increasingly centralised system
- also notable, in only one country examined (Belgium) there was no funding at all from central government
- in some countries, notably the Nordic countries, where this is associated with extensive decentralisation, the majority of school funding comes from local authorities. In others, generally larger countries (e.g. Australia, the USA), the majority of school funding comes from regional sources, with smaller proportions from central and/or local level
- when resources are transferred from central government to local authorities, they may be earmarked for a specific item of expenditure, or take the form of a block grant that the local authority has to share out across various headings (sometimes related to areas other than education), giving the local authority considerable discretion over education funding
- local authorities generally make use of their own resources (e.g. local taxes and other forms of income), as well as the funding they receive directly or indirectly from the central authority. This sometimes corresponds to only a very minor proportion of the total available to them
- regardless of the actual source of finance, central and/or local authorities may be responsible for distributing funding and making decisions about the amount of resources schools receive. This gives rise to three overarching models: central, local or shared responsibility
- in the majority of European countries, responsibility for the financing of schools is shared between central and local government.

3 Division of responsibilities

In the last two decades there has been a move in many countries to improve the efficiency and cost effectiveness of schools and this has led to examination of the way in which the different bodies involved in financing schools share responsibilities (European Commission, 2000). In the main, this has resulted in a move towards greater financial autonomy of schools. This chapter of the report examines the division of responsibilities between those involved in the financing of schools: local authorities and schools. In each case, different models based on varying degrees of autonomy are described and their pros and cons explored. A move towards local autonomy, as suggested by the different models, gives rise to a number of governance and management issues. This is therefore the focus of the final part of this chapter.

3.1 The role of local authorities

In many European countries local authorities play a significant part in the provision of compulsory education. However, it should be noted that, in a limited number of countries, there is no role for local authorities (e.g. New Zealand) since the government provides and allocates funding directly to schools (as noted in Chapter 2) and this funding is then managed by the school's board of trustees. In the majority of countries, where local authorities do have a role, this involvement may result in different levels of autonomy depending on the country and the kinds of schooling considered. The level of autonomy depends on the leeway local authorities have for three different aspects of school funding, reflecting their different roles: the financing of schools; the distribution of funding; decisions to delegate management of the budget to schools (European Commission, 2000).

Some local authorities undertake the **financing of schools** and determine the amount of resources to be allocated for education. To this end, they make use of government allocations as well as their own resources. In other cases, the sum earmarked for education is fixed at a higher level but the local authority may (or must) supplement it with their own resources. Thirdly, the

local authority may play no part at all in deciding the overall scale of the budget but handles its distribution among the schools concerned. Irrespective of the way in which the overall budget for education is financed, the local authority may possess greater or lesser autonomy in the **distribution of the funding** among schools. The various restrictions with which it may have to comply at this stage provide a good indication of its room for manoeuvre. There may be a distribution formula for allocation to schools, or regulations that have to be respected during the award of different types of resources.

Following distribution, local authorities may be involved in **decisions to delegate** the management of the budget to schools. Either schools are responsible for acquiring goods and services or this task is performed by local authorities. The way in which responsibilities are shared may be governed by national legislation, or left entirely to the discretion of local authorities. This is one of the main pointers to the degree of local autonomy a local authority possesses. These three key factors are therefore the most significant variables in the autonomy of local authorities and the combination of these factors results in three main models (as detailed in European Commission, 2000), depending on how far local authorities are autonomous. The three models will be described and their strengths and weaknesses will then be discussed.

3.1.1 Models of local authority autonomy

The three key factors described above give rise to the following three models:

1. financial autonomy
2. shared responsibility in the financing of operational and capital resources
3. autonomy in the use of allocations.

Table 3.1 provides a summary of the three models. Where an area is shaded this represents autonomy for

local authorities, whilst unshaded areas indicate no autonomy.

Table 3.1 Models of local authority autonomy

	Model 1 Financial autonomy	Model 2 Shared responsibility	Model 3 Autonomy in the use of allocations
Financing		Shared with government	No autonomy
Distribution			
Delegation		No autonomy	No autonomy

It is important to note that, whatever degree of financial autonomy may be suggested by these models, this may be limited by official norms, standards or regulations, usually laid down by central government. Where this has an impact on the models this is highlighted in the examples.

Financial autonomy

In model 1, the local authority has some latitude in preparing and making use of the budgets established for the various categories of resources (this also applies to other services in addition to education). The main feature of this model is that local authorities are empowered to establish the education budget for all or some of the expenditure linked to school service provision. The resources that they use for this purpose come from different sources, including the general government allocation for various local authority services, local taxes and the authority's own revenue. This model appears to apply to many countries in Europe, but to varying degrees, depending on which types of resources and formal requirements laid down by central government, with the Nordic countries and the UK being the most autonomous. However, in reality, local authority autonomy in the UK is somewhat constrained within the current school funding arrangements by the introduction of the minimum funding guarantee for schools and government requirements to passport funding to schools (Atkinson *et al.*, 2004; Audit Commission, 2004).

In the five Nordic countries and the UK, local authorities are responsible, in accordance with this model, for **staff, operational and capital resources** (Audit Commission, 2004). In the five Nordic countries, local authorities determine the overall amounts to be allocated to the various categories of resources and decide whether or not the management of resources will be delegated to schools. However, there are certain

limits to this autonomy in the case of Finland and Iceland. In Finland, for example, instead of receiving an overall subsidy for all services, municipal authorities get two specific allocations for education, one for capital expenditure and one for operational costs, including staff. The amounts of both are calculated by the Ministry (i.e. at central level) to cover a proportion of the estimated cost of education. The municipalities may supplement these from their own resources and ultimately themselves decide how much they invest in education. Decision-making power in budgetary matters lies with the municipal council. Further details from Europe can be found in country illustrations 1 (UK) and 5 (Sweden).

In the USA, individual states have financial autonomy over the generation and allocation of funding for education (Carey, 2002). Because the US constitution does not designate a public education role for the federal government, the responsibility for education falls to the states. The federal government provides assistance to the states to supplement, not supplant state support. States raise their own resources for education and are free to allocate them according to any formula approved by state legislature. Further details can also be found in country illustrations 6 (USA) and 7 (Canada).

Local authorities finance **operational and capital resources only** in Germany, Spain, France, Italy, Austria and Portugal (some primary only) (European Commission, 2000). These local authorities may have considerable autonomy, although they may also be subject to certain restrictions by central government. This is distinct from the next model in which responsibility is shared with the central government. In Italy, for example, local authorities finance only some operational and capital resources. The municipalities are responsible for cleaning and utilities in the operational budget, while the government provides allocations to schools for administrative activities and teaching materials, to which some municipalities contribute. Municipalities also shoulder the costs and deal with the management of building expenditure, renovation, sports facilities, school buses and catering equipment. The municipalities draw up their own criteria for the distribution of resources. See country illustration 4 (France) for further details.

As far as operational and capital resources are concerned, the local authorities more often than not have to comply with regulations applicable to all public

places or the workplace in general, as well as to environmental and health standards (e.g. in Denmark, France, Italy, Luxembourg, Finland, Sweden, Liechtenstein, Norway) (European Commission, 2000). A second level of restrictions may comprise the existence of school building standards (e.g. in Belgium, Greece, Austria, UK, Iceland). In some countries, the local authorities responsible for financing and managing operational and capital resources are subject to more restrictive regulations. In some of these, they have to list and justify their fixed capital investment (Belgium and Finland). In others, the central government imposes standards on certain categories of resources, as in Portugal and Iceland.

Shared responsibility in the financing of resources

In this model, the local authority has room for manoeuvre in the use of allocations which it receives from central government and it shares responsibility with the government for determining the amount of operational and capital allocations, in so far as it can or must supplement them with its own resources.

In two countries in Europe, municipalities and central government share responsibility for financing school **operational and capital resources** (European Commission, 2000). This means that municipalities receive from central government allocations that they may, or have to, top up with their own resources. This model applies to the public sector schools in Belgium run by the provinces and municipalities and Liechtenstein in the case of primary education. In Belgium, local authorities contribute to the financing of operational resources for schools which they are responsible since they can supplement allocations with their own funds. The financing of capital is partly the responsibility of the local authorities because they have to make a predetermined percentage contribution to it. Local authorities also play an important part as far as staff are concerned. Teachers in schools administered by the provinces or municipalities are recruited by these authorities with reference to an overall number of hours teaching. In this model, as in the last, local authorities generally handle the distribution among schools of the resources they finance. However, in contrast to the situation in the Nordic countries, local authorities do not decide whether or not to delegate management responsibilities to schools. Instead, the decision is governed by national or community regulations and, as a result, is uniform throughout a particular country.

Autonomy in the use of allocations

In the third model, the local authority is free to use schools resource allocations made available to it by a higher authority. While it is not involved in determining the volume of such allocations, it is responsible for distributing them amongst schools (European Commission, 2000).

In two countries in Europe (Greece and Ireland) local authorities receive central government allocations earmarked for a particular category of educational resources (European Commission, 2000). They do not supplement them from their own resources and are therefore not involved in fixing the amounts of these allocations. On the other hand, they are responsible for distributing them to schools. The local authorities do not decide whether or not to delegate management responsibilities to schools. This decision depends on the application of a national regulation. In Greece, the municipalities receive an operational subsidy from the Ministry of Interior while the prefectorial authorities obtain credit from the Public Investment Programme and loans for capital expenditure. The municipalities delegate to schools the management of cleaning staff and operational resources. They themselves undertake school building work. The amount of subsidy allocated to schools for operational purposes is determined by the municipal council, after schools have given account of their needs. The prefectorial authorities are responsible for the award of resources for fixed capital to schools. They themselves determine the criteria for distribution among schools of the investment credit they receive.

3.1.2 Models of local authority autonomy: pros and cons

The central tenet for increasing the autonomy of both local authorities and schools is that decision-making power is brought closer to the point at which needs are determined (European Commission, 2000). Where this occurs, all those involved are more fully aware of the needs of schools and are able to adapt the resources available accordingly since those involved understand the particular circumstances of individual schools and take the needs of the pupils into account (Kilvert, 2001). The particular needs of individual schools can therefore be taken into account because of proximity to decision making. The Audit Commission (2004) in the UK, for example, stated that councils should ensure that resources are matched to needs through the implementation of their local fair funding formulas.

Conversely, in a centralised system, large-scale changes are imposed on all by a single group of policy makers (Harrison, 2004). Moreover, this decision is often based on limited information and does not take into account local need and demand. In this way, the effect of such decisions, when wrong, can be particularly costly.

According to the European Commission, decentralisation to local authorities of the responsibility for distributing resources among schools is necessary to ensure that two pupils with the same needs in different schools receive identical provision. This contrasts with more centralised models, where no account is taken of individual needs. However, the Commission also notes that equality of educational opportunity may correspond to a system for the even distribution of resources which is more consistent with centralised arrangements for school funding and management. FrenchEntrée (2004), focusing on moves towards greater decentralisation in France, also notes: 'the undoubted inequality of resources from one area to another' and cites, for example, that the poorest commune in France currently allocates ten euros per child, compared to certain schools in Paris where the figure is 70 euros and that the poor regions of France already have a marked shortage of educational facilities. FrenchEntrée also highlights the potential influence that local politics will have on education. However, as Harrison (2004) points out, this problem may also be inherent within a centralised system in which decisions are made and the competing interest of different parties resolved through the political process. In this way, control of schools may be used for political rather than public interest. As such, policies may result in political rather than social benefits. According to Harrison, in a centralised model, those involved 'do not have strong incentives to make efficient decisions and, instead, pursue political, ideological and personal objectives'.

Where the central government remains the main source of funding, resources are allocated in the form of staff or facilities and they are converted into a cash subsidy which is managed by the school or local authority (Harrison, 2004). This has the advantage for the central authority of enabling better costs forecasting. In addition, the entire budget is spread across the schools and the financial risk inherent in the management of the finances is transferred to local authority or school level.

In addition, whilst simplicity and transparency may be consistent with a centralised model, as all schools are

treated in the same way, Kilvert (2001) notes that decentralisation also avoids having too many formulae with separate and unrelated accountability measures and the receipt of cash grants for each financial year being received at different times and being allocated by a range of different formulae.

The models of local authority autonomy were examined in relation to the overall performance rankings of different countries (see Appendix 5). Complete data was available for 19 OECD countries. As can be seen from the table, there were more countries in the top half of the table in which local authorities had financial autonomy for all types of resources than in the bottom half of the table. However, it is difficult to make conclusions because of the limited amount of data and the number of other variables likely to be involved in influencing performance scores.

3.2 The role of schools

The extent of school responsibilities in the area of financing varies in different countries, although the trend is towards the financial autonomy of schools. Once the total budget for the school has been established by the higher authority (local authority or central government), it may be allocated to schools as a global budget or pre-allocated according to separate resource categories (i.e. staff, operational and capital resources). School autonomy is therefore in part determined by their ability to **establish budgets** for different resource categories. The extent of autonomy also depends on their **ability to determine the way in which their allocation is used**. In addition, since it is the major resource available to schools, it depends on the schools' **ability to recruit and determine the salaries of staff**. These three key factors are therefore the most significant variables in the autonomy of schools and the combination of these factors results in three main models (as detailed in European Commission, 2000), depending on how far schools are autonomous. Firstly, the three models will be described and their advantages and disadvantages will then be discussed.

3.2.1 Models of school autonomy

The three factors described above gave rise to three broad school autonomy models:

1. autonomy in establishing budgets

2. autonomy in the use of allocations
3. limited autonomy.

In the Nordic countries (except Iceland) school autonomy varies with different municipalities so schools within a particular country may belong to any of these models.

Table 3.2 provides a summary of the three models. Where an area is shaded this represents autonomy for schools, whilst unshaded areas indicate no autonomy.

Table 3.2 Models of school autonomy

	Model 1 Autonomy in establishing budgets	Model 2 Autonomy in the use of allocations	Model 3 Limited autonomy
Establishing budgets		No autonomy	No autonomy
Use of allocations			Limited autonomy
Staff recruitment and management		No autonomy	No autonomy

It is important to note, however, that there may be regulations that the school has to comply with in using their allocations and this will affect their financial autonomy. For example, they may have to comply with national salary regulations or pupil/teacher ratios. Local authorities may delegate their responsibilities to schools and in this way grant them financial autonomy or this may be a measure introduced by central government as part of decentralisation.

Autonomy in establishing budgets

In this model, on the basis of a general fixed amount, schools are free to draw up their own budget and have control over the way it is used. They divide the gross sum into budgetary headings to cover the three main categories of resources. They recruit staff and manage the payroll, with the administration of the remuneration sometimes being handled by a local authority. In this case, the schools either determine the salaries themselves or act in accordance with collectively negotiated agreements.

The Netherlands and the UK award block grants to their schools, which cover staff and operational costs in the broad sense (European Commission, 2000). Capital expenditure on immovables may or may not be

administered by the school, depending on the particular case. Schools freely allocate the amounts earmarked for each expenditure heading. In England and Wales, for example, schools receive an annual allocation that they are largely free to administer as they wish, provided they achieve their declared educational objectives. They receive their share of the Aggregated Schools Budget with which they cover their operational and staffing costs. School governing bodies decide how the budget is to be spent and may delegate control to headteachers. They may also carry over any unused amount from one year to the next. They are free to choose their staff but local authorities, who remain the legal employers, have the right to give advice in this respect. In the UK, some schools manage the budget for staff salaries, however, local authorities or the appropriate ministerial department administer payment and, in Scotland, also recruit staff. Furthermore, some schools, in some countries, remunerate teachers directly. Sweden is an extreme case because schools also decide on the salaries of their teachers. In Canada, each provincial system provides grants to school boards which have responsibility for setting budgets, hiring and negotiating with teachers and setting and developing the school curriculum (in line with provincial requirements). In Australia, schools also have a high degree of autonomy and responsibility for their budgets. Further details can be found in country illustrations 1 (UK), 3 (Netherlands), 5 (Sweden), 7 (Canada) and 9 (Australia).

Autonomy in the use of allocations

In this model, schools have a degree of freedom in the use of allocations (in cash or in kind) which the central government (or top level authority) grants them. This usually applies to operational resources, sometimes to operational and staff resources, but rather less often, to all three main types of resources. However, schools do not have the right to make decisions about the amount of resources to allocate to various budgetary headings. For teaching staff, they receive an allocation in the form of a given number of hours of teaching which they convert wholly or partially into a corresponding number of teachers. They either recruit them directly or forward their decisions to the competent authority which assigns the teachers to them.

In five countries in Europe (Greece, Spain, Ireland, Italy, Austria), school autonomy is limited to **operational resources** (European Commission, 2000). The room for manoeuvre of schools varies in accordance with the number and content of operational allocations received.

The countries in which autonomy may be considered to be greatest are Spain (secondary) and Liechtenstein because the schools concerned manage their recurrent operational expenditure, as well as the purchase of equipment. In Greece, the municipality awards the school committee an operational subsidy, which is entered into the school budget which the headteacher and the school committee are jointly responsible for administering.

In Europe, Belgium, France (secondary), Ireland and the Netherlands have school autonomy in relation to **staff and operational expenditure** (European Commission, 2000). No transfers are possible between the headings corresponding to teaching/management staff and operational resources. In France, for example, secondary schools receive a general grant for operational purposes in the broad sense covering utilities and supplies for basic teaching and administrative activity, as well as maintenance. They receive a global allocation for staff expressed in hours and may fix the teaching workload, select course options and decide on the size of groups of pupils. They are thus relatively free to determine the kind of education they will provide, but have no room for manoeuvre from the financial point of view.

In New Zealand, although the Ministry provides virtually 100 per cent of the funding for education directly to schools, school boards are fully accountable for the allocation of funding to reflect school priorities and the control of school expenditure (Ministry of Education, 2003a). In addition, school boards are responsible for hiring their staff. Further details of this type of model can be found in country illustrations 2 (Ireland), 3 (Netherlands), 4 (France) and 8 (New Zealand).

Limited autonomy

In this model, schools receive their resources in kind from the central government or local authority which acquires goods and services whose quantity and nature it determines itself. Schools sometimes submit budgetary estimates (e.g. Germany, Luxembourg, Iceland and some schools in France, Austria, Portugal, Liechtenstein and the French community of Belgium). In most countries adopting this model, autonomy is very limited, although, in some, there is greater autonomy regarding operational resources, because municipalities have the option of delegating decision-making power to schools. Schools may also be autonomous as regards staff if they are responsible for recruitment. In Iceland, for example, the bulk of resources is provided in kind by

municipalities. However, schools have a part to play in the allocation of some of their resources. Headteachers annually prepare an estimate of the volume of resources they will need for staff and capital and submit it to the local authority. Resources are thus allocated to schools as a total number of teaching hours for staff, while headteachers are delegated the responsibility for recruiting staff in cooperation with the school boards. Municipalities are also able to delegate routine financial management to schools, which is increasingly the case.

3.2.2 Models of school autonomy: pros and cons

Many of the pros and cons discussed previously in relation to models of local authority autonomy also apply to the autonomy of schools. However, the social pressure to involve all stakeholders in decisions, with a view to enhancing the quality of education, has been more instrumental in moves towards school autonomy (European Commission, 2000). This has led to the gradual establishment of decision-making bodies in schools (e.g. school governing bodies or school boards). Whilst such bodies may have had a role in decision making regarding non-financial matters for some time (e.g. organisation of timetables etc.), their decision-making powers in the management of resources tends to be more recent.

The quality and responsiveness of local decision making may also be improved by giving schools the flexibility to match financial and staff resources to the learning needs of students, who are better known to them than any centralised body (Harrison, 2004). According to Harrison, 'Decentralised decision making makes sense because individuals have the strongest incentive and best information to further their own interests'. School principals in the state of Victoria in Australia, for example, reported a belief that, since devolution to schools, there is a greater capacity to build up a relationship between curriculum programmes and resource allocations, to allocate resources to the identified needs of students and to achieve more priorities set out in the School Charter (Steering Committee of the Cooperative Research Project, 1996).

In addition, a decentralised system also precludes the inefficiencies and delays and inflexibility often associated with more centralised finance systems as a result of the distance between the school and the controlling body (Hill, 1997). Instead, it creates an incentive at school

level to see financial resources as one of a number of factors which need to be brought together and managed to maximise student learning. Furthermore, it might be argued that, where schools receive funding through a politicised and bureaucratic system, there are limited incentives or opportunities for schools to improve quality or to innovate, resulting in a lack of diversity of educational provision (Harrison, 2004).

Where schools have control over the whole budget and can allocate funding for resources as they think fit, whilst this inevitably means that they have greater control of their spending and can plan its use, the schools themselves have to bear any budgetary deficits. Equally, any savings are retained by the school (Kilvert, 2001) and they may therefore have more leeway to plan for a particular development or activity. This also means that schools have to have the required financial management skills. Ainley and McKenzie (2000) note that a lack of knowledge and skills in terms of the requisites to fully comprehend and manage financial systems at the school level could well be an obstacle to decentralisation and Hill (1997) argues that a more centralised budget system in education also spares teachers, namely those in senior positions, from a significant number of non-teaching tasks.

The models of school autonomy were examined in relation to the overall performance rankings of different countries (see Appendix 5). Complete data was available for 19 OECD countries. It is impossible to make any firm conclusions because of the limited data available and other confounding variables, but, the table shows, all those countries in which school autonomy varied with the local authority fell in the top half of the table.

3.3 Governance and management issues

The different models of local authority autonomy and school autonomy discussed, in conjunction with the advantages and disadvantages noted, give rise to a number of governance and management issues. This section of the report focuses on governance and management issues in relation to the financial management of schools and provides a synthesis of the issues that emerged from the literature. It should be noted, however, that the majority of this literature related to the UK and Australia and the issues under discussion commonly stem from the funding systems

within these countries although they are also applicable in the broader sense. The main governance and management issues for local authorities are examined, followed by a discussion of the main issues raised for schools.

3.3.1 Governance and management issues for local authorities

The main governance and management issues for local authorities cited within the literature centred on four main areas, reflecting the local authority's role in financial management. These are:

1. accountability
2. the monitoring of school finances
3. provision of support, advice and information for schools on financial matters
4. inter-school issues.

Accountability

In England, the government is committed to ensuring that governing bodies have the maximum amount of freedom possible and the flexibility to determine how to undertake their functions, but with appropriate safeguards to ensure accountability (Page, 2003). Whilst local authorities have been encouraged to maximise the delegation of funding to schools, they also have a statutory responsibility to monitor, challenge and support the resource management decisions made by schools and to ensure that education spending reflects national policy. Where schools have financial autonomy, for governors to be more effective in school improvement, there needs to be greater emphasis placed by local authorities on monitoring and accountability rather than providing support and advice (Creese and Bradley, 1997). Local authorities need to have a clear strategy for identifying schools causing concern and supporting their improvement (DfES, 2004). According to the DfES, the aim should be to provide support before any formal powers of intervention are used. Where schools are in special measures or serious weaknesses, however, local authorities have the power to intervene and may suspend the right to a delegated budget. It appears unclear how such powers may be utilised where a school's financial management is weak, whilst other areas are not of concern.

Monitoring

According to the Audit Commission (2003), most authorities have yet to strike a proper balance between monitoring, challenge and support for school resource management. The Commission found that school expenditure was monitored and evaluated with too narrow a focus (i.e. avoiding deficits or surpluses) and neither schools nor local authorities were able to say whether investment was delivering the intended educational outcomes. Problems at local authority level were exacerbated by high numbers of authorities who do not bring together evaluations of school performance and school resource management. Although reviews by local authority internal auditors were appreciated by schools, the extent to which the quality of financial planning and evaluation by schools was assessed in the audits was variable. It was reported that many local authorities have adopted the policy of minimal involvement in schools and remain detached unless their budgets suggest large surpluses, or indications that they are running into deficit. The monitoring at local authority level was felt to be nominal, increasing the likelihood that mismanagement of resources at the school level may remain undetected and reducing the possibility of early intervention.

In New Zealand, schools at financial risk are closely monitored by financial advisers of the Ministry of Education and they are given varying levels of support. Schools considered to be at low or moderate levels of financial risk, receive advice and support as appropriate. A school at greater risk undergoes in-depth financial analysis and is offered school support options, including ongoing financial advisory services. In some cases, assistance is provided to help maintain cash flow. Similarly, the LGA (2003) suggest that the financial arrangements between councils and schools should reflect the principle of 'earned autonomy'. That is, that schools which can demonstrate quality financial management and human resource capacity, should have more autonomy over their financial affairs than those unable to do so.

Support, advice and information

Support for governors and school staff should also be viewed as an essential prerequisite to successful management of finances at the school level. However, in the UK, the Audit Commission (2003) reported that, although local authority financial support services generally met schools' needs and written guidance was good, it tended to focus on procedures and processes

rather than on resource management in the wider sense. Most local authorities were not providing schools with adequate support to enable them to make resource management an integral part of their development planning. Often, engagement of advisory services with schools was merely confined to situations where schools showed surpluses or deficits. Although local authorities were increasingly encouraging schools to develop medium-term (usually three-year) budget plans, the quality of the support they provided for schools to do this varied. It was reported that most authorities assisted schools with calculating projections based on pupil roll, as well as on staffing costs and provided guidance on inflation rates. However, very few gave indications on budget decisions, or how the total allocation was likely to be spent. Where such support is lacking, barriers to autonomy have been well documented.

Kilvert *et al.* (2001) explain how, in Australia, site leaders have been critical of the level of support they receive from the state and this has impacted on their ability to make informed local decisions and to provide meaningful and credible reports to school communities. Hill (1997) revealed that principals spoke less positively about the implementation of the School Global Budget in Australia in terms of the time provided to adjust to the new approaches and levels of funding, as well as to the degree of access to quality professional development for staff. Hill argues that this suggests that, while principals and school staff see merit in the Australian reforms, they have found the pace of it difficult to accommodate and particularly that they have lacked the degree of support they would have liked. Hill also observed that it was almost impossible to overestimate the amount of professional development and support services needed to sustain real reform.

Finally, as noted in the next section, schools need to have access to up-to-date and accurate information in order to be able to make sound financial decisions. The local authority, among others, has an important role to play in this. This might include, for example, data that facilitates accurate forecasting and enables them to compare their situation with other schools in the authority, as well as information about accessing different pots of money. A recent report by Ofsted in conjunction with the Audit Commission (2003), for example, revealed that although most local authorities provide some information to their school on grant funding opportunities, few succeed in ensuring that this

information is always comprehensive and up to date. Where funding bids are unsuccessful, local authorities also often fail to inform schools of their weaknesses.

Inter-school issues

Although there was little highlighted in the literature generally about inter-school issues in relation to increasing school financial autonomy, the LGA (2003) argue that the way in which much of the current system of governance and accountability is arranged in the UK is heavily focused on individual institutions. They suggest, therefore, that this may discourage collaboration between schools. Thus, whilst in the UK, certain measures (e.g. the facility to have groups of schools under a single governing body) have provided new opportunities for closer working relationships between schools (Page, 2003), increasing school financial autonomy may militate against this. This therefore raises questions about the cooperation of schools in relation to a number of other areas, including, for example, the management of pupil admissions (i.e. over and undersubscribed schools) and the reintegration of excluded pupils.

3.3.2 Governance and management issues for schools

The main governance and management issues for schools centre on a broader number of areas than those of local authorities and they include issues concerning:

- responsibilities/accountability
- strategic financial planning
- monitoring and evaluation
- knowledge, skills and professional development
- provision of accurate information
- associated time and costs.

Responsibilities/accountability

One of the main features of decentralisation is the opportunity for community participation and empowerment in education through membership of a governing body or school board and accountability to those communities (Campbell and Whitty, 2000). Campbell and Whitty suggest that, whilst the delegation of financial resources to schools may have

disempowered local authorities, it may also have empowered individuals with no clear democratic mandate.

In England, where schools have financial autonomy, school budgets are considered to be the responsibility of the governing body, although, in practice, many headteachers have been able to exercise budgetary control, often working closely with the chair of the governing bodies (Campbell and Whitty, 2000). However, according to the Audit Commission (2003), headteachers and governors in some schools felt that delegation had gone too far and that they have become responsible for controlling numerous budgets for activities in which they have little expertise and which offer little return on the investment of management time required. A key question concerning the effectiveness of school boards is the extent to which they effectively delegate and monitor the responsibilities that they have (MOE, 2003b). This then raises issues of accountability for those departments as well as those delegating the responsibility. As a natural extension of local financial management and the principle that funds are used more effectively if they are controlled closest to where they are used, schools may, for example, extend delegated budgets to heads of departments (Ofsted, 1997). According to Ofsted, whilst this approach can sharpen heads of departments' thinking about priorities and raise their awareness of the overall financial position of the school, in order to do this, schools have to invest heavily in training and administrative support for managers (see below).

Strategic financial planning

A central principle of financial autonomy is that schools have the capacity to deploy resources to meet locally identified needs and schools which make good financial decisions welcome the flexibility and independence which this gives them (Ofsted, 1997). A key measure of the effectiveness of a school board is the quality of its strategic planning. However, there is some evidence to suggest that many boards remain firmly focused on financial and site management, rather than focusing on school performance and thinking more strategically (MOE, 2003b). Ofsted (1997) concluded that good development planning and sound leadership, underpinned by confident strategic financial planning, were key features of good practice in financial management and the effective allocation of resources. They argued that well managed schools looked ahead, set clear targets, were realistically aware of costs and

balanced predicted income against anticipated costs. This was enhanced by clear thinking about the nature of various budget headings and what was being foregone if there was a need to shift funds between them. However, they also noted that, where the emphasis of financial decision making was on short-term affordability rather than long-term desirability, it was difficult for schools to adjust to changing circumstances. In less well managed schools, patterns of expenditure reflected transitional habits rather than conscious thought about current and future needs. Whilst past resource allocations may provide a guide to future patterns of expenditure and this may maintain a degree of stability, over emphasis on this can lead to stagnation and unchallenged siphoning of funds into traditional areas of expenditure. Strategic planning requires a high level of skill, knowledge and confidence, as well as the ability to detach from immediate concerns (Creese, 1999).

An important feature of the delegation of funds in England has been the facility for schools to carry money forward from one financial year to the next. The decision whether or not to forego current expenditure in order to meet future needs is an important one. Concern has been expressed nationally about the apparent size of school surpluses (Ofsted, 1997). In some cases, this has reflected good long-term planning, whilst, in others, uncertainties about future levels of funding have led some schools to be more cautious in their spending plans and to retain more money for contingency purposes. Substantial budget deficits are detrimental to long-term strategic planning for improvement since preoccupation with the size of the deficit can inhibit planning on a long-term basis. Providing resources to poorly managed schools may itself be an ineffective strategy, as these schools do not have the management and leadership capacities to use these extra resources in a way that is likely to lead to improvement. Management capacity may have to be improved before resources can be increased.

For successful strategic planning, schools need to know in advance their allocation. Where additional funding is allocated to schools in the form of grants for pupils with special needs (see Chapter 4), new grants are often announced at short notice and the continuation of funding is frequently uncertain (LGA, 2003). This can result in an approach to taking up grants that is ad hoc, rather than strategically planned.

Monitoring and evaluation

One of the most important functions of governors is to monitor and evaluate school performance, but these are often the weakest areas of their work (DfEE, 1997). According to Ofsted (1997), 'Good financial planning and decision making alone is insufficient to secure improvements in teaching and learning. This also requires sound evaluation and monitoring procedures'. The allocation of funding for education in some countries is evaluated according to the performance or achievements of a school. Although this may increase motivation to raise standards in order to qualify for additional funds, adequately monitoring performance can be an issue. For example, Carey (2002) highlights the difficulties of accurately quantifying educational outcomes and of understanding the relationship between outcomes, funding levels, student characteristics and school performance.

Knowledge and skills

School autonomy provides the opportunity for community participation and empowerment in education through membership of a governing body or school board (Campbell and Whitty, 2000). Financially aware schools make good use of public money, but also attract new money and use it to raise standards (Muijs, 2003). Headteachers and governors in these schools are quick to take advantage of funding opportunities. Furthermore, successful schools have, in some studies, been found to be more effective at deploying resources, acting as 'wise' consumers and being more proactive at finding resources. According to Campbell and Whitty, the importance of knowledge and skills of financial management within governing bodies should not be understated. However, they also state that financial skills and commercial awareness can sometimes lead to commoditisation of parents, where those who provide the necessary skills and resources required are seen as more valuable than others.

Creese (1999) argues that governing bodies are typically comprised of unpaid, part-time volunteers who are often uneasy with the breadth of responsibilities, particularly in the area of finance, where they feel they lack the necessary skills and expertise. Creese questions the extent to which governors are experienced enough to make informed judgements and how far they are able to cope with the increasing demands, particularly financially, that are placed upon them. Ofsted (1997), as well as highlighting the need to improve the skills of governors and senior and middle managers for

monitoring and evaluating, also identify the need for well qualified financial managers who can provide accurate financial forecasts and who can make a significant contribution to strategic thinking within the school. With increasing fiscal autonomy, the financial skills within the schools are ever more imperative. Indeed, in 2001, Ofsted continued to argue that governors make a real difference where they bring a wide range of expertise and experience, including financial experience and have a programme of training to support their own development, so that all members of the body possess the skills to be active in the decision-making process (Ofsted, 2001). Ainley and McKenzie (2000) also suggest that a lack of knowledge and skills in terms of the requisites to fully comprehend and manage financial systems at the school level, could develop into an obstacle to decentralisation in Australia.

Kilvert *et al.* (2001) detail the measures implemented in Australia to address the arising issues associated with the skills and training in schools for financial management. This includes a taskforce established to provide support during the changes to the education system and the establishment of the Financial Management and Accountability Project to clarify and redefine central budgeting and reporting and accountability processes in the context of increased local management of schools. Within the UK, Byers (1998) also points out that the government recognises the need for support and training for governors. With ring-fenced funding in the school effectiveness category of the Standards Fund, local authorities are being asked to ensure that at least one school governor is trained in target setting. The DfES also issues good practice guidance about how school governors' training needs can best be met.

Provision of accurate information

Effective planning depends on accurate information (Ofsted, 1997). Schools need precise, detailed financial data and reliable forecasting. Ofsted found that this was more often available to secondary schools than to primary schools. Accurate forecasting was often difficult because of the many uncertainties faced by schools, including the eventual size of the delegated budget, teachers' pay settlements, pupil numbers and unexpected premises costs. One of the main issues for governing bodies, therefore, is the uncertainty about future funding levels. Lack of information as crucial as this may have a huge impact on the management and governance of a school (Creese, 1999). In order to hold

their school to account, governing bodies require access to information from a variety of sources (e.g. Ofsted, their local authority and their school) (Byers, 1998). Byers states that, whilst most governors seem to have core knowledge about their school, especially their financial state, they are sometimes unfamiliar with basic facts, such as its number of pupils. He suggests that, without this information, they are unable to hold their school to account because they are unable to ask effective questions regarding the school's performance budget. Access to comparative performance data is helpful. For example, this can help schools to review differences in patterns of expenditure and to question such differences (Ofsted, 1997). The DfEE (1997) points out the dangers (including the time demands) of governors relying too heavily on the headteacher for information, but also states that, without this information, the governing body cannot contribute to strategic management, or the budget process which supports planning decisions.

Associated time/costs

Where schools have financial autonomy, the time and administrative costs of financial management at school level is an important issue. The LGA (2003) suggests that a system is needed to provide support services in the most effective way, whilst not diverting the attention of headteachers and their staff away from the key task of teaching and learning. In contrast, a more centralised budget system can prevent teachers, particularly those in senior positions, from having to be involved in a significant number of non-teaching tasks. Where budgets are locally managed, this increasing burden can have a negative effect. The Audit Commission (2003) highlighted concerns that the calculations of delegated funding to schools sometimes fail to include additional costs, such as senior management time, accommodation and services provided by other departments. The Commission criticised the administrative burden placed on schools as a result of the bidding process, as did also the Post Primary Teachers Association (2003), which deem the process extremely time consuming. In addition, they identified administration costs and time as a key reason for the lack of provision of information to schools on funding opportunities and on failing bids. Local authorities appeared to support the overall belief that information gathering, bidding, monitoring and accounting did not justify the time, effort and indeed, cost involved. In addition, the provision of money for management and administration tasks in schools is not made explicit in many local authority funding formulae.

Furthermore, in 2003, the LGA argued that the introduction of a national funding formula, as well as exacerbating problems of responsiveness and flexibility at local level, would also increase administrative costs.

3.4 Summary

This section of the report has focused on the roles of local authorities and schools and their financial autonomy. Three different local authority models were presented, based on their degree of discretion in financing schools, the distribution of resources and powers of delegation. Their pros and cons were discussed. Three different models for the financial autonomy of schools, based on whether they have a say in establishing budgets, use of allocations and the recruitment of staff, were identified and their pros and cons discussed. Finally, the governance and management issues associated with increasing financial autonomy were examined for both local authorities and schools. The following key points emerged:

- in the great majority of European countries, local authorities have an important part to play in the financing and distribution to schools of their operational, capital and, sometimes, staff resources
- three local authority autonomy models were identified: financial autonomy (the most autonomous); shared responsibility and autonomy in the use of allocations (the least autonomous)
- the UK and the Nordic countries adopt a model which can be considered the most financially autonomous for local authorities, since within this model, local authorities are empowered to establish the education budget for all or some of the expenditure linked to school service provision (for all types of resources) and thus exercise considerable responsibility and decision-making power as regards most expenditure on education
- this power is more limited in the UK than in the Nordic countries, since the award of resources to schools has to comply with formal requirements established by central government and the government regulates the way in which decision-making is shared between schools and local authorities, whereas the Nordic municipalities themselves decide what they will delegate to schools
- in contrast, some countries (e.g. Greece and Ireland) do no more than administer a sum fixed and allocated at a central level. In this model, local authorities have no role in determining the volume of school allocations or in delegating responsibilities to schools, although, they are responsible for distributing allocations amongst schools
- schools tend to have a degree of freedom in the use (not the amount) of allocations. Three models were identified: autonomy in establishing budgets (the most autonomous); autonomy in the use of allocation and limited autonomy (the least autonomous)
- in the Netherlands and the UK, schools exhibit more financial autonomy than schools in other countries, since they are free to draw up their own budget and the way it is used. Block grants are awarded to schools, which cover both staff and operational costs
- autonomy relating to the management of operational resources is the most widespread, followed by staffing, but, in most cases, there is an allocation in kind, i.e. an overall number of either hours of teaching or teacher periods. The management of capital resources is less frequently a school responsibility and it rarely applies to all three types of resources
- where there is the most limited autonomy, schools receive their resources in kind from the central government or local authority which acquires goods and services whose quantity and nature it determines itself
- whilst increasing local autonomy may give local authorities and schools more control over the use of their resources, it also raises a number of issues, not least, concerning accountability, monitoring and the time, skills, knowledge and information to engage in effective strategic financial planning.

4 Allocation of funding to schools

This chapter focuses on how the funding allocated to schools is determined. It examines the models used for determining schools' allocations, i.e. whether a common rule is applied across a country for this purpose or not. It then goes on to look at the range of factors taken into account when allocating funding to schools, i.e. whether a broad or more limited range is utilised. The final section focuses on the different models used for the allocation of funding to schools for pupils with special needs.

4.1 Methods for determining allocations

Funding has to be given to schools in order to provide an educational service of the required standard and the authorities which distribute this funding have to have a method for allocating the funding to different schools. In this section, different models for allocating funding to schools are discussed before moving on to their advantages and disadvantages.

4.1.1 Models based on the method of allocation

Three main models for the allocation of funding to schools were identified by the European Commission (2000). They were:

1. using a common rule
2. having no systematic rule
3. local authorities choosing their own methods (i.e. there is no single method).

The method of allocation may vary depending on the level of education concerned or the kind of resources (i.e. staffing, operational or capital resources) being allocated, therefore, some countries can operate several models.

A common rule

In this model, a common rule is applied systematically, using observable criteria, to allocate resources to schools.

This usually involves the use of conversion tables or mathematical formulae. Nine countries in Europe have adopted this procedure for one or more resources categories (European Commission, 2000).

Most of the countries which adopt this model use it to establish the **teaching staff resources** to which each school is entitled. This is the case in Germany, Ireland, the Netherlands, Austria, Portugal, the UK and Iceland. The authorities of each *Land* in Germany, for example, all employ the same technique for staff resources, even though the mathematical formula they use may vary. The parliament of each *Land* establishes the number of teaching posts to be allocated in the proposals for the annual budget. The proposals set out very clearly the basis on which this number is calculated, as well as details relating to all supplementary needs. The authorities responsible for allocating posts to the various schools have, in practice, only to convert the specific circumstances of each school into a number of teaching posts. Further examples of where this model is applied to staff resources can be found in country illustrations 1 (UK), 2 (Ireland) and 3 (Netherlands).

Five countries in Europe, the Netherlands, the UK and Ireland, Austria and Portugal (in the case of some schools), also use a common rule to determine the allocation of **operational resources**. In the UK, for example, local authorities (or equivalent) draw up a formula that governs the distribution of resources to schools. This is done within the broader regulatory framework laid down by the government through local management of schools. Further examples of where this model applies to operational resources can be found in country illustrations 2 (Ireland) and 3 (Netherlands).

In Europe, only Belgium uses this model across **all resource allocations** (i.e. for staff, operational and capital resources). A common rule is also used in Australia for the allocation of the Schools Global Budget, which includes a number of formulae for allocating funds universally across states (see country illustration 9).

No systematic rule

Some European countries have no strict rules for the distribution of resources (European Commission, 2000). Decisions are taken on an ad hoc basis by the authority concerned. This involves an individual estimate which may or may not be based on observable criteria, but there is no objective rule or procedure that is applied to all schools. It usually involves the administration of applications and budgetary approval. This model is used in seven countries in Europe (European Commission, 2000).

This applies to **staff resources** in the case of France, Spain and Italy and to **operational and capital resources** in secondary schools in Spain and some schools in Ireland. In Spain, for example, the local authorities are responsible for the allocation of all resources in secondary education and with all the staff resources, some operational resources and the greater part of capital expenditure in primary schools. There is no predetermined rule for establishing the amounts awarded. Instead they estimate needs and grant the resources required to satisfy them. This model also applies to some schools in Austria for **capital resources**. However, it applies to **all types of resources** in Luxembourg and secondary schools in Liechtenstein. The Ministry of Education and Vocational Education in Luxembourg, for example, has no hard and fast rule for establishing the amounts of resources. It draws on its familiarity with the individual circumstances of each school and the way they may have been changing. Further examples of this model can be found in country illustrations 2 (Ireland) and 4 (France).

Regionally or locally determined

In some countries in Europe, the authorities that award resources to schools are decentralised and act with relative autonomy when deciding the amounts allocated, including the method used to determine the amounts that each school gets (European Commission, 2000). As a result, whilst individual authorities may use a common rule, there is no general rule that is applicable across the entire country. In the main, the countries in this category are those that have introduced extensive measures for decentralisation which is supported by real autonomy for the local bodies concerned.

In most countries the municipality (local level) takes the decision. This applies to Denmark, Finland, Sweden,

Liechtenstein (primary) and Norway for **all types of resources**. Similar arrangements in the UK and the Netherlands relate solely to **capital expenditure**. In other cases, e.g. Greece, authorities that are far more removed from schools decide the volume of their resources. In Greece, for example, the *prefectorial* governments (regional level) apply their own rules for determining the amounts for the share of capital resources they administer. In France, the *départements* (local level) are responsible for financing the **operational and capital resources** of colleges and they draw up their own criteria for this purpose. Examples of this model can be found in country illustrations 1 (UK), 3 (Netherlands), 4 (France) and 5 (Sweden). Similarly, throughout the states of America and the provinces of Canada, funding levels for public schools are determined by the individual state or province. Although every state varies, the fundamental structures of the funding systems have many similarities (see country illustrations 6, USA and 7, Canada).

4.1.2 Models based on the method of allocation: pros and cons

Literature related to the advantages and disadvantages of using a **systematic rule** in the manner described across Europe was unavailable. However, this does imply that the method of allocation is more systematic and therefore more transparent and more easily understood. Also perhaps significant here is the body of research in the UK, following the introduction of LMS and fair funding, examining the pros and cons of the use of local authority formulae for the allocation of funding to schools. McClure (1989) argues that, when LMS was introduced, the government imposed a highly prescriptive formula on local authorities which was designed to severely curtail their ability to intervene selectively. Levacic (1993) agreed with this view and stated that allocating school budgets by formulae is 'a key element' in decentralised school management because it ensures that the local authority cannot engage in discretionary intervention with respect to individual schools. Johnson (2003) also describes LMS formulae as 'somewhat regressive in effect' suggesting that this prevents local authorities from being progressive. However, according to Thomas (1990), despite the degree of imposed prescription, local authorities still have some important leeway in the design of their formulae, resulting in variation

Table 4.1 Models based on the range of factors taken into account

Number of factors taken into account	Description	Example	Further examples
Limited number of indicators	A limited number of basic indicators, such as the number of pupils, the number of classes or the number of hours of lessons, are used to make funding or resource allocations to schools.	Ireland (European Commission, 2000) In Ireland, the number of teachers assigned to primary schools depends on the number of annual enrolments. A formula proportional to the number of pupils is also employed to determine resources for the acquisition of operational goods and services, whereas the capital investment tends to depend more on a case-by-case approach for each individual school. Resource transfer to the community and comprehensive schools are handled in the same kind of way, although indicators other than just the number of pupils are incorporated into the formulas for deciding the number of teachers and operational resources.	<ul style="list-style-type: none"> • Belgium (European Commission, 2000) • Spain (European Commission, 2000)
Broad range of indicators	A thorough estimate of the needs of schools is made by having a broad range of indicators. In some cases, the range of indicators may be very broad and may include, for example, the social background of the pupils, the geographical location of the school, the type of school, its existing facilities and particular characteristics of its pupils. This tends to involve the use of summary indicators and a variable number of other indicators.	Wyoming, USA (Christenson, 2000) Wyoming uses a very wide range of indicators in its basic funding program. For example, Average Daily Membership is calculated and pupils are assigned to grade-level groupings for which different assumptions are made as to the resources and associated costs necessary to provide sufficient education. Within each grade level grouping there are 25 specific cost components, grouped into five major categories: personnel; supplies, material and equipment; special services; special student characteristics and special school/district/regional characteristics. To this calculation, as in many other American states, funding is allocated for: transportation; special education; compensatory education; gifted and talented education; bilingual education; early childhood education; etc.	<ul style="list-style-type: none"> • Scotland (European Commission, 2000) • The Netherlands (European Commission, 2000) • New Zealand (MOE, 2003c) • Australia (Hill, 1997) • Alberta, Canada (National Center for Education Statistics, 2001a) • Georgia, USA (Sielke, 2000)
Authority dependent indicators	The choice of indicators lies with the responsible authority, with the result that identification of a particular national or regional policy is not possible.	Finland (European Commission, 2000) All decisions for determining the volume of resources earmarked for schools in Finland are taken by the municipalities, so they are not governed by a common regulation. However, there is a procedure to prevent the undesirable effect that decentralisation might have on the same fair deal for pupils from different municipalities. As a result of adjusting municipal allocations, potential differences in the schooling of pupils across the entire country can be reduced.	<ul style="list-style-type: none"> • Luxembourg (European Commission, 2000) • USA (Carey, 2002) • Canada (National Center for Education Statistics, 2001a)

across local authorities. Evans *et al.* (2001) state that the adoption of formula allocation allows the funding body to produce a formula that includes sanctions and incentives intended to influence school policies and practices in the preferred direction of the local authority. Levacic (1993) concludes that the use of a formula promotes cost efficiency and provides sensitivity, but that schools are unlikely to experience stability. She suggests that schools adapt to this by adjusting staffing more rapidly and by building up balances.

In the second model, where **no systematic rule** is applied across a country, decisions would seem to be taken on an ad hoc basis by the authority concerned at the entire discretion of the Ministry or other administrative authority. In this case, therefore, political authorities determine the amount that schools get. According to the European Commission (2000), while this may appear more arbitrary, it may also have the advantage offering a more appropriate response to individual circumstances than the application of a uniform rule.

No pros and cons were explicitly identified within the literature regarding the **regionally or locally determined model**. However, the situation described in American states illustrates that this model enables regional or local funding systems to be developed which take into account a variety of local differences. States generally provide funding to the school districts by identifying factors that distinguish states from one another and then calculating the impact of those differences on the cost of providing educational services (Carey, 2002). Size and wealth are the most obvious differences between individual school districts. Funding systems have therefore been developed to calculate the funding levels and adjust, to varying degrees, for local differences in wealth. The system whereby every district gets an identical 'flat' grant for each student enrolled, regardless of local circumstances has largely been abandoned and the methods adopted usually take into account the disparity in school funding as a result of differing abilities to raise local funds. This system guarantees every district a standard amount of money per student for each unit of taxation. The system currently used by 40 states (foundation plans) establishes a specified per student funding amount and a specified local tax rate that each school district must levy. The state provides the difference between the amount of revenues raised from the local tax rate and the foundation funding level.

The three models were also examined in relation to countries' overall educational **performance**. For the 17 European countries where both models of allocation and performance data were available, these were compared to see whether there was any relationship between the performance of countries and the models they used for allocating funding to schools (see Appendix 6). Very little discernible pattern was identified. However, when considering staff resources (i.e. the bulk of resources to schools), the majority of countries which had no systematic rule for allocation tended to be ranked lower than the majority of those with a common rule or where the rule was local authority dependent. For example, three out of the bottom five countries employed no specific rule (the other two applying a common rule), whilst four out of the top five employed a common rule and, in the other, the rule was local authority dependent. Overall, the data suggests that factors other than the funding models presented here were likely to be responsible for differences in performance between countries.

4.2 The range of factors taken into account

The rules used to make funding allocations to schools vary in complexity depending on the number of variables taken into consideration. Some countries develop elaborate formulae as they attempt to estimate as accurately as possible the real needs of schools. Some use a broader estimate based on a limited number of indicators. Other countries leave this decision entirely to the discretion of local authorities. There are therefore different models based on the range of factors used. These are described, followed by a discussion of the pros and cons relating to the different models.

4.2.1 Models based on the range of factors taken into account

Three models have been identified in the literature by the European Commission (2000). They are not mutually exclusive and different systems can exist alongside each other in one country, especially where decisions on the amount of resources have been decentralised. In the allocation of funding to schools, account may be taken of:

- a limited number of indicators
- a broad range of indicators
- authority dependent indicators.

These models are presented in Table 4.1, which provides a brief description of each model, together with detailed examples. Further examples may be found in the country illustrations relating to specific countries as identified in the table.

4.2.2 Models based on the range of factors taken into account: pros and cons

Whether a country uses a broad or narrow range of indicators, or whether the choice of indicators lies with the responsible authority, can have a number of both positive or negative implications. Some countries in Europe use a **limited number of indicators** as they are considered to be broadly indicative of schools' needs (European Commission, 2000). From the literature it was evident that the indicators used in refining the assessment of what schools need and

working out the amounts of resources to be awarded are numerous and very varied and a full discussion about these is not appropriate here. However, a summary of the main indicators, i.e. the ones most commonly used, (e.g. pupil numbers and number of teaching hours required), together with illustrations of their use and their pros and cons are provided in Appendix 7. Countries of average size (e.g. Belgium, Ireland, the Netherlands) tend to rely on a limited number of indicators and succinct mathematical formulae for the allocation of operational resources.

Where a **broad range of indicators** are employed, although seemingly more complex, countries have made a thorough estimate of the needs of schools and, it could be argued they are better able to cater for schools' needs (European Commission, 2000). The use of a broad range of indicators may reflect a strategy of including resources that enable them to satisfy all their needs. For example, indicators to do with the local area may be used in conjunction with a basic indicator, such as the number of pupils, in order to refine the assessment of schools' needs. A description of these indicators, which tend to be used less commonly, together with examples and their pros and cons can be found in Appendix 8. Authorities allocating resources to schools may also take into account the special needs of pupils (e.g. due to social deprivation or inability to speak the native language). Discussion about the allocation of funding for pupils with special needs is reserved for section 4.3 and a description of the indicators used for assessing special needs, together with examples and their pros and cons, can be found in Appendix 9.

An alternative strategy involves identifying basic resource allocations and then targeting additional resources for specific needs (see section 4.3). Inevitably, however, the greater the range of indicators used to determine allocation of funding or resources, the more complex allocation formulae become. The Department of the Environment, Transport and the Regions (DETR, 2000) in England, for example, highlighted the need for simpler and more transparent formulae, 'avoiding the mechanical application of statistical analysis that characterises the current system' (p.16). DETR discusses a variety of options for using a formula to distribute grant, ranging from, at its simplest, a formula based on the number of people for whom a service is provided, to the use of a wide evidence base to inform the

development of fairly complex judgemental formulae. DETR states that a more judgemental approach to formulae could allow some discretion, but 'might not be sufficient to take account of local variations in performance' (p.19).

According to the European Commission (2000), the number of indicators used tends to be **dependent upon the responsible authority** in countries which are very small or very decentralised since they capitalise on their geographical proximity when assessing school needs, rather than relying on mathematical estimates. Thus, they rely on the fact that local decision-making authorities are familiar with the needs of the schools concerned. Decisions relating to capital resources are at the discretion of the competent authority much more frequently than staff or operational resources. In this case, 'much is unquestionably gained from the administrative authority and the school concerned being in close proximity' (p.211).

These models were examined against countries' overall educational **performance** rankings to see if there appeared to be any relationship between models and performance. There were 20 countries where both models and performance data were available (see Appendix 10). It was difficult to find any discernible pattern since the vast majority of countries used a broad range of indicators to allocate the bulk of resources (usually staff and operational resources) to schools. In addition, a limited number of indicators was only applied in the allocation of staff resources in primary schools in two countries, so only limited comparisons could be made. However, all of those countries where the number of indicators was dependent on the local authority fell into the top two-thirds of the ranking table. Overall, however, this suggests, that factors other than the funding models presented here were likely to be responsible for differences in performance between countries.

4.3 Allocation of funding for pupils with special needs

As a result of the move towards decentralisation, in many countries, there has been an international recognition that it is desirable to target funding at pupils with special needs (European Commission, 2000; Johnson, 2003). Rather than being systematically awarded to all schools, some resources are therefore set aside for some on the basis of criteria associated with

socio-economic, cultural or linguistic traits which give rise to the need for additional support. According to the European Commission, this is a practical example of positive discrimination and it is 'critically relevant to the principle of equality where there is increased financial autonomy for local bodies'. The allocation of funding according to need has been a major concern in European countries for the past 30 years. In this section, different models for targeting funding for special need are described and this is followed by discussion of their pros and cons.

4.3.1 Models of allocating funding for special needs

The models identified by the European Commission (2000) take account of the form in which special funding is awarded and the amount of discretion schools have over the distribution of resources. Within each of these models, the criteria for identification may be a target population, residential area or a combination of both. In addition, different indicators may be used for determining the population. Whilst this section is mainly reserved for discussion of the models, consideration of the methods and indicators used in association with the models and their pros and cons is presented in Appendix 9. Three main models were identified, in which extra funding for specific pupil needs may be targeted at schools by:

1. increasing the general allocation
2. funding centrally defined activities
3. funding locally proposed projects or schemes.

These three models are not mutually exclusive and many counties or states within countries may use a combination of these models.

Increasing the general allocation

In this model, schools are given a global allocation of additional resources dependent on the presence of pupils from specific target populations, e.g. children from disadvantaged backgrounds or children with particular educational needs. Special resources are awarded to schools as an increase in the general allocation granted automatically by central authorities to schools for one or several types of resources, for example, by having a per capita system weighted in accordance with the socio-economic requirements of pupils (European Commission,

2000). In most cases, schools have responsibility for decisions about how these resources are utilised.

Resource allocation may be dealt with at central level or entrusted to the discretion of the local authority. Within Europe, examples of this type of model exist within the UK, Germany, Spain and Sweden. Examples are also found within Australia, New Zealand, the USA and Canada. Different variations of this model exist depending on the resources to which they apply. In this model, the allocation of some schools may be increased for one or several resource categories according to need (European Commission, 2000). Several sub-models therefore exist, depending on the types of resources involved.

Resources may be allocated by increasing the global allocation for **staff and operational resources**. In Sweden, for example, government legislation identifies target groups of pupils with particular needs (e.g. pupils for whom Swedish is not their native language, those from disadvantaged socio-economic backgrounds or others with particular educational needs) who require additional forms of teaching to take account of them. The government has stipulated that this should be provided without specifying in what form it should be funded and some municipalities have opted to increase the general allocation. They either award the basic resources to schools and then a further amount that depends on the particular needs of the pupils or they weight the allocation to schools in accordance with the socio-economic characteristics of their catchment areas. Further examples are found in country illustrations 1 (UK), 6 (USA), 7 (Canada), 8 (New Zealand) and 9 (Australia).

Another sub-model exists in which the **operational or capital allocation** may be increased. When the *départements* in France, for example, award operational allocations to *collèges* (lower secondary schools), they take account of whether schools are officially classified as belonging to *zones d'éducation prioritaires* (ZEPs) (European Commission, 2000). This classification depends on the social characteristics and ability of the pupils concerned. Further examples are found in Ireland (see country illustration 2) and Portugal.

A further sub-model involves **increasing the staffing allocation**. In Ireland, in primary education, the Ministry of Education awards additional resources in the form of staff, to schools situated in disadvantaged areas, under two programmes (European Commission, 2000). In one

of these, the areas concerned are determined by the Ministry of Education, on the basis of socio-economic criteria, including the unemployment rate, the number of persons receiving free access to health care and the rate of local authority housing occupancy by families. In the second programme, the Educational Research Centre selects areas in accordance with socio-economic criteria. Selected schools in urban areas receive extra teaching staffing in order to achieve a teacher/pupil ratio of 1:15. Further examples are found in Germany, Spain, France (see country illustration 4) and Portugal.

Funding for centrally defined activities

The second model identified for targeting the special needs of schools involves the financing of special resources for activities under schemes drawn up in detail by central government or local authorities (European Commission, 2000). The essential feature of this type of allocation is that the activities are highly defined and the central government determines how the grants should be utilised. This model is the most widespread in Europe and examples are found in 13 European countries (European Commission, 2000) and also found in Australia, New Zealand, the USA and Canada.

In most cases, in Europe, in the UK, Belgium, Ireland, Luxembourg, Austria, Spain, Liechtenstein and Greece and in Australia and New Zealand, additional grants are directly awarded and allocated to schools by the central government. In Luxembourg, for example, a whole range of supporting activities is available for the benefit of immigrant children. The systematic teaching of German is organised for these children during the initial years of primary school and classes offering back-up tuition adapted to their needs are also provided. The number of immigrant pupils attending a school, governs the allocation of additional teachers engaged in specific supporting activities. Teaching staff responsible for this tuition are mainly paid for by the Ministry of Education, as well as by the municipalities, with the former contributing between 66 per cent and 80 per cent and the latter no more than 33 per cent.

In some counties (e.g. Denmark, Finland, Norway), the municipalities make the allocation, although the use of the grant is still determined by the government. It may therefore be interesting to note, that, in most of the Nordic countries, which stand out as reflecting a more locally autonomous financial system (as previously discussed), the funding for pupils with special needs is an area where the government in the main (apart from

Sweden) appear to retain control. In Norway, for example, special allocations in the form of teaching hours are awarded by municipalities to schools for remedial or similar purposes (e.g. Norwegian language classes, special education and remedial education). They are also used to provide additional teaching to immigrant pupils, child refugees and asylum seekers. Schools can apply for special subsidies to the Chief Municipal Officer. The municipalities in turn may be reimbursed by the government, or receive a special allocation. They mainly cover a share of the expenditure by municipalities on the salaries of teachers involved. In the Netherlands, in contrast, the allocation is made by the government but the municipalities decide how it should be used and in Sweden, municipalities both allocate resources and determine their use. In the USA, states make the allocation and determine their use, whilst in Canada, this is the remit of the provinces. Further examples can therefore be found in country illustrations 3 (Netherlands), 5 (Sweden), 6 (USA) and 7 (Canada).

In most cases, the allocation depends on the enrolment of children from immigrant families, refugees, travellers, or from families at socio-economic disadvantage. In all cases, schools have very little autonomy and funds have to be used for the purposes for which they are intended. In Europe, staff resources are those most commonly allocated.

Funding for locally proposed projects or schemes

The third model highlighted involves the allocation of resources to support schemes which have been devised and implemented by a school, a group of schools or an intermediate authority (European Commission, 2000). Allocations are usually made from central government to cover locally proposed projects that are specially devised and implemented. A key feature of this model is that the central government usually provides funding under a broad remit (e.g. social inclusion) rather than a highly defined area (as in the previous model) and schools or local authorities have to put in a detailed plan or bid to access resources. The submission of a project bid or plan of activity in this way may result in the award of resources to schools in a number of countries and two sub-models exist.

This model may include allocations by the central government for projects **proposed by schools** (as in Belgium, France, Ireland, Italy, Portugal and New Zealand). In Italy, for example, additional resources are

awarded in the form of teaching staff to schools situated in 'risk areas' provided they submit educational schemes likely to support the schooling of disadvantaged pupils (*ibid.*). In addition, operational allocations from the government and municipalities, as well as fixed capital allocation from the municipalities take account of socio-cultural and environmental conditions of schools and the existence of schemes devised by them to fight absenteeism. The attribution of teaching staff to each school by the Ministry of Education is partly determined by the existence of schemes for preventing and taking remedial action against school drop out and failure, as well as by indicators of an economic, socio-cultural and academic kind relating to the pupils at the school. Examples can be found in country illustrations 2 (Ireland) and 4 (France) and 8 (New Zealand).

This model also includes central government allocations for activities **proposed by local authorities** under a national scheme, as in Denmark, Sweden, the USA and the UK. In Scotland, for example, a method of financing the particular requirements of pupils known as the Excellence Fund was set up to improve performance, raise standards and boost social inclusion in schools. Some of the initiatives are targeted at pupils from socio-economically deprived areas. Local authorities have to submit a plan of activity incorporating the areas of concern in the national scheme on which they want to concentrate. They have to involve schools in their activity from the outset. Plans require approval from the government and resources are then awarded to local authorities in the form of a cash allocation for staff, equipment and capital assets which they in turn distribute to schools. This method of funding has to be flexible enough to meet local needs. Examples can be found in country illustrations 1 (UK) and 4 (France) and 6 (USA).

4.3.2 Models of allocating funding for special needs: pros and cons

As previously noted, it is common for OECD countries to allocate additional funding to schools according to the special needs of their pupils. Funding systems that identify specific student characteristics and provide funding accordingly have the advantage of increasing the accuracy of their funding policies (Carey, 2002).

Using an **increase in the general allocation** as a way of targeting pupil need is a less frequently used method compared to funding for defined activities in

Europe (European Commission, 2000), perhaps reflecting the few advantages and large number of disadvantages of its use which were highlighted within the literature. In this model, pupils' special needs are catered for in base level funding that is usually supplied by central government and so no extra funds are required from local authorities (Sielke, 2000). Since these additional resources are generally not earmarked for specific purposes but are lumped together with the overall allocation, this can be advantageous for schools as they have the same leeway as when using their general resources and can use the extra funding as they wish (European Commission, 2000). In England, for example, the government announced a reversal of the trend in the use of specific grants and the transfer of some of this funding back to Education Formula Spending Share on the basis that this gave local authorities more freedom over expenditure and so that schools could decide how to take forward action in these areas (Downes and Wharmby, 2003). This model also avoids stigmatisation of pupils and parents, since, unlike the other two models, they are not directly targeted. In addition, according to Wylie (1999), allowance for special needs in the per-student funding formula is often attractive to policy makers because it is comparatively simple and offers a logical approach to school funding.

However, the main problem with this approach is that it is difficult to ensure that the funds are used for what they were intended (although this may be an advantage to schools, as noted above) (e.g. Evans *et al.*, 2001; de Vijlder, 2003; Wylie, 1999). This is supported by evidence from Europe. In the Netherlands, for example, schools awarded extra funding through a weighted funding system used the extra funding to reduce class sizes rather than provide individual support for children from disadvantaged families (de Vijlder, 2003). When schools receive additional staff resources, they invariably use them to increase the teacher/pupil ratio rather than specifically targeting pupils in need (European Commission, 2000).

According to Evans *et al.* (2001), a further consequence of this, within the context of LMS in England, may be that central services for supporting pupils with special educational needs (SEN) may, as a result, diminish. In the USA, however, the programs created by funding systems that increase the general allocation, also tend to increase state control over education, since use of the funds is generally limited to state-specified programs (Carey, 2002).

Where there is freedom for parents to choose a school in any area, the use of criteria within the formula to address the special needs of pupils may mean that funding may not reach the target population (European Commission, 2000). It is suggested therefore that it is better for the specific requirements of schools (rather than a defined area) to be taken into account when calculating the allocation of resources. Others highlight that weighting within the general allocation often leads to insufficient funding for schools' needs. In New Zealand, while schools with a low decile rating receive more funding, they also incur higher costs (Wylie, 1999). Similarly, in America, a growing body of research suggests that the actual amount of funding required to address the needs of specific students is significantly higher than weights accommodate for (e.g. Carey, 2002). In addition, where this model is used by local authorities to allocate funding to schools, this may compromise transparency and schools may become suspicious that other schools have received more resources than them (European Commission, 2000). This view is supported by Johnson (2003) who states that 'amongst the aims of a funding formula, two are mutually exclusive, transparency and equity'. There is also the disadvantage of increasing their complexity and administrative costs (Carey, 2002).

Until more recently, the government in the UK increased considerably direct grants to schools to support specific initiatives or **funding for centrally defined purposes**. A key characteristic of these grants is that they may be used only for the purposes specified and that central government may dictate, at least to some degree, how the funding is distributed and who takes the spending decisions (Johnson, 2003). From the central government's perspective, the main advantage of this model is therefore the central government control. According to Johnson, specific grants are 'highly conditional and constitute powerful levers on school activity' and they permit much more precise targeting of resources than a formula. This view is supported by West *et al.* (2000) who state that this enables funding to be concentrated on specific priority areas, so increasing government control over education. Johnson also points out that, since the provision of grants permits much more precise targeting of resources than a formula, this also gives rise to higher expectations of equity which cannot always be met. He concludes that it may be impossible to reflect needs adequately in a single national formula and the use of grants may be the best means of providing additional funds, but that targeting must be done on a sound basis and the funding must be secure. He

suggests, for example, that some of the grants made on the basis of additional educational needs data are 'unambiguously directed at the target'. For more information on the indicators used to target special needs see Appendix 9. West *et al.* (2000) also point out that, within the grant allocation process, there is no objective assessment of the type and amount of provision required to meet pupils' needs.

West *et al.* (2000), referring to the situation in England, state that grants are only available at the expense of the schools' main budget. Since matched funding may be required, the local authority's main budget will be reduced and this will lead to a reduction in quality (as not all initiatives cover teaching costs). Similarly, according to Johnson (2003), these programmes can have an effect on the overall funding for additional educational needs (AEN). There is also an argument that grants made on the basis of AEN replicate provision that is made within the Education Formula Spending Share. He argues, however, that it is possible to conceptualise them as complementary, in which case there would be no question of double counting. Although not mentioned directly within the literature, this also raises the question of additional funding allocated in this way being targeted all the time at the same schools or areas, since additional funding for different initiatives is often based on the same or similar criteria (e.g. social deprivation). In contrast, providing funding through the general allocation may ensure a fairer and more even distribution of resources.

Where funding is allocated for **locally proposed projects or schemes**, a frequently reported problem of this model for targeting need is the administrative burden placed on schools as a result of the bidding process (Audit Commission, 2003; Evans *et al.*, 2001; Atkins, 2003; Post Primary Teachers Association, 2003). The Post Primary Teachers Association, focusing on contestable funding in New Zealand, highlighted that schools are required to submit detailed proposals to the Ministry for contestable funding irrespective of their need for the money and that this can prove extremely time consuming. According to the Audit Commission (2003), the arrangements for grant funding in England are too complex and onerous, the number of separate grants is too great and the bidding and accounting requirements are too varied. The costs of managing projects and accounting for expenditure (not allowed for in the grant) were also reported to be high. The Audit Commission (2000) questioned whether the Standards Fund was the most efficient and effective way to deliver

national priorities and advocated incorporation of the funding into the general allocation because of the administrative burden placed on schools. In England, schools in areas in receipt of most programmes complained that they were having to manage as many as 40 different funding streams: a 'needlessly complex administrative task' (Johnson, 2003). Similarly, Evans *et al.* (2001) argue that different grants available for special educational needs (coupled with different approaches to allocating funding in different LEAs) create a complex and confusing situation, making it very difficult to analyse funding for these pupils.

With this model, the uncertainty of future funding was often reported as problematic. According to the Audit Commission (2003), in England, new grants are often announced at short notice and the continuation of funding in future years is frequently uncertain thereby hindering effective planning. The Post Primary Teachers Association (2003), focusing on contestable funding in New Zealand, reported that this funding is ultimately 'provisional', 'temporary' and 'at risk' funding. Even after a school has been allocated money for a programme and there is a clear need for that programme to continue, the school is expected to find the funds to continue the programme in the following year. Additional funding is only provided if a variation of the programme is submitted in the following year. The Post Primary Teachers Association also states that the amount of money made available is capped and, as such, if a large number of schools apply for this limited amount, they may only receive a small amount. In addition, unlike targeting via the general allocation, since specific populations are targeted, this method can also lead to opposition regarding the preferential treatment of some populations over others and to the stigmatisation of parents and pupils (European Commission, 2000).

However, this process was also reported to have some benefits. The National Union of Teachers (Atkins, 2003), following incorporation of some of the Standards Fund grant into the general allocation by the government in England, criticised this move, stating that this fund comprised significant support for schools for named programmes and types of activity, the funding for which now had to come out of the general school allocation. According to Ofsted (1997), many schools passed on the bidding process to their departments and this 'sharpened thinking about priorities'. Through this process, they concluded that school staff (e.g. heads of department) were more acutely aware of the financial

position of the school and rapidly learnt what was likely to be a realistic bid.

The different models for targeting pupils with special needs were examined against the overall educational **performance** rankings of different countries (see Appendix 11). Again, it was difficult to discern any pattern since the countries where information was available tended to use a variety of the models discussed. However, in the top half of the performance ranking table there were more countries which used the general allocation and locally proposed projects as a methods of allocation for special needs funding than used government defined activities, whilst in the bottom half of the table there were more countries which used government defined activities for allocating funding than the other two methods. Overall, this suggests little relationship between the funding models and educational performance.

4.4 Summary

In this chapter, different models for the methods of allocating resources to schools (i.e. whether a common rule was applied across countries to all schools) were first examined. This was followed by funding models which reflected the range of factors taken into account when allocating resources to schools (i.e. the use of a broad or more limited range of factors). Different models for targeting the special needs of pupils were considered (i.e. was this achieved through the general allocation received by schools or through centrally or locally defined activities). From this exploration the following key points emerged:

- three funding models based on the method of allocation were identified: countries may adopt a common rule (e.g. a mathematical formula) for one or more resource types (mainly teaching staff); they may have no systematic rule; or it may be local authority dependent. Some countries adopt several models depending of the level of education concerned or the kind of resources being allocated
- where there is a systematic rule, this would suggest a firm basis on which to allocate resources. However, where there are no strict rules and decisions are taken on an ad hoc basis, this may have the advantage of providing a more appropriate response to individual school circumstances

- where extensive decentralisation has occurred, municipalities act with relative autonomy when deciding the amounts allocated. They may apply a systematic rule, but there is no general rule across the whole country. This applies to all types of resources in some Nordic countries
- three models were identified based on the range of factors taken into account: countries may use a limited range of basic indicators (e.g. pupil numbers) to allocate resources to schools; they may use a broad range of indicators, taking into account other factors (e.g. the geographical area); or the range of indicators taken into account may be local authority dependent
- countries more commonly use a broad range of indicators rather than a limited number of basic indicators on which to base school allocations, allowing greater sensitivity and fairness but, at the same time, this may compromise simplicity and transparency
- three models were identified for allocating resources for pupils with special needs. This may be achieved by weighting the general school allocation, through centrally defined activities or through locally proposed projects or schemes
- the most commonly used model for targeting resources for special needs was through centrally defined activities, giving central government control and ensuring that resources are directed towards national policies. In some countries, special needs are also targeted through the general allocation, but the difficulty with this is that these resources may not be used for the purposes intended.

5 Summary

This chapter presents an overview of the funding models identified and makes some recommendations for future research.

5.1 Overview

Firstly, this section reiterates some of the main findings. It then presents an overview of the models and some of the central issues raised.

Public funding for education may originate from mainly central, regional or local sources. Funding may then be transferred between levels of government and, where this is the case, these may have some influence over the allocations schools receive. Centrally allocated funding is most typically either earmarked for specific items of expenditure or takes the form of a block grant over which the local authority has considerable discretion. Local authorities also use their own resources, such as taxes and other forms of income, although this sometimes corresponds to only a very minor proportion of the funds. Regardless of the actual source of finance, central and/or local authorities may be responsible for distributing funding and making decisions about the amount of resources schools receive.

Local authorities have an important part to play in the financing of schools. They may be financially autonomous, in which case they are empowered to establish the education budget for all or some school expenditure and thus exercise considerable responsibility and decision-making power. Alternatively, this responsibility may be shared with central government or they may distribute allocations amongst schools, but have no say over the amounts allocated. Schools may have autonomy in establishing budgets or in the use of allocation. Those that are less autonomous receive resources from central government and the quantity and nature of these resources are predetermined. Where schools have greater autonomy, this raises a number of issues concerning accountability, monitoring and the time, skills, knowledge and information to engage in effective strategic financial planning.

Countries may allocate resources to schools on the basis of a variety of different models. They may have a common rule, no systematic rule, or this may be local authority determined. In addition, they may use a limited range of basic indicators or a broad range of indicators to determine the allocation of resources to schools. The range of indicators taken into account may be local authority dependent. Countries may target resources for pupils with special needs by weighting the general school allocation, through centrally defined activities or through locally proposed projects or schemes.

Educational funding is a complex area and, in order to present theoretical models of school funding, the school funding systems involved have had to be broken down into their component parts. Although this may result in an oversimplification in places, this has made possible broader comparisons and illustrative examples have been used to provide more detail of the systems in different countries. This has enabled the UK funding system and the models used to be seen in a broader perspective alongside other OECD countries.

In order to provide more of an overview, Table 5.1 shows all the models as they apply across a number of European countries.

Table 5.1 illustrates that those which are locally financed, perhaps not surprisingly, demonstrate more autonomy in all the funding models identified, except when models concerning targeting pupils with special needs are considered. This appears to be an area where central government in these countries exert some control. In contrast, in countries that are mainly regionally or centrally funded, there tends to be limited local authority and school autonomy, a common rule is applied to the allocation of resources to schools, yet the funding for pupils with special needs tends to be allocated through the general allocation, giving schools more discretion in this area.

In addition, in order to provide a further overview of the models, diagrams for three contrasting European countries, i.e. highly centralised (Ireland), fairly centralised (France) and highly decentralised systems

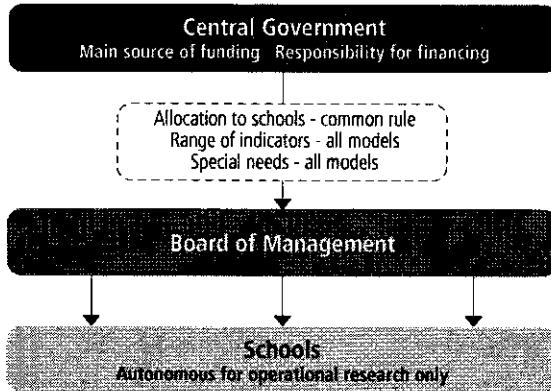
Table 5.1 Overview of models

	Performance	Source	Responsibility	LA autonomy	School autonomy	Allocation	Indicators	SEN
Finland	2	Local	Local	Financial autonomy (all resources)	Varies with local authority	LA rule (all resources)	LA dependent (all resources)	Government
Norway	14	Local	Local	Financial autonomy (all resources)	Varies with local authority	LA rule (all resources)	Broad; LA dependent (all resources)	Government
Sweden	9	Local	Local	Financial autonomy (all resources)	Varies with local authority	LA rule (all resources)	LA dependent (all resources)	General allocation; LA
Denmark	17	Local	Local	Financial autonomy (all resources)	Varies with local authority	LA rule (all resources)	LA dependent (all resources)	Government; LA
Iceland	13	no data	Local	Financial autonomy (all resources)	Limited autonomy	Common rule; LA rule	Broad (all resources)	Government
Belgium	10	Regional	Shared	Shared (some resources)	Limited autonomy	Common rule (all resources)	Broad; limited	Government; school
Germany	20	Regional	Shared	Financial autonomy (some resources)	Limited autonomy	Common rule; LA rule	Broad; LA dependent	General allocation
Spain	21	Regional	Shared	Financial autonomy (some resources)	Operational resources only	No rule; LA rule	Broad; LA dependent	General allocation; government
UK	6	Central	Shared	Financial autonomy (all resources)	Budget autonomy	Common rule; LA rule	Broad; LA dependent	General allocation; government; LA
Ireland	7	Central	Central	Autonomy in use only	Operational resources only	Common rule; no rule	Broad; limited; LA dependent	General allocation; government; school
Austria	8	Central	Shared	Financial autonomy (some resources)	Operational resources only	Common rule; no rule	Broad; LA dependent	Government
France	11	Central	Shared	Financial autonomy (some resources)	Limited autonomy	No rule; LA rule	Broad; LA dependent	General allocation; school
Italy	23	Central	Shared	Financial autonomy (some resources)	Operational resources only	No rule; LA rule	Broad; LA dependent	School
Portugal	24	Central	Shared	Financial autonomy (some resources)	Limited autonomy	Common rule; LA rule	Broad; LA dependent	General allocation; school
Greece	25	Central	Central	Autonomy in use only	Operational resources only	Common rule; LA rule	Broad; limited; LA dependent	Government
Luxembourg	27	no data	Shared	Shared (some resources)	Limited autonomy	No rule (all resources)	Broad; LA dependent	Government
Liechtenstein	18	no data	Shared	Shared (some resources)	Limited autonomy	No rule; LA rule	Broad; LA dependent	Government

Note: The countries are ordered according to whether they are locally, regionally or centrally financed

(Sweden) showing all the different models they use are presented in Figures 5.1, 5.2 and 5.3.

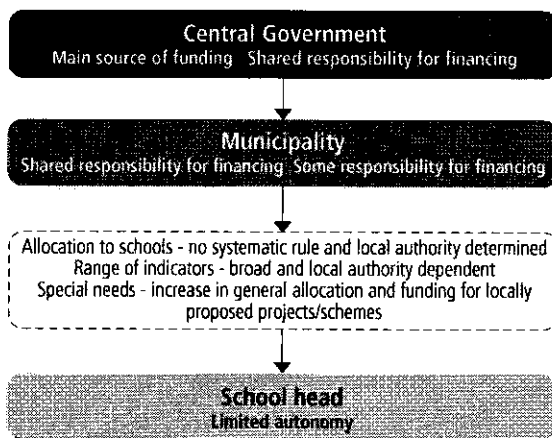
Figure 5.1 Ireland: primary schools



Source: Various

In Ireland, for example, central government is both the main source of funding and maintains responsibility for the financing of schools. Local authorities have no role in this model. Schools receive their resources direct from central government and have financial autonomy for operational resources only.

Figure 5.2 France: primary schools



Source: Various

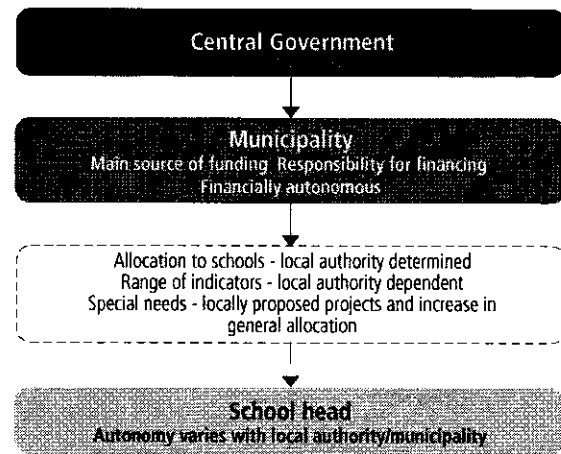
In contrast, in France, in primary education, the locus of control and responsibility is more towards the municipal level, which has shared responsibility for the financing of education with the central government and some financial autonomy, despite the fact that education is mainly centrally funded. Schools themselves have limited autonomy.

In Sweden, the locus of control and responsibility is centred on the municipality (at local level) and central

government has a limited role, i.e. setting certain national regulations and standards. Municipalities have sole responsibility for financing and are financially autonomous. The extent of school autonomy varies with the municipality. Thus, despite the hierarchical levels of government, greater control and responsibility in Sweden is located at local level.

Whilst the trend across most countries has been towards decentralisation and more local financial autonomy, from the literature review, it appeared that the UK and the Nordic countries, such as Sweden, have gone the furthest down the local autonomy route.

Figure 5.3 Sweden



Source: Various

The findings from the exploration of the relationship between countries' educational performance and the funding models identified support the view that the main source of funding, who has final responsibility for funding and whether local authorities and schools are more autonomous, as well as the way in which funding is allocated to schools, has little relationship with educational performance. However, it is recognised that the method of comparison was very limited in this case and measures of educational performance would need to take into account 'value added' aspects to avoid simply reflecting different levels of social deprivation in different countries.

5.2 Recommendations

The literature review highlighted the dearth of available information on funding models and their strengths and weaknesses. Since this review has focused on a broad

overarching exploration of the funding models used in many different countries, only broad recommendations can be made. However, areas for potential future research have been highlighted and the following recommendations would seem appropriate.

- Since moves towards the direct funding of schools through a national funding formula have been mooted in the UK, there may be value in further exploration of systems which provide direct funding to schools in this way. What can be learnt, for example, from the experience of New Zealand, where a system which was designed to increase autonomy for schools appears to have reverted to a more centralised system?
- Equally, there may be value in further exploration of the funding systems in countries which are further down the local autonomy route than the UK at present. Perhaps there are also lessons to be learned from a more detailed examination of the way in which Nordic countries operate their highly localised system of education funding
- Further work on the relationship between funding models and educational performance, taking into account value-added measures, may provide useful information. It may be that this is an area that could be examined in more depth at local authority level
- In addition, as highlighted in the Audit Commission report (2004), further research into the management and governance issues associated with school autonomy may prove valuable. For example, by examining in depth, at local authority and school level, the issues of accountability and financial decision making and the management of inter-school issues, which were raised by the literature.

**part two:
country illustrations**

6 Country illustrations

Introduction

Illustrations are provided for nine countries, which were selected to illustrate a range of models. Five countries have been included from Europe (the UK, Ireland, the Netherlands, France and Sweden) to exemplify the wide variety of practice across different countries. Similarly, given the size of the countries and the range of practices across states in the USA and Canada, two states have been included for each. New Zealand and Australia have also been depicted.

Each of the country illustrations includes key statistics and key features of the education system to provide some contextual information. The illustrations follow the chapters of the report, in terms of structure and are therefore focused on models. It is important to note that this section is not designed to provide a comprehensive summary of the funding system in each country, rather to illustrate the models which have been elucidated on throughout the report. The following sections are included in each country illustration:

- key statistics
- key features of the education system
- financial source and flow
- division of responsibilities
- allocation of funding to schools.

The key statistics are taken from OECD (2003) data for 2000. Where there was a choice, for each factor, figures which most closely equated with the focus of the study,

i.e. public finance and the years of compulsory schooling, were selected. For each country, data is provided on:

- performance ranking (based on the average of pupil performance means in English, mathematics and science)
- expected years of schooling (primary and lower secondary)
- ratio of students to teaching staff, primary and lower secondary
- expenditure per pupil, primary and lower secondary, i.e. annual expenditure on educational institutions per student in equivalent US dollars converted using purchasing power parities (PPPs)
- public expenditure on primary and lower secondary education as a percentage of the GDP and public expenditure on education (primary, secondary and post-secondary non-tertiary) as a percentage of the total public expenditure.

In addition, the average of the data, the country mean, has been provided to enable a comparison of the value of one country against the value of another 'typical' or 'average' country (OECD, 2003). It should be noted, however, that the country mean does not take into account the absolute size of the education system within each country. Given that figures on school populations or the numbers of schools within each country were unavailable, a total population figure for each country has been included to give an indication of the size of each country.

6.1 United Kingdom

Key statistics

	Country mean	
Total population of the country (in thousands)	58,655	
Performance ranking	6	
Expected years of schooling (primary and lower secondary)	8.9	9.4
Ratio of students to teaching staff (primary)	20.5	17.0
Ratio of students to teaching staff (lower secondary)	17.3	14.5
Expenditure per pupil (primary) in US\$/PPP	3877	4381
Expenditure per pupil (lower secondary) in US\$/PPP	No data	5575
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of GDP	3.4 per cent	3.5 per cent
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of total public expenditure	8.3 per cent	8.9 per cent

Source: Organisation for Economic Cooperation and Development (2003)
Year of reference: 2000

In 2000, the UK ranked within the top ten OECD countries for overall educational performance (measured as described in the introduction). Expected years of schooling were slightly below the country mean. The percentage of public expenditure on education as a proportion of the total public expenditure for the UK was less than the OECD country mean but, as a percentage of the GDP, the UK spent around the average.

Key features of the education system

In England and Wales, the schools are all referred to as maintained schools regardless of whether they were set up by private entities or state bodies (European Commission, 2000). Those founded by private bodies include voluntary controlled schools, which were mainly established by the Church of England and voluntary aided schools, which were set up by the Catholic Church or the Church of England. Both of these categories are voluntarily incorporated within the maintained sector and supported by public funding. There is private provision at all levels of education. Apart from city technology colleges (see below), private schools, often known as independent schools, receive no public funds except for financial advantages (e.g. tax relief) conferred by their charitable status (Eurydice,

2004). Some existing pupils, however, may have part or all of their fees paid by the government through the Assisted Places Scheme.

Comprehensive schools are non-selective and accept pupils regardless of ability, whereas grammar schools select their pupils by ability. In 2002, there were 161 maintained grammar schools in England (Eurydice, 2004). Specialist secondary schools, which may select ten per cent of their pupils by aptitude for the specialist subject, specialise in a particular area of the curriculum and must receive some finance from outside sponsors who may be represented on the governing body. They also receive additional funding from the government and are required to share their expertise with other schools and the local community. City technology colleges are publicly funded independent secondary schools which also exist in England. In Northern Ireland there is currently a selective system of secondary education. All publicly funded secondary schools in Scotland are comprehensive in character.

Since the introduction of local management of schools (LMS) in the early 1990s, there has been increasing school autonomy and increasing delegation of funds to schools.

Financial source and flow (see Figure 1)

OECD figures suggest that, in the UK, the initial source for the majority of funds is local government (74 per cent local; 26 per cent central) (OECD, 2003). It is these figures for the initial source of funds which are shown in Figure 1. These figures do not, however, appear to take into account the fact that local government funds are derived mainly from central government grants, with the balance raised through local taxes. The overwhelming majority of public funding to public sector primary and secondary schools is finally obtained from local authorities, with the remainder coming from central government (76 per cent local and 24 per cent central) (OECD, 2003). The direct financial burden of education is therefore borne heavily by local authorities.

All maintained schools in England and Wales receive their revenue funding from their local authority. Local authorities receive this funding from two principal sources: grants from central government (mainly the Revenue Support Grant or RSG) and money raised by the local authority itself (e.g. council tax). The RSG covers all local authority services, including education. Local authorities are therefore free to decide how much of the total they devote to education, although this is limited by requirements for delegation to schools and the Secretary of State has the power to intervene.

Division of responsibilities

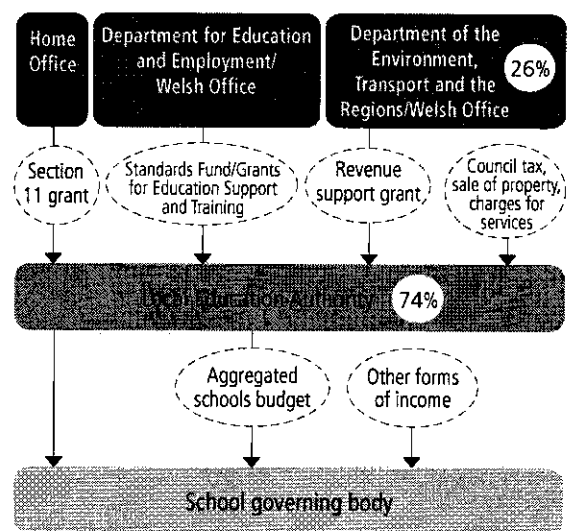
Following the introduction of LMS, decentralisation of financing to local authorities and to schools has been considerable. However, the powers of local authorities are limited by formal requirements laid down by central government.

Role of local authorities

In the UK, decentralisation of financing to the local authorities is very extensive. Local authorities are more autonomous than elsewhere in Europe, since they finance operational, capital and staff resources and receive a global allocation for these purposes. The local authorities determine freely the overall amount that they allocate to education (the General Schools Budget or GSB). They thus exercise considerable responsibility and decision-making power as regards most expenditure on education (Eurydice, 2001). However, this power is

limited (unlike the Nordic municipalities) by the formal requirements to delegate funding to schools established by central government. Local authorities are not required to delegate capital funds to schools. These funds are retained and spent centrally following consultation with schools about their needs. Although local authorities have to delegate the major share of administration of the education budget to schools, they remain ultimately responsible for ensuring that schools honour their resource contracts and are the owners of the equipment and goods purchased by them.

Figure 1 England and Wales: LEA maintained schools



Source: adapted from European Commission (2000)

Role of schools

In the UK, responsibilities for staff and operational resources have been systematically decentralised to schools (European Commission, 2000). Schools in the UK have the most extensive and most atypical autonomy, where staff resources and operational resources are allocated in global form. Schools thus receive an annual allocation that they are largely free to administer as they wish. They may also carry over any unused amount from one year to the next.

In England and Wales, schools themselves are responsible for managing their own staff budget. They are free to choose their staff but local authorities, which remain the legal employers, have the right to give advice in this respect. Delegation of the administration of operational goods and services to schools is provided for in national legislation, whereas, in other countries in Europe, the local authorities administer the operational goods and services that they finance. The management

of fixed capital assets is less often a school responsibility, but it applies to certain capital resources in schools in England (e.g. low cost minor building or conversion and building repair and maintenance).

In Scotland, schools, in conjunction with local authorities and in compliance with national basic staffing standards, deal with determining the number of staff, whilst the local authorities deal with their recruitment and the payment of their salaries. Within this system, the local authority finances staffing costs in accordance with recurrent annual school costs, whereas, in the rest of the UK, schools support the costs of variations in salary related to the seniority of staff. Schools manage movable capital assets and undertake their purchase subject to the approval of local authorities.

Allocation of funding to schools

In the UK, contrary to many other European countries, the methods of financing primary and secondary education are exactly the same.

Method for determining allocation

In the UK, a mathematical formula is used to determine operational resources and staff resources allocated to schools (European Commission 2000). In England and Wales the volume of staff and operational resources awarded to individual schools is governed by certain common principles, e.g. that at least a certain percentage of the Schools Budget must be allocated on the basis of pupil numbers. In Scotland, local authorities have opted for the systematic use of formulas to establish the allocations for staff and operational purposes. Since there is extensive decentralisation in the UK, capital expenditure is not allocated on the basis of a formula but is determined by the local authority and depends on the provision of sufficient schools places and the need for urgent repairs.

Range of factors taken into account

In the UK, a summary of indicators plus a variable number of other indicators are used to determine the allocation of staff and operational resources (European Commission, 2000). However, the range of factors taken into account is the choice of responsible authority for capital resources. Whilst England, Wales and Northern

Ireland use basic indicators and supplementary indicators for the volume of operational resources for each individual school, Scotland uses basic indicators and past experience.

Indicators used

In the UK, the number of pupils is the main variable for assessing school needs in the case of staff and operational resources (*ibid.*). The overall budget for LEA-maintained schools in England and Wales varies between different local authorities and the indicators they use vary from one local authority to another. However, a large percentage (i.e. around 80 per cent in England and 75 per cent in Wales) of the local authority's Aggregated Schools Budget must be allocated on the basis of age weighted pupil numbers.

Local authorities may weight pupil numbers according to a number of factors (e.g. age; key stage; year group; nursery education; SEN). Although most local authority funding schemes have, in the past, included an element related to social deprivation, in 2002/3 it became compulsory for all local authorities in England to include a factor which distributes funding on the basis of some indicator of social deprivation. Other factors which may be taken into account are actual salary costs, delivering the curriculum in small schools, AEN and the cost of premises. In Scotland, the amount of resources is chiefly based on the number of pupils, class size regulations and the need to provide an adequate curriculum, especially in small secondary schools.

Allocation of funding for pupils with special needs

In the UK, schools receive additional resources for staff and/or operational activity or even capital from the public authorities which are dependent on the presence of pupils from special target populations. All three of the identified models for allocating funding for pupils with special needs are adopted (European Commission, 2000).

Increasing the general allocation

The additional resources can be lumped together with the general allocation and schools then have the same leeway as when handling their general resources. After allocating the majority of funding to schools on the basis of age weighted pupil numbers, local authorities are allowed to distribute to schools a share of the

remaining resources to address AEN. This includes pupils with formal statements of SEN, non-statemented SEN pupils and other educational needs, such as social disadvantage.

The range of indicators used by local authorities to allocate resources is varied and includes, for example, the numbers of pupils receiving free school meals (FSM), results of statutory or other educational tests, pupil turnover, the ethnic background of pupils and their degree of fluency in English. While most local authorities take account of the particular needs of schools when calculating allocations, they are not obliged to do so and their practice depends on their own priorities. This sets England, Wales and Northern Ireland apart from other countries, where the identification of certain specific needs in schools results in extra resources as a matter of course. In Scotland, procedures for the award of staff and operational resources to schools by local authorities take account of a number of social circumstances, such as the location of a school in an isolated area or a disadvantaged catchment area.

Funding for centrally defined activities

Additional resources for pupils with special needs are also allocated for activities defined by central government. In England and Wales, for example, local authorities can apply for funding for grants to meet the needs of ethnic minority pupils from the DfES, known as Ethnic Minority Achievement Grants, which aim to provide equal opportunities for all ethnic minority groups. They are intended primarily to meet the needs of pupils for whom English is an additional language and to raise standards of achievement for those ethnic minority groups who are especially at risk of underachieving. Once the grants have been obtained, the local authorities award cash resources to schools.

Funding for locally proposed projects or schemes

There are central government allocations focused on pupils with special needs for educational activities drawn up by local authorities under a national scheme. In this model, local authorities have to submit plans for activity consistent with a national scheme. In England and Wales, for example, there are several government initiatives which provide additional resources to help schools overcome the educational effects of economic and social deprivation and/or the needs of minority groups and to raise pupil attainment. The Standards Fund in England provides funding for schemes to support schools which deal with such problems. These include, for example, schemes to improve attendance and behaviour and various schemes to raise the attainment of underachieving pupils, e.g. setting up of study support centres, family literacy projects and summer literacy schools. The education ministries determine annually the type of scheme which will be supported; local authorities submit bids and plans for approval and normally provide 50 per cent of the funds.

In Scotland, a method of financing the particular requirements of pupils known as the Excellence Fund was set up to improve performance, raise standards and boost social inclusion in schools. Some of these initiatives are targeted at pupils from socio-economically deprived areas. Local authorities have to submit a plan of activity incorporating the areas of concern in the national scheme on which they want to concentrate. They have to involve schools in their activity from the outset. Plans require approval from the government and resources are then awarded to local authorities in the form of a cash allocation for staff, equipment and capital assets (movables) which they in turn distribute to schools. This method of funding has to be flexible enough to meet local needs.

6.2 Ireland

Key statistics

		Country mean
Total population of the country (in thousands)	3,799	
Performance ranking	7	
Expected years of schooling (primary and lower secondary)	10.8	9.4
Ratio of students to teaching staff (primary)	20.3	17.0
Ratio of students to teaching staff (lower secondary)	15.2	14.5
Expenditure per pupil (primary) in US\$/PPP	3385	4381
Expenditure per pupil (lower secondary) in US\$/PPP	4625	5575
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of GDP	3.5 per cent	3.0 per cent
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of total public expenditure	9.3 per cent	8.9 per cent

Source: Organisation for Economic Cooperation and Development (2003)
Year of reference: 2000

In 2000, Ireland ranked within the top ten OECD countries for overall educational performance. The expected years of schooling were slightly above the country mean. As in other European countries, Ireland devotes more money for secondary schools than for primary schools, although the difference between the two levels was very marked compared to other countries in 2000 (although to a lesser extent than some European countries, e.g. France). Ireland spent a slightly greater percentage of its total public expenditure on education than the OECD average, and slightly more than the OECD average for public expenditure on education as a percentage of GDP. In the same year, 3,172 primary schools, 783 second-level schools and 121 special schools were in receipt of funding from the Department of Education and Science (DES) (Eurydice, 2004).

Key features of the education system

In Ireland, in contrast to most other countries, a large proportion of pupils attend schools in grant aided private education. This applies throughout virtually the whole of primary education and, to a large extent, in secondary education (European Commission, 2000). In principle these schools belong to 'grant aided private education', but they are largely financed by the state and they account for by far the greater share of educational

provision. The majority of these schools are run by a board of management which includes teaching staff and parent representatives, as well as members of the founding body. The Irish education system therefore takes the form of a partnership between the state and various private partners. Schools are private but they are funded publicly and are therefore classified as public sector.

Secondary education is provided in three main types of schools:

- voluntary secondary schools (60 per cent of enrolments)
- vocational schools and community colleges (26 per cent of enrolments) and
- comprehensive and community schools (ten per cent of enrolments) (Commission, 2000).

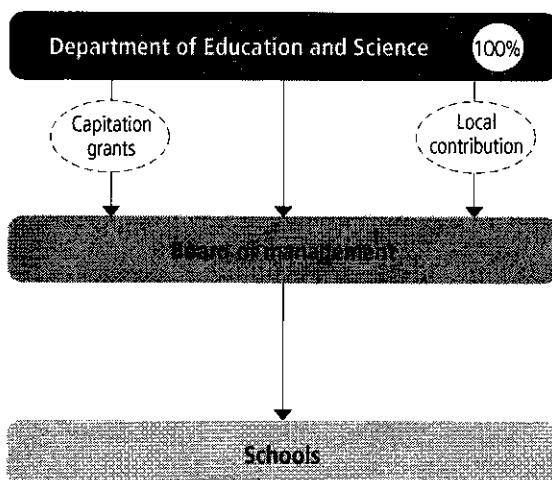
Voluntary secondary schools and vocational schools and community colleges are primarily subject to the patronage of religious orders, whilst, comprehensive and community schools are primarily the property of the State.

The education system in Ireland is highly centralised and is administered by the DES (Commission, 2000). Schools are organised at parochial and local level and this has led to a proliferation of small schools.

Financial source and flow (see Figures 2a, 2b and 2c)

In Ireland, the source of public financing is the state and the majority of schools obtain their resources directly from central government. According to OECD (2003) statistics relating to 2000, 99.9 per cent of funding comes from central and 0.03 per cent from local government sources (the 100 per cent financing from central government is illustrated in the diagrams). Vocational schools and community colleges, however, receive their resources from the government via the Vocational Education Committees (VECs) of the local authorities (see Figure 2c). The religious communities contribute approximately ten per cent of the capital costs of community schools, with the state paying the remainder.

Figure 2a Ireland: primary schools



Source: Diagram adapted from the European Commission (2000)

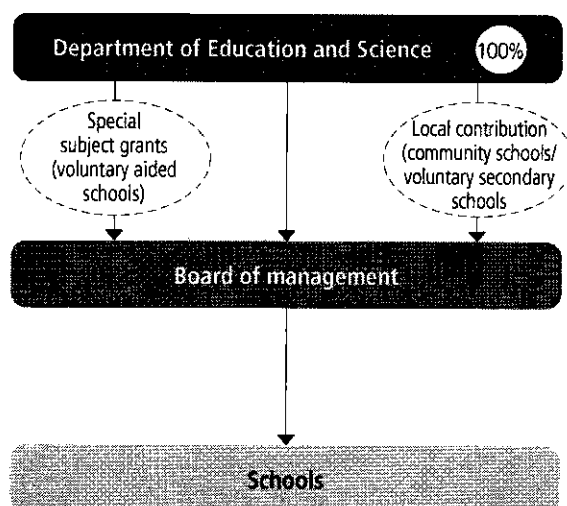
Division of responsibilities

Ireland is one of the few countries where, in the case of vocational schools and community colleges, the financing of compulsory education is only decentralised in the sense that the VECs are responsible for distributing to schools allocations, whose amounts are determined at central government level (Eurydice, 2001).

Role of local authorities

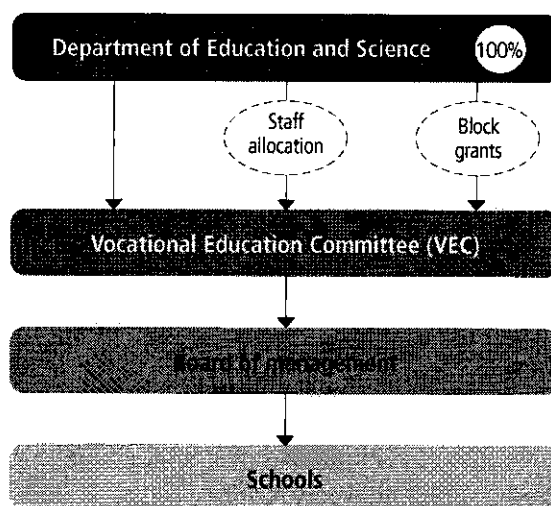
Ireland is one of only two countries in Europe in which local authorities receive central government allocations earmarked for a particular category of educational resources (European Commission, 2000). They do not supplement them from their own resources and are,

Figure 2b Ireland: voluntary secondary schools and community and comprehensive schools



Source: Diagram adapted from the European Commission (2000)

Figure 2c Ireland: secondary vocational schools and community colleges



Source: Diagram adapted from the European Commission (2000)

therefore, not involved in determining the amounts of these allocations. However, they are responsible for distributing them among various schools. The VECs receive three different allocations from the DES intended for expenditure on staff, operational resources and capital. The VECs distribute all resources to the various schools in accordance with their priorities and perceptions of need. However, there are ministerial recommendations regarding the allocation of non-teaching staff to schools, in accordance with their levels of enrolment. These are included in the operational allocation. The VECs recruit staff and pay their salaries.

Role of schools

Whereas primary schools and voluntary secondary schools manage the three budgetary headings of staff, operational resources and capital, in the vocational schools and community colleges, school autonomy is limited to the management of operational resources (this is the most widespread form of autonomy in Europe) (European Commission, 2000). These schools receive their operational resources in cash in roughly compartmentalised form. The boards of management of these schools receive an operational allocation from the VEC which has to cover the costs of utilities and maintenance. Community and comprehensive schools also have autonomy over staff resources. They receive an allocation in kind, i.e. an overall number of either hours or teacher periods to be divided up amongst classes and subjects. One aspect of this autonomy is that schools are free to recruit staff. However, no transfers are possible between the headings corresponding to staffing and operational resources. These schools receive a cash allocation for part-time or replacement teachers. The number of staff to be employed is fixed at a higher level. Teaching staff are remunerated by the DES, but recruited by the board of management, their official employer.

Allocation of funding to schools

In Ireland, the method of awarding and managing school resources differs in primary and secondary education and between different types of schools (European Commission, 2000).

Method for determining allocations

A systematic common rule is applied for the allocation of primary and secondary staffing and also for the allocation of operational resources to primary and voluntary secondary schools. However, there is no systematic rule for the allocation of operational resources to comprehensive and community schools or vocational schools and community colleges and there is no systematic rule for the allocation of capital resources.

Range of factors taken into account

A limited number of summary indicators are taken into account when allocating staff and operational resources to primary and voluntary secondary schools. In contrast, a summary of indicators and a variable number of other indicators are used for the allocation of staff and operational resources for community and comprehensive schools. It is the choice of the VEC what factors are

taken into account for staff, operational and capital resources for vocational schools and community colleges.

Indicators used

The number of teachers assigned to each primary school depends on the number of annual enrolments. A formula proportional to the number of pupils is also employed to determine resources for the acquisition of goods and services, whereas the scale of capital investment tends to depend more on a 'case-by-case' approach for each individual school. Resource transfers to community and comprehensive schools are handled in a similar way, although indicators other than just the pupil numbers are incorporated into the formula for deciding the number of teachers and the resources for acquiring operational goods and services. The voluntary secondary schools are entitled to a teaching staff quota and to operational expenditure on a per capita basis. Resources awarded to vocational schools and community colleges vary with the VEC concerned and so are not subject to any single common regulation.

Allocation of funding for pupils with special needs

All three of the main models for allocating funding for pupils with special needs are used in Ireland.

Increasing the general allocation

Additional funding may be allocated for pupils with special needs through an increase in staffing allocation and through an increase in operational and/or capital allocation. For example, in primary education, the Ministry of Education awards additional resources in the form of staff to schools situated in disadvantaged areas under two programmes (European Commission, 2000). In one of these, the areas concerned are determined by the Ministry of Education, on the basis of socio-economic criteria, including the unemployment rate, the number of persons receiving free access to health care and the rate of local authority housing occupancy by families. In the second programme, the Educational Research Centre selects areas in accordance with socio-economic criteria. Selected schools in urban areas receive extra teaching staffing so that they can achieve a teacher/pupil ratio of 1:15. In addition, primary schools included in the Designated Areas Scheme receive supplementary cash resources as a flat rate amount, use of which is guided by ministerial recommendations.

Funding for centrally defined activities

The home-school liaison scheme in Ireland seeks to develop partnerships between schools, homes and the community by relying on additional support from teachers and parents to motivate children to learn. Selection of a school for the scheme depends on the extent to which its pupils have difficulty in following normal classroom activities and the degree of involvement of their parents in education. While in principle this is not related to the area, most of the schools selected for this initiative come from disadvantaged areas. Additional resources for this are directly awarded to schools by central government.

Funding for locally proposed projects or schemes

The Breaking the Cycle Initiative, where resource allocations are awarded in cash by the government to primary schools in disadvantaged areas, enables schools to develop projects for which they can secure extra funding (European Commission, 2000). Grants are accompanied by advice and proposals regarding appropriate activities for expenditure.

6.3 The Netherlands

Key statistics

		Country mean
Total population of the country (in thousands)	15,922	
Performance ranking	No data	
Expected years of schooling (primary and lower secondary)	10.5	9.4
Ratio of students to teaching staff (primary)	17.2	17.0
Ratio of students to teaching staff (all secondary)	17.1	14.5
Expenditure per pupil (primary) in US\$/PPP	4325	4381
Expenditure per pupil (lower secondary) in US\$/PPP	6100	5575
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of GDP	3.2 per cent	3.5 per cent
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of total public expenditure	7.0 per cent	8.9 per cent

Source: Organisation for Economic Cooperation and Development (2003)
Year of reference: 2000

For the Netherlands, the expected years of schooling were slightly above the OECD country mean. In 2000, the Netherlands was characterised by quite large differences in the average resources per pupil at primary and secondary level. In terms of the percentage of public expenditure on education in proportion to total public expenditure, the Netherlands was one of the six OECD countries that spends 7.0 or less than 7.0 per cent and was well below the country mean. The Netherlands also spent below the OECD country mean for the public expenditure on education as a percentage of the GDP.

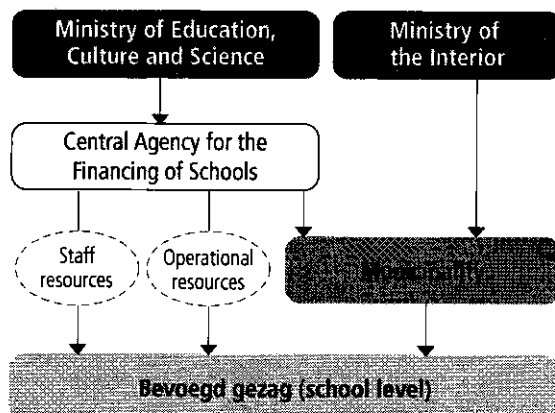
Key features of the education system

Contrary to the majority of European countries, around 70 per cent of pupils in the Netherlands attend private schools, governed and administered by private school boards (de Vijlder, 2003). However, all schools are funded on an equal basis and have to answer to the same national requirements on quality and curriculum (Eurydice *et al.*, 1995). There is a national funding scheme based on the fact that 'money follows students' (Vijlder, 2003). There are four major kinds of schools: state schools; Roman Catholic; Protestant and non-denominational private schools. Dutch parents have freedom of choice of schools, although the freedom of

privately run schools is constrained by funding conditions (Eurydice *et al.*, 1995) and the government recently introduced legislation limiting their number and funding eligibility (Fraser, 2003). Another distinctive feature of the Netherlands system is that schools have a high degree of autonomy in the application of the curriculum and the systems used for enrolling pupils, although they must employ standard assessment tests (Post-Primary Review Body, 2001).

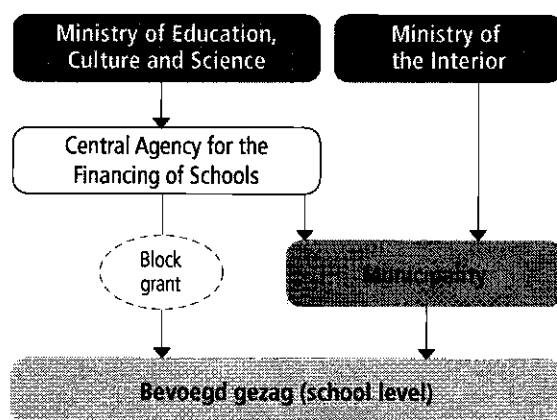
Financial source and flow (see Figures 3a and 3b)

Figure 3a The Netherlands: primary schools



Source: Diagram adapted from the European Commission (2000)

Figure 3b The Netherlands: lower secondary schools



*Note: No figures were available from the Netherlands
Source: Diagram adapted from the European Commission (2000)*

The funding for education is almost entirely from central government and most costs are paid directly to the competent authority (European Commission, 2000). OECD data for 2000 indicates that 94 per cent of the initial funds (before transfers between government levels) come from central government and six per cent from local government (OECD, 2003). European Commission data indicates that the proportion of all resources distributed to schools by public authorities (not the actual amounts) is high, e.g. primary schools receive 92.7 per cent from local authorities (*bevoegd gezag*) and 7.3 per cent from central government and secondary schools receive 92.3 per cent and 7.7 per cent respectively (European Commission, 2000).

Division of responsibilities

The government covers the full cost of schooling, which imposes restraints on what educational institutions can provide (Fraser, 2003). Under this system, according to Fraser, educational institutions are responsible to a sole funding body, the provincial government, funding follows the student and there is no administrative middle man to complicate lines of accountability. This allows parents to hold an elected body directly accountable for the quality of their child's education.

Role of local authorities

Local authorities have autonomy in financing operational and capital resources, but not staff resources (European Commission, 2000). This means that they determine the amounts under these budgetary headings on the basis of

their general budget, which comprises several kinds of resources and covers services other than education. They draw up their own criteria for the distribution of resources. Municipalities finance the fixed capital expenditure of schools and they handle the management of capital expenditure.

Role of schools

In secondary education in the Netherlands, the management of staff and operational resources is entrusted to schools and block grants for covering the costs of these are awarded to schools (European Commission, 2000). Schools have an annual overall budget that they use as they wish, in accordance with certain limits defined by law and they freely allocate the amounts earmarked for each expenditure heading. The body that maintains them may transfer resources between schools for which they or another body are responsible. In addition to the block grants intended to cover staff and operational expenditure, secondary schools have some leeway in their capital expenditure on immovables. Like the UK, schools in the Netherlands exhibit the most extensive kind of autonomy in Europe. Local authorities in the Netherlands may also delegate to secondary schools the financial management of external building maintenance.

In primary education, there exists a transition towards a system of a block grant for staff and operational resources as employed in secondary education, which has not been employed at primary level because of the more limited size of the schools. Primary schools have managerial autonomy for staff, operational and capital resources. The central agency for financing schools allocates a staff budget to the competent authority in the form of calculation units for teaching and non-teaching staff. Schools (*bevoegd gezag*) are therefore free to recruit staff and remunerate staff directly. Schools have an operational subsidy to cover internal and external building maintenance in primary schools, the payment of taxes and utilities, teaching equipment and furnishings and the costs of administration. The *bevoegd gezag* is able to vary expenditure across the different headings and share out the subsidy among the various schools it manages. It can transfer unused units to other schools or capitalise them, but room for manoeuvre is very limited as units for special requirements are pre-established and transfer or capitalisation cannot correspond to more than ten per cent of the budget.

Allocation of funding to schools

The methods of awarding and administering resources in all types of schools are the same, although the methods for awarding and managing schools resources at primary and secondary level differ. Primary schools and special education schools receive funding to cover staffing costs, operation and accommodation (Eurydice *et al.*, 1995). Secondary schools receive government funding to cover the costs of staffing, operation, establishment and equipment. Most costs are paid directly to the competent authority, although primary accommodation costs are paid to the local authority.

Methods for determining allocation

The Netherlands adopts a common rule applied systematically and uses a complex mathematical formula to establish the teaching staff and operational resources to which each school is entitled. As a result of extensive decentralisation and the real autonomy for the local bodies concerned, the municipality takes the decision with regard to capital expenditure,

Range of factors taken into account

In the Netherlands, a limited number of indicators tends to be used for the allocation of operational resources, although decisions regarding the volume of these resources are sometimes decentralised. There is a distinction, however, between primary, where basic indicators only are used and secondary education, where basic indicators plus supplementary indicators are used. In contrast, the way in which the volume of staff resources is established is relatively centralised and more complex since they rely on simple mathematical formulae, with basic and supplementary indicators (European Commission, 2000). The number of factors taken into account for the allocation of capital resources is the choice of the municipality.

Indicators used

The number of pupils is used to determine the allocation in secondary education and for teaching staff in primary education (European Commission, 2000). Establishing staffing for primary schools is the result of a relatively complex mathematical operation which, although based mainly on the number of pupils, also incorporates additional indicators (e.g. the level of education of parents and children whose cultural background is not

Dutch) (European Commission, 2000). Resources for operational expenditure for these schools are also established with respect to the number of pupils. Secondary schools receive a global allocation intended to finance both teaching staff and operational expenditure. This allocation is calculated using a mathematical formula with reference to the number of pupils and the type of school. The socio-economic status of pupils is also taken into account.

Allocation of funding for pupils with special needs

Over the years, a system has developed in the Netherlands with the aim of compensating disadvantaged groups in two ways (de Vijlder, 2003), i.e. using two of the models identified.

Increasing the general allocation

The Ministry of Education, Science and Culture awards additional resources to some primary and secondary schools by weighting the staff allocation in accordance with the needs of certain pupils (European Commission, 2000). Pupils exhibiting particular characteristics count for more than a single unit. They include children whose parents have a low level of education, children in residential care or those with foster parents, children of travellers and children whose native origins are not Dutch. Some schools thus get a greater number of staffing units for the purpose of fighting school failure. Although these resources are allocated by the Ministry, the municipalities are responsible for deciding how they should be used.

Funding for centrally defined activities

In the Netherlands, the central government awards schools special resources intended to address specific requirements (European Commission, 2000). The allocation is made by the government but the municipality decides how it should be used. The schools concerned are awarded allocations for particular requirements associated with pupils from disadvantaged backgrounds. Central government sets out certain policy guidelines for implementation with regard to the particular needs of pupils, but the municipalities decide the kind of action that will be undertaken. Furthermore, municipalities have the task of incorporating various measures into their local policy that enable these needs to be taken into account, in addition to being responsible for managing resources for schools so that

the latter may address the requirements of particular groups of pupils.

In addition, under the municipal compensation policy scheme, the municipalities coordinate the fight against school failure. This scheme receives funding from central

and local government levels. In addition to weighting the staffing allocations for schools, the Ministry makes resources available to the municipalities in the form of a special subsidy. Besides government resources, primary and secondary schools can therefore rely on municipal financial resources and services.

6.4 France

Key statistics

	Country mean	
Total population of the country (in thousands)	59,373	
Performance ranking	11	
Expected years of schooling (primary and lower secondary)	9.5	9.4
Ratio of students to teaching staff (primary)	19.5	17.0
Ratio of students to teaching staff (lower secondary)	13.5	14.5
Expenditure per pupil (primary) in US\$/PPP	4486	4381
Expenditure per pupil (lower secondary) in US\$/PPP	7076	5575
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of GDP	4.1 per cent	3.5 per cent
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of total public expenditure	8.0 per cent	8.9 per cent

Source: Organisation for Economic Cooperation and Development (2003)
Year of reference: 2000

In 2000, France ranked just outside the top ten OECD countries for overall educational performance. The expected years of schooling were close to the country mean. As for the majority of European countries, France provided more money for secondary schools than for primary schools, but there were large differences in the average resources per pupil at the two levels. Whilst the percentage of public expenditure on education as a proportion of the total public expenditure for France was below the country mean, it was one of the six OECD countries which spent over four per cent of GDP on education.

Key features of the education system

Primary or elementary schools come under the jurisdiction of local communes, while *départements* are responsible for *collèges* (lower secondary education) and the regions for *lycées* (upper secondary education) (Eurydice, 2004). The *collège* is the single establishment of education for all pupils who have completed their primary schooling. Private institutions for primary and secondary education are able to pass a contract with the state guaranteeing financial assistance from the state in exchange for which state administrative and educational supervision is allowed.

Since 1985, *collèges* and *lycées* have been granted autonomy in pedagogical and educational organisation. Schools are able to make decisions, for example, on school organisation and special arrangements tailored to pupils' needs. School autonomy is exercised by the governing board, which draws up and adopts the school plan (*projet d'école*) according to a procedure provided for by the law of 1989 and further detailed in 1990. In addition, many aspects of the education system (e.g. buildings and facilities, auxiliary staff, child welfare and development) have been devolved to local, departmental or regional level. Teachers and teaching programmes, however, are still state-controlled. The curriculum and the skills to be acquired by pupils are defined nationally, but each school has a degree of autonomy in deciding on the strategies which seem most appropriate for attaining national goals. Reforms proposed by the French government for greater decentralisation have recently received opposition (FrenchEntrée, 2004).

Financial source and flow (see Figures 4a and b)

The state is mainly responsible for the funding of education in France (Eurydice, 2004). In 1999, central government provided 74 per cent of the funding for primary, secondary and post-secondary non-tertiary education and regional and local government provided

the remainder (12 and 14 per cent respectively) (OECD, 2003). In secondary schools, however, the share of resources provided by central and regional levels is considerably greater than in the case of primary education (the central level provides 79 per cent, the regional level 16 per cent and the local level five per cent) (European Commission, 2000). In primary schools, the contribution of the local level is proportionally greater and funding is fairly evenly balanced between central government and local authorities (57 per cent and 39 per cent respectively, with the remainder from regional level). Secondary schools receive most of their grants (e.g. the general operational grant) from the *départements*, themselves largely financed by the government. The *départements* also receive a grant from the government for school facilities.

Division of responsibilities

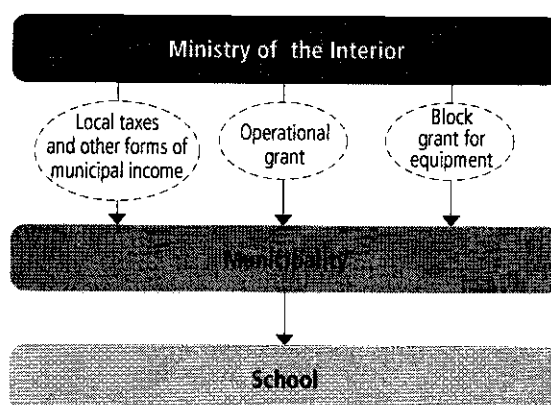
Central government is responsible for remuneration and recruitment of staff and, since this is the bulk of resources, this serves to limit the autonomy of local authorities (European Commission, 2000). With regard to primary education, the regional level is responsible for allocating teaching posts among the various *départements* (Eurydice, 2004). In primary and secondary education the role of the *département* is mainly one of organisation and administration, but they also ensure that teaching jobs are adapted to class time and that regulatory instructions are followed. Each territorial authority is responsible for the schools in each educational level.

Role of local authorities

In France, local authorities have autonomy in financing all operational and capital resources and resources for non-teaching staff in primary schools, but not staff resources (European Commission, 2000). They determine the amounts under these budgetary headings on the basis of their general budget (which comprises several kinds of resources and covers services other than education). Local authorities draw up their own criteria for the distribution of resources. The local authorities handle the management of capital expenditure, whilst the management of operational goods and services is entrusted to the municipalities in primary education and to schools in the case of secondary education. In the latter, delegation of the administration of operational

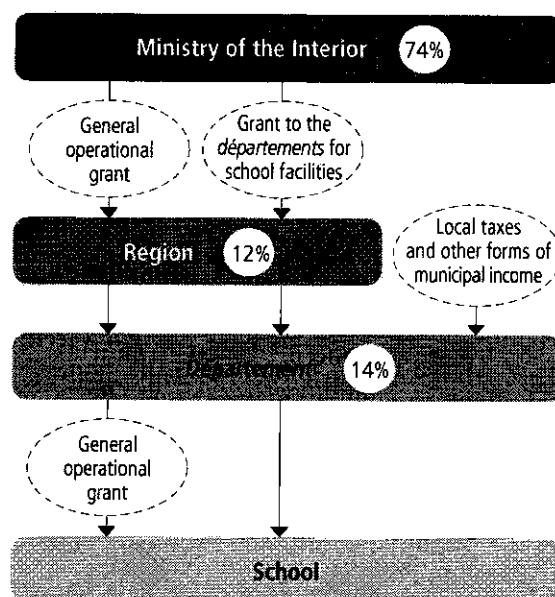
goods and services to schools is provided for in national legislation.

Figure 4a France: primary schools



Source: adapted from European Commission (2000)

Figure 4b France: lower secondary schools



Source: adapted from European Commission (2000)

The area authorities (municipalities in the case of primary education and *départements* for secondary education) take decisions on procedures and requirements regarding the building of school premises and the equipping of classrooms, while the government decides whether they will actually be opened by designating the number of posts available. In the case of primary education, local authorities do not have to conform to centralised formal requirements as regards the use of budget for operational resources.

Role of schools

The extent of school autonomy in the management of resources is different for primary and secondary

education. Secondary schools have autonomy in the management of operational resources, capital goods and some or all non-teaching staff (European Commission, 2000). They receive a general grant for broad operational purposes, covering utilities and supplies for basic teaching and administrative activity, as well as maintenance. Secondary schools also have managerial autonomy for teaching staff, but allocation is provided in kind and an overall number of either hours or teacher periods is divided up amongst classes and subjects. Secondary schools receive a global allocation expressed in hours and may fix the teaching workload, select course options and decide on the size of groups of pupils. They are thus relatively free to determine the kind of education they will provide but have no room for manoeuvre from the financial point of view. There is only limited autonomy because no transfers are possible between the teaching staff and operational resources. Primary schools, in contrast, have no autonomy since municipalities and government are jointly in charge of their financial management. Schools receive their resources in kind from municipalities and government which decide on their amount and acquire them.

Allocation of funding to schools

Method for determining allocation

In France, no systematic rule is applied for the allocation of staff resources and the competent authority has an entirely free hand in decisions relating to expenditure on staff. Teachers are assigned among different *rectorats* (LEAs) by the Ministry, then by a particular *recteur* (chief education officer) among different groups of schools and then to individual schools. Decisions are therefore made by successive levels of government. However, the geographically decentralised divisions of the Ministry negotiate the distribution of staff with the centralised ministerial *départements*, the regional and local authorities and the schools themselves. The method adopted for operational and capital resources depends on the local authority.

Range of factors taken into account

Indicators are used in France to guide the decisions of the various bodies which in turn distribute the resources mobilised by the national government (European Commission, 2000). In lower secondary education, the number of hours of lessons required is calculated according to a simple theoretical model, while qualitative

needs are assessed using a summary indicator. Resources made available to *collèges* for the acquisition of their operational resources are calculated in accordance with a strict rule whose terms may vary since it is drawn up by each *département* individually.

Indicators used

The indicators used to guide the various bodies which make decisions include trends in the number of pupils, the social difficulties they may experience and possible inconveniences arising from the rural location of schools. In lower secondary education, the calculation of the number of hours of lessons required takes account of socio-cultural criteria and the level of school achievement. However, individual authorities that allocate resources may decide the emphasis which should be attached to these indicators. In primary and secondary education the *inspecteur d'académie* decides how many teachers will be assigned to each school in accordance with ministerial allocation. In primary schools, this is based on a ratio of number of teaching posts for every 100 pupils, whilst in secondary schools it is based on the number of hours per pupil. The indicators used to determine the resources made available to colleges for operational resources may vary, since these are determined by each *département* individually.

Allocation of funding for pupils with special needs

Two of the identified models for targeting pupils' special needs are used in France, an increase in the general allocation and allocations for locally proposed schemes (European Commission, 2000).

Increasing the general allocation

In France, schools corresponding to certain criteria (e.g. the presence in school of certain groups that need additional resources or geographical location) receive additional resources from the public authorities for staff and/or operational activity or even capital. In most cases, these are not earmarked for a particular purpose so schools have leeway in their use. When the *départements* in France award operational allocations to colleges (lower secondary schools), they take account of whether schools are officially classified as belonging to *zones d'éducation prioritaires* (ZEPs) or priority education zones. This classification depends on the social characteristics and ability of the pupils concerned

and relates to the scale of educational and social difficulties affecting the neighbourhood. In primary and secondary education the number of teachers assigned to each school is varied to take into account certain specific characteristics of the school and above all, their classification into ZEPs.

Funding for locally proposed projects or schemes

In addition, whilst a school in a ZEP is entitled to extra resources as a matter of course, it is also possible for it to receive resources for a project it implements itself. This ensures that schools retain some degree of autonomy.

6.5 Sweden

Key statistics

		Country mean
Total population of the country (in thousands)	8,871	
Performance ranking	9	
Expected years of schooling (primary and lower secondary)	9.7	9.4
Ratio of students to teaching staff (primary)	12.4	17.0
Ratio of students to teaching staff (lower secondary)	12.4	14.5
Expenditure per pupil (primary) in US\$/PPP	6336	4381
Expenditure per pupil (lower secondary) in US\$/PPP	6238	5575
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of GDP	4.9 per cent	3.5 per cent
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of total public expenditure	8.9 per cent	8.9 per cent

Source: Organisation for Economic Cooperation and Development (2003)
Year of reference: 2000

Sweden ranked just inside the top ten OECD countries for overall educational performance in 2000. The expected years of schooling were just above the country mean. Sweden was characterised by a particularly low ratio of students to teaching staff for both primary and lower secondary education. Furthermore, the expenditure per pupil for both levels of education was high compared to the country mean, with very little difference between the two levels. The public expenditure on education as a percentage of GDP was above the country mean, whilst as a percentage of total public expenditure it equalled the country mean.

Key features of the education system

In Sweden, all schools are comprehensive and all schools are coeducational (ESTIA Sweden, 2004). The curricula for the various school forms are valid nationwide. Overall responsibility for education in Sweden is borne by the government and education in Sweden has traditionally been organised within the public sector.

For many years, control of activities within the system of education was heavily centralised, but it has undergone fundamental reforms during the last decade which have changed the role of the state and given local authorities (the municipalities) more autonomy (ESTIA Sweden,

2004). The local authorities have secured extensive autonomy in administering the schools within a framework set by the government. The main principle of the distribution of responsibilities in the Swedish education system at present is that the government should control educational activities by defining national objectives, while national and local authorities and the organisers of the different institutions are responsible for ensuring that activities are implemented in line with these named national objectives and achieve the necessary results.

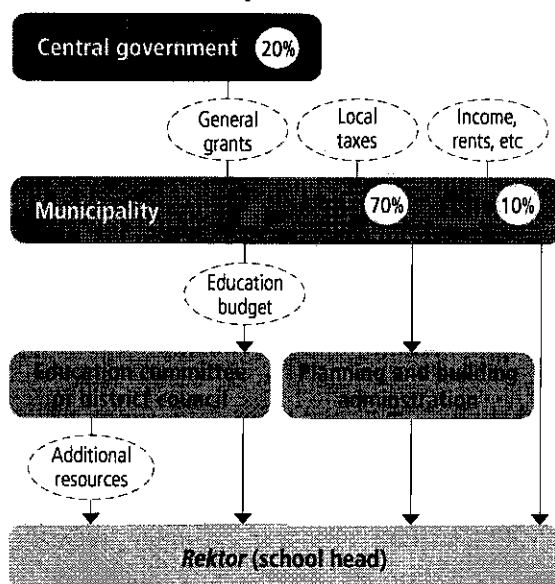
Financial source and flow (see Figure 5)

The funding of school-level education is shared between central and local governments (ESTIA Sweden, 2004). The literature indicates that 80 per cent of funding comes from local sources and about 20 per cent from central sources (European Commission, 2000). Municipal tax revenues are the municipality's main source of income (Eurydice, 2004). Apart from income taxes, which finance the majority of municipal education, the municipalities also receive a state grant, but this is not earmarked for a specific activity. State funding is not directly linked to school organisation; the municipalities are free to use the grant for the educational services on other activities. The structural element of the grant is

determined by several underlying factors, such as the size of the population in the municipality, its age structure, population density, social structure and number of immigrants. Tax revenues and state grants thus provide most of the resources for compulsory education in the municipalities.

In addition, over a five-year period (2001-06), the Swedish government has decided that additional resources will be given to municipalities specifically for the employment of teaching and other staff. This grant was introduced because of the difficult economic situation in most municipalities in the 1990s, when a decrease in the municipal education budgets resulted in fewer staff in schools. Municipalities apply for the grant from the National Agency for Education and must show how the grant will help their schools to attain the objectives set out in the curriculum. At the end of the five years, these additional resources will be included in the global allocation to the municipalities from the government.

Figure 5 Sweden: primary and lower secondary schools



Source: adapted from European Commission (2000)

Division of responsibilities

Public education in Sweden is operated by the municipalities (ESTIA Sweden, 2004). Municipalities assume responsibility for the financial wellbeing of schools and have to see that they remain on financially sound footing and are responsible for ensuring that their educational activities are of optimal quality and comply with national regulations. They remain the legal employers of staff and are responsible for recruitment.

They may delegate management of all or some of the resources to the schools, in the form of segmented or global allocations. Situations between municipalities differ. Other aspects of staff resource management (recruitment and payment of salaries), teaching staff salaries and conditions of employment are established at national level. However, in Sweden, in contrast to other Nordic countries, national agreements draw up only a basic salary structure and the local level is empowered to negotiate salaries on an individual basis.

Role of local authorities

In the Swedish decentralised system, each municipality determines how it will allocate resources and organise its activities provided that the provisions of the Education Act regarding activities and quality are followed (Eurydice, 2004). The municipality usually has its own local board of education or a similar body, which decides on the allocation of funds between different schools. Municipalities in all Nordic countries are more autonomous than those elsewhere in Europe, since they finance operational, capital and staff resources and exercise considerable responsibility and decision-making power as regards most expenditure on education (European Commission, 2000). Unlike the UK, they themselves decide what they will delegate to schools. The municipalities show a less than uniform pattern with regard to capital expenditure. Some municipalities decentralise responsibility for these expenditures to individual schools, while others keep responsibility for local costs at the municipal level.

Role of schools

In Sweden, resources allocated to schools may be divided into various budgetary headings or distributed in block form (European Commission, 2000). Decision-making autonomy for expenditure may also be shared between schools and their municipality. In very many, the management in each school may fix the level of teacher salaries and other expenditure. In other cases, salary levels are established by the municipalities. With regard to capital expenditure, some municipalities delegate this responsibility to schools, whilst others retain it or incorporate it into their own administration of planning and construction.

The responsibility for determining teachers' salaries and other expenditures is thus usually decentralised to the individual school. However, even in this decentralised

system, the municipality may choose to make such decisions at a higher level. A growing number of municipalities entrust to each school an overall budget for salaries, the costs of teaching materials and equipment (ESTIA Sweden, 2004). Since the school can shift resources between budget headings, this is the most extensive kind of school autonomy in Europe. Schools in Sweden remunerate teachers directly and Sweden is an extreme case in that schools also decide on the salaries of their teachers. In addition, in some municipalities, responsibility for school building financed by the municipalities is delegated to schools.

Allocation of funding to schools

All decisions for determining the volume of resources earmarked for schools in Sweden are taken by municipalities and they are not governed by common regulation. However, there is a procedure to prevent the undesirable effect that decentralisation may have on ensuring that pupils from different municipalities receive equivalent education. As a result of mechanisms for adjusting municipal allocations, potential differences in the schooling of pupils across the entire country can be reduced. Although there are no national regulations on how resources should be allocated between schools and each municipality normally develops its own allocation system, these systems do resemble each other. A number of municipalities start off by determining a 'basic resource' for each pupil and then add to this an additional amount for pupils with special needs. Some of these needs may, for instance, relate to pupils from areas of social deprivation, disabled pupils and pupils with an immigrant or refugee background. Methods for determining the allocation, the range of factors taken into account and the indicators used are municipality specific.

Allocation of funding for pupils with special needs

All three models identified for allocating funding for pupils with special needs are found in Sweden (European Commission, 2000): increasing the general allocation; funding for centrally defined activities and for locally proposed schemes.

Increasing the general allocation

In Sweden, schools corresponding to certain criteria, such as the presence in school of certain groups that

need additional resources or their geographical location, receive from the public authorities additional resources for staff and/or operational activity or even capital. In most cases this additional funding is not earmarked for a particular purpose so schools have leeway in its use.

Government legislation identifies target groups of pupils with particular needs who require additional forms of teaching to take account of them. They may include pupils whose mother tongue is not the language of instruction, those from a disadvantaged socio-economic background or others with particular educational needs. The government stipulates that this should be provided without specifying in what form it should be funded. Some municipalities have opted to increase the general allocation. They either award the basic resources to schools and then a further amount that depends on the particular needs of the pupils, although its precise use is not specified, or, alternatively they calculate the allocation to schools by weighting it in accordance with the socio-economic characteristics of their catchment areas.

Funding for centrally defined activities

In most countries that use this model, resources are directly awarded to schools by central government, but in Sweden, municipalities both allocate the resources and determine their use. The schools concerned are awarded allocations for particular requirements associated with pupils from disadvantaged backgrounds. Government legislation identifies target groups of pupils with particular needs who require additional forms of teaching to take account of them. Municipalities then have considerable room for manoeuvre in deciding what form support should take, its amount and the method of allocating. Some municipalities award schools basic resources and then a top up amount depending on the individual needs of pupils, which has to be used for specific purposes. Others distribute resources to schools after negotiating with them and, in this case, the amounts negotiated must be kept for the particular needs of pupils.

Funding for locally proposed projects or schemes

Since the end of the 1990s, municipalities in Sweden have been able to obtain additional resources under a special policy for the benefit of pupils from deprived municipal areas. The general aim of this additional support is to improve proficiency in Swedish of pupils for whom it is not the mother tongue. The municipalities eligible are those designated by the Commission on Metropolitan Areas, known as the Metropolitan Areas Initiative.

6.6 USA

For the purpose of this country summary, the states of North Dakota and Wyoming are included to provide examples of individual state funding systems.

Key statistics

		Country mean
Total population of the country (in thousands)	282,128	
Performance ranking	16	
Expected years of schooling (primary and lower secondary)	9.5	9.4
Ratio of students to teaching staff (primary)	16.3	17.0
Ratio of students to teaching staff (lower secondary)	17.0	14.5
Expenditure per pupil (primary) in US\$/PPP	6995	4381
Expenditure per pupil (lower secondary) in US\$/PPP	No data	5575
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of GDP	3.5 per cent	3.5 per cent
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of total public expenditure	10.9 per cent	8.9 per cent

Source: Organisation for Economic Cooperation and Development (2003)
Year of reference: 2000

In 2000, the USA ranked sixteenth in terms of overall educational performance compared to other OECD countries. The expected years of compulsory schooling were close to the country mean. Across the USA, the expenditure per pupil at primary level (and, where figures are available, at secondary level as well) is the highest of all the OECD countries for which this data is available. Moreover, the spending per primary pupil is over twice as high in the USA as it is in Ireland, for example. The public expenditure on education as a percentage of total public expenditure is the highest in comparison with other OECD countries, whilst, as a percentage of the GDP, it equals the country mean. Across the USA, approximately \$412 billion was spent on public elementary and secondary education during the 2001-02 school year, making it the largest single area of direct public expenditure (Carey, 2002).

12 years of regular schooling, preceded by one or two years of pre-school education. There are over 14,000 active school districts in the United States, governing approximately 90,000 individual schools. The districts vary in size from those enrolling over one million students, to rural school districts educating fewer than one hundred students each (Carey, 2002). Most students in America (around 90 per cent) attend public elementary and secondary schools, which do not charge tuition, but rely on local and state taxes for funding (Clack *et al.*, 1997). Students who do not attend public schools attend fee charging private schools. Four out of five private schools have a religious affiliation. Each of the fifty states in America has its own laws regulating education and education is decentralised to state level. Local school boards are instrumental in governing the schools. States and communities, as well as public and private organisations, establish schools and colleges and develop curricula.

Key features of the education system

The United States does not have a national school system and schools (with the exception of military academies) are not run by the federal government. The structure of the education system can include up to

North Dakota

In North Dakota, the numbers of students in 2000 was 109,201 across the state (National Center for Education Statistics, 2001). There are 231 school districts in North Dakota, of which, 180 are high school districts, 39 are elementary districts, ten are rural districts and two are military installation school districts. In North Dakota, a foundation program is used to fund education. Foundation programs establish a per student funding amount and a specified local tax rate that each school district must levy (Carey, 2002). The original formula was adopted in 1959 with a major revision in 1973. The current formula was brought together in 1997 (Bass et al., 2000).

Wyoming

The total number of students in Wyoming in 2000 was 89,940 (National Center for Education Statistics, 2001). There are only 48 school districts in Wyoming. The school funding system in Wyoming was overhauled in 1995 and a transformation of the system ensued. The restructuring was intended to provide each child in the state with the best possible education, to uncover the cost of educating children in various sizes and types of school districts, whilst taking into account the needs of different kinds of students. By 1997, a major reform was introduced, with most components being in place by 1999 (Christenson, 2000).

Financial source and flow (see Figures 6a and b)

The financing of education in the United States is primarily the responsibility of state and local government. For example, statistics relating to 2000 demonstrate that the majority of funding for education comes from regional and local sources (51 and 41 per cent respectively). Only eight per cent of the funding comes from the federal government (OECD, 2003). The federal governments' role in financing education has remained steady over time, yet the share financed by state dollars has been increasing and the local share had been shrinking (Carey, 2002). The federal government provides assistance to the states to supplement, not supplant, state support.

Money raised by individual states is allocated to school districts to supplement, where applicable, locally raised

funds. The school districts then allocate the funds to schools. Where federal level support is provided, it is most commonly allocated as funding to support a specific program or need. As such, resources are transferred directly to states, then to schools through their local districts. Individual schools then use these funds for the purposes defined in the federal programs.

North Dakota

Funding is raised by local school districts primarily through the property tax. Other local revenues include interest on investments, proceeds from sales of supplies and other materials, student participation fees in extra curricular activities and contributions for local educational foundations. Revenue from mineral taxes is an additional source of funding.

There are no state taxes earmarked for education in North Dakota. Rather, the primary source of state funding comes from the State Tuition Fund. It has two main sources of funding. The first is income from leasing of school lands and investment income from the state permanent school fund. The second source is the net proceeds from all fines assessed for violation of state laws. The income from the State Tuition Fund is allocated to all school districts based on their respective shares of school-aged children in the state (Bass et al., 2000).

Wyoming

As in North Dakota, property taxes are the major source of revenue for the districts. These come in the form of a countryside and district wide school levy. If the local resources exceed the state 'guarantee' that a district is entitled to, the district is considered a 'recapture' district and the state recaptures the entire excess amount for its State School Foundation Account. Other local sources of revenue include fines and penalties, motor vehicle registration fee payments, state common land income payments and forest reserve funds.

State earmarked revenue is provided through entitlement payments to school districts from the School Foundation Program Account. Amounts available are established through legislative appropriation as part of the state biennial budget process and generally supplemented thereafter. Revenue resources dedicated to the account include property tax, motor vehicle registration fees, railroad

car company taxes, federal mineral royalties and, as explained previously, the recapture from school districts. The interest accumulated on the account is also available for distribution to school districts. Other state revenues have been used to augment the account as necessary (e.g. the highway fund and waterway development accounts) (Christenson, 2000).

Division of responsibilities

In the USA, the central government plays a minimal role in education and consequently, in education funding. The US constitution does not designate a public education role for the federal government and consequently, responsibility for education falls to the states (U.S. Department of Education, 2004a). In essence, the role of the federal government has been described as an 'emergency response system' (U.S. Department of Education, 2004b) in that it is a means of filling in the gaps in state and local support for education when critical national needs arise. To the extent that the federal government has chosen to be involved in education finance, it has done so through policies aimed at achieving targeted outcomes with limited means. Finally, by identifying specific populations of student needs, the federal government has aimed to supplement school district funding levels (Carey, 2002).

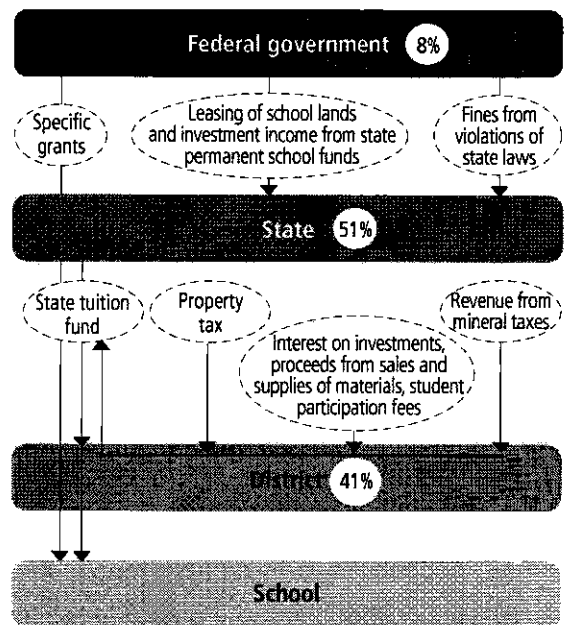
Role of states

In the USA, individual states have financial autonomy over the generation and allocation of funding for education. States raise their own resources for education, primarily through property taxes and are free to allocate them according to any formula approved by state legislature. As a result, a variety of basic funding formulae are apparent and states have full autonomy over the allocation of resources. States will typically allocate the resources to local school districts who will then distribute the money directly to schools, via school boards. Therefore, finances are decentralised from the federal government to state government level (Carey, 2002).

Role of schools

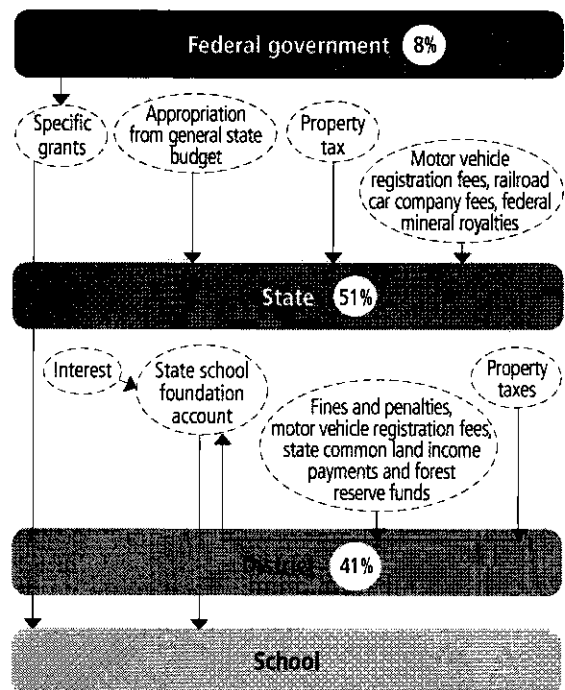
Resources pass from the state governments, which have most control over funding, to school districts and then to schools. The role of the schools in the funding system is minimal.

Figure 6a USA: North Dakota



Source: Various

Figure 6b USA: Wyoming



Source: Various

Allocation of funding to schools

Method for determining allocation

In the USA, methods for determining allocations for school districts and, subsequently, schools, are regionally determined. States generally provide funding to the

school districts by identifying factors, such as size and wealth, that distinguish them from one another and then calculating the impact of those differences on the cost of providing educational services (Carey, 2002). Funding systems have therefore been developed to calculate the funding levels and adjust, to varying degrees, for local differences in wealth. The system whereby every district gets an identical 'flat' grant for each student enrolled, regardless of local circumstances, has largely been abandoned and the methods adopted usually take into account the disparity in school funding as a result of differing abilities to raise local funds. This system guarantees every district a standard amount of money per student for each unit of taxation. The system currently used by 40 states is a foundation plan, which establishes a specified per student funding amount and a specified local tax rate that each school district must levy. The state provides the difference between the amount of revenues raised from the local tax rate and the foundation funding level.

Range of factors taken into account

Besides wealth, there are a number of other factors taken into account that distinguish districts from one another and impact upon the cost of providing education. States have adopted policies designed to accommodate these differences by adjusting funding levels beyond the basic allocations. Examples include size and student dispersion, the cost of living and changing enrolment (Carey, 2002). The range of factors taken into account varies between states (see the examples detailed of North Dakota and Wyoming).

North Dakota

An Equalized Foundation Formula is used to determine school district allocations in North Dakota. As described above, this establishes both a specified (foundation) per student funding amount and a specified local tax rate that each school district must levy. The state provides the difference between the amount of revenues raised from the local tax rate and the foundation funding level. In this way, all districts end up with the same local tax rate and the same combined state and local funding level per student, even though the relative weight of those two sources can be significantly different (Bass et al., 2000).

Wyoming

The funding system in Wyoming is a modification to the typical block grant model in that it takes into account local circumstances and student needs in its basic formula. The funding system is known as the Education Resource Block Grant Model (commonly referred to as the MAP model). The model specifies the instructional and operational resources necessary to provide a child with the best possible education. A total revenue amount in the form of a block grant is provided to each school district. The actual amount of block grant the districts receive is a function of the model components necessary for the delivery of the best possible education and the characteristics of the schools and students within a particular district (Christenson, 2000).

Indicators used

The indicators used to allocate resources to school districts vary with different states. They may include, for example, number of pupils or classes, age weightings, school size, geographical location, the characteristics of the teaching staff, historical spending data and school premises/maintenance.

North Dakota

The basic support program is based upon weighted full-time equivalent pupil units. The size of the school is taken into account and the grade level of students are considered. Allocations for transportation, special, compensatory and gifted and talented, bilingual and early childhood education also rely on a range of indicators (Bass et al., 2000).

Wyoming

Wyoming uses a very wide range of indicators in its basic funding program. Funding is allocated to schools according to units of Average Daily Memberships (ADM). Different assumptions are made as to the resources and associated costs necessary at each grade level. Within each level grouping there are 25 specific cost components, grouped into five major categories: personnel, supplies, material and equipment, specialised services, special student characteristics and finally, special school district or regional characteristics (Christenson, 2000).

Allocation of funding for pupils with special needs

Some differences in pupil needs are significant enough for the states to adopt specific funding policies that reflect them. Where school districts have disproportionate numbers of students identified as needing additional resources, these policies can result in additional state funding. In the USA, funding for pupils with special needs is taken account of by increasing the general allocation to schools and through centrally defined activities.

Increasing the general allocation

Many states use a weighting system where special needs students are worth slightly more than for normal funding purposes. Student characteristics used by the states to generate additional funding include students with disabilities, low-income students, gifted and talented students, limited English proficient students and students at different grade levels (Carey, 2002).

North Dakota

In North Dakota, provision for pupils with SEN is addressed through an increase in the general allocation formula. Special education per pupil ADM payments are included and equalised in the calculation of funding allocations. These constitute approximately 75 per cent of all special education funding provided by the state. Payments are also made to school districts that incur excess costs of special education services. Districts are responsible for special education expenditures per student to two and a half times the state average of per-pupil expenditures. Beyond that amount, the state reimburses the district for 80 per cent of excess costs (Bass et al., 2000).

Wyoming

In Wyoming, as the model operates on a block grant basis, allocations to target need are included in the basic funding formula. One of the categories of cost components is 'special student characteristics'. This attempts to avoid the segregation of students with special needs by assuming resources for small schools, small class sizes, teaching specialists and professional development to enable teachers to effectively deal with special needs in the classroom. Four categories of SEN students are identified in the model: special education; gifted students; limited English proficient students and economically disadvantaged youth (Christenson, 2000).

Funding for centrally defined activities

Some programs drawn up to address need exist as separate budget lines to the state's basic funding formula and are funded entirely from state or federal resources (Carey, 2002). For example, the federal government provides school districts with additional funding to help low income students through two main programs. The first is the free and reduced-priced lunch programs. The second, Title 1 of the Elementary and Secondary Education Act, provides supplemental grants based on poverty levels. The Title 1 funds are designed to supplement state efforts to serve low income students and most states use them to augment existing programs, including after school programs, additional instruction and summer school programs.

North Dakota

In North Dakota, the state does not fund or require a compensatory education program. As such, most school districts participate in the Title 1 federally funded program. Gifted and talented education is funded through specific programs for which the state appropriates a set amount each year (Bass et al., 2000).

6.7 Canada

Key statistics

		Country mean
Total population of the country (in thousands)	30,770	
Performance ranking	3	
Expected years of schooling (primary and lower secondary)	8.8	9.4
Ratio of students to teaching staff (primary)	18.3	17.0
Ratio of students to teaching staff (lower secondary)	18.4	14.5
Expenditure per pupil (primary) in US\$/PPP	No data	4381
Expenditure per pupil (lower secondary) in US\$/PPP	No data	5575
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of GD	3.3 per cent	3.5 per cent
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of total public expenditure	7.9 per cent	8.9 per cent

Source: Organisation for Economic Cooperation and Development (2003)
Year of reference: 2000

In 2000, Canada ranked alongside Japan and Finland in the top three OECD countries for overall educational performance. The expected years of compulsory schooling, however, were less than the country mean and the ratio of students to teachers was above the average. In 2000, public expenditure on education as a percentage of GDP was less than the OECD country mean. Furthermore, public expenditure on education as a percentage of total public expenditure also fell below the average value for other OECD countries.

Introduction

For this country illustration, since funding systems tend to be province-specific, a brief introductory description of the Canadian school funding system is provided followed by a more detailed account of the funding systems in Alberta and Ontario as examples of individual provincial funding systems.

Canada is a confederation of ten provinces and three territories. Unlike many other countries, in Canada there is no federal level responsibility for education. Education is the responsibility of each province or territory. Although there is much similarity between the 13 education systems, each provincial system reflects, to a certain extent, its particular region in terms of history, culture and geography (Department of Foreign

Affairs and International Trade, 2002). Despite this, the Canadian government plays an indirect role in education in terms of financial support for post-secondary education, labour market training and the official language teaching. As such, education financing is mostly the responsibility of each territory or province. This is reflected in OECD (2003) statistics for 2000 which report that only four per cent of funding comes from central government compared to 70 per cent and 26 per cent from regional and local sources respectively.

Funding is allocated by the province to school boards who are responsible for the administration of that funding, including setting budgets. Although the use of funding by school boards is flexible, provincial restrictions on the use of funding are applied in some cases. Each province or territory has its own method for determining the funding allocation to schools. The majority have adopted centralised (i.e. state) systems in this respect. Alberta and Ontario will now be discussed in more detail.

ALBERTA

Key features of the education system

Prior to 1994, education was jointly funded by locally elected school boards and the province. From 1994,

however, school funding in Alberta became the sole responsibility of the province. In 1995, the government of Alberta introduced a new funding framework for school jurisdictions. Under the new funding framework for education, the support provided to school boards for the education of kindergarten to grade 12 pupils is expected to exceed C\$3.5 billion in 2004/2005 school year. This represents an increase of approximately C\$253 million (7.8 per cent) from the previous budget in April 2003 and by the 2006/2007 school year it is expected to reach C\$3.9 billion (Government of Alberta, 2004a).

Financial source and flow (see Figure 7a)

In Alberta, education financing is the sole responsibility of the province. Revenue for education funding comes from general provincial revenue and provincial education tax on residential and non-residential property. This is supplemented by a small amount of funding from the provincial lottery fund. School jurisdictions receive funding through the Alberta School Foundation Fund (ASFF), which is responsible for collecting and redistributing property tax revenue and the General Revenue Fund (GRF). School jurisdictions are then responsible for distributing this funding to schools. Under the funding framework, funding is allocated to schools in three blocks; the instruction block, the support block and the capital block. In addition, funding can be distributed through a number of grants for specific programmes (Government of Alberta, 2004c).

Division of responsibilities

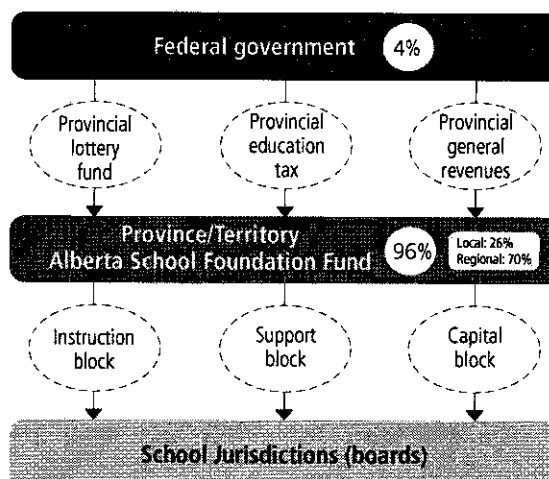
In Canada, there is no federal level responsibility for education; it is the responsibility of each province or territory.

Role of province or territory

The province provides funding to each school board which has the responsibility for the administration of elementary and secondary education, including the setting of budgets. However, in order to monitor school board spending, a number of accountability elements are imposed by Alberta Learning (the government of Alberta education department) to monitor how funding is being spent, including annual performance reports and the requirement for boards to submit a three-year

education plan. In addition, certain provincial restrictions apply to the funding, which includes caps on the amount of funding that can be spent on administration and limits on transfers of funds between the three funding blocks (National Center for Education Statistics, 2000).

Figure 7a Canada: Alberta



Source: Various

Role of schools

Each school board has the responsibility for the administration of elementary and secondary education, including the setting of budgets. The way in which funding is allocated to school boards (as three discrete blocks) enables school boards to exercise a significant degree of autonomy on how resources are used (given that funding is not earmarked for specific purposes). To this end, school boards have maximum flexibility on how their funds are spent and funding is used to provide, for example, specific instructional programmes or services, the salary cost of teachers and support staff and for learning resources (Government of Alberta, 2004b). The funding framework also means that school boards are accountable to their constituents for the decisions they make.

Allocation of funding to schools

From the literature available, limited information was highlighted on the way in which funding is allocated to schools in Alberta. A systematic common rule, involving a broad range of summary indicators, is applied for the allocation of primary and secondary operational resources and staffing.

Indicators used

The amount of funding for which schools jurisdictions are eligible is mainly based on the number of students enrolled (per-pupil funding). The rate per student depends on the grade distribution of pupils. Pupils in grades 1-9 receive a set rate of C\$4,963 per student. However, for pupils in years 10-12 (senior high school), funding rates are calculated on Credit Enrolment Units (CEUs) which are allocated for courses on which pupils have received a mark of 25 per cent and covered 50 per cent of the content. The 2004/2005 funding rate is C\$141.80 per CEU (to a maximum of 60 CEUs per student) The full-time equivalent (FTE) number of CEUs is 35, at which level students are funded at the basic instruction rate (Government of Alberta, 2004c).

'Differential cost funding' is also incorporated into the instruction block to address the differential cost of providing education to specific student populations (e.g. students with special needs, English as a second language students), as well as cost factors associated with specific school environments (e.g. small schools, geographically widespread areas). Differential cost funding is incorporated into the funding by a weighting factor for different student types or environmental factors.

The support block provides funding for operations and maintenance (i.e. for buildings and grounds costs), administration/governance and student transportation. The support block funding is calculated by the square footage of each school's facilities and incorporates a sparsity and distance factor. The province also provides funding for pupils residing at least 2.4 kilometres away from the school in order to support student transportation. Administration costs are funded as a percentage of the instruction, operations and maintenance and transportation funding (National Center for Education Statistics, 2000)

Allocation of funding for pupils with special needs

In Alberta, two of the three main models for the allocation of funding for pupils with special need were evident within the literature: increasing the general allocation and funding for centrally defined activities.

Increasing the general allocation

Differential cost funding is incorporated into the instruction block to address the additional cost of providing educational provision for specific student populations. Those populations include: students with severe disabilities or special needs, students with English as a second language and Francisation students, the percentage of pupils from a low socio-economic status (Enhanced Opportunity Funding), Aboriginal students and the number of early childhood services children with mild or moderate disabilities. Funding is adjusted to accommodate these students through a weighting factor applied to each student type which is then multiplied by the standard learning grant rate. For 2004/2005, the Learning Grant rate is C\$1,637 per student. To determine the level of funding for a pupil with severe disabilities, for example, this would then be multiplied by the relative weighting factor of 8.8061 which would determine the level of funding (C\$14,415 per pupil) (Government of Alberta, 2004c).

Funding for centrally defined activities

Targeted funding is provided to school boards for specific provincial priorities, such as the Student Health Initiative (SHI) and the Alberta Initiative for School Improvement (AIS). Funding for these initiatives must be spent on the programme for which it was provided. The SHI is a provincial targeted programme to support students with special health needs. In 1999, the Alberta government announced funding of C\$25.6 million per annum to implement the SHI, with the aim of building partnerships between education, health, children's and mental health services to strengthen the province's capacity to support students with special health needs (e.g. children with physical disabilities, developmental disabilities and/or emotional and behavioural disabilities). Services eligible for funding include, for example, speech and language therapy, physical therapy and emotional and behavioural support. SHI funding is accessed by partnerships of school authorities, regional health authorities and child and family services authorities which collectively set priorities, develop collaborative strategies for delivering services and share accountability for results (Government of Alberta, 2004b and 2004d).

ONTARIO

Key features of the education system

In Ontario, a number of major reforms to the education system were introduced in 1998 which included the introduction of a new 'student focused funding' model under which the province was responsible for determining the total spending allocation of school boards. Furthermore, property tax rates were set by the province and school boards were no longer allowed to raise or requisition property tax for their own purposes. In addition, school boards were consolidated into district boards, reducing the overall number of boards from 129 to 72. Education funding covers public education from kindergarten to grade 12 education. Private schools are not entitled to public funds.

Financial source and flow (see Figure 7b)

In Ontario, property tax revenue is the major source of education financing. The property tax rates are set by the province and revenue is collected by municipalities and then distributed to school boards. The province also provides some funding for education through the Consolidated Revenue Fund (CRF) which is funded through personal and corporate income tax and, retail sales tax and other goods taxes (e.g. alcohol and tobacco). In 1998/99, the overall school board expenditure on education totalled C\$14,100 million, 57.5 per cent of which was funded through provincial grants and 42.5 per cent of which was funded through property tax revenues (National Center for Education Statistics, 2000). Under the new funding framework, funding is allocated to school boards under three main categories, the Foundation Grant, eleven special purpose grants and the Pupil Accommodation Grant.

Division of responsibilities

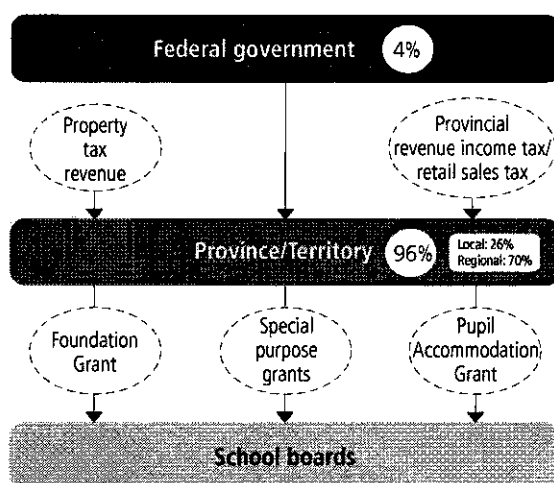
In Canada, there is no federal level responsibility for education; it is the responsibility of each province or territory.

Role of the province

In Ontario, the province determines the total spending allocation of school boards. Provincial grants are provided to supplement the difference between the

funding raised through local property tax and the school boards' spending allocation. School boards have ultimate responsibility for setting their budgets and allocating resources within those budgets. However, four main provincial restrictions are placed on how schools may use their funding. These include limitations on the transfer between classroom and non-classroom (i.e. administration) spending, special education spending (which is protected), the allocations for new pupil places (which involves a minimum spend limit in this respect) and school board administration and governance (which involves a maximum spend limit on these functions). (National Center for Education Statistics, 2000).

Figure 7b Canada: Ontario



Source: Various

Role of schools

School boards are responsible for their budgets but are tied to the spending allocation set by the province and are unable to levy or request property tax revenue from local municipalities.

Determining the funding allocated to schools

A systematic common rule is applied for operational resources for publicly funded elementary and secondary education (kindergarten to grade 12). Almost all school boards (excluding those operating hospital schools or very remote areas within the province) receive provincial funding under the same basic formula. The Foundation Grant provides a per-student funding allocation for the basic cost of education and generates 55 per cent of the total funding allocated under Ontario's funding model

(Mackenzie, 1998). A broad range of summary indicators are used when allocating funding for staff and operational goods and services for primary and secondary education.

Indicators used

The bulk of the foundation grant is calculated on a school's enrolment count on the last school days in October and is based on Average Daily Enrolment (ADE) units for the full-time equivalent of pupils across these counts. In addition, the grant is calculated on the basis of funding allocations for a number of other components, including: classroom teachers (the number of staff per 1000 students), the number of teaching assistants, textbooks and learning materials required, other resources (e.g. stationery), computers, preparation time (e.g. marking time, lesson planning time), library and guidance services, professional services (e.g. counsellors, psychologists), preparation time and in-school administration and classroom consultants (e.g. reading specialists) (MOE, 2004b).

Allocation of funding for pupils with special needs

In Ontario, need is targeted through a number of special purpose grants incorporated into the main funding allocation.

Increasing the general allocation

A number of special purpose grants are allocated within the funding model to provide funding to address specific student populations and need. These include: the Special Education Grant (for students with special education needs), the Language Grant (to support pupils with English, French or native language as a first or second language) and the Learning Opportunities Grant (to support students at risk of experiencing academic difficulties, as based on socio-economic indicators).

6.8 New Zealand

Key statistics

		Country mean
Total population of the country (in thousands)	3831	
Performance ranking	4	
Expected years of schooling (primary and lower secondary)	10.1	9.4
Ratio of students to teaching staff (primary)	19.6	17.0
Ratio of students to teaching staff (lower secondary)	18.7	14.5
Expenditure per pupil (primary) in US\$/PPP	No data	4381
Expenditure per pupil (lower secondary) in US\$/PPP	No data	5575
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of GDP	4.9 per cent	3.5 per cent
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of total public expenditure	No data	8.9 per cent

Source: Organisation for Economic Cooperation and Development (2003)
Year of reference: 2000

In 2000, New Zealand ranked fourth compared to other OECD countries for overall educational performance. The expected years of compulsory schooling was just above the country mean. The ratio of students to teachers, however, was significantly higher than the country mean. Public expenditure on education as a percentage of GDP was greater than the OECD country mean and was the highest (with Sweden) in comparison with the other countries. Government funding per student varies with the type of school. Secondary students are funded at a higher level than primary school students. State schools receive more than integrated schools, which get more than private schools. In 2002/2003, government grants to state and state integrated schools equalled NZ\$4,625 per student. Over the next four years the government is increasing school operational funding by NZ\$61 million, which represents an overall increase of 1.8 per cent from the beginning of 2004 (MOE, 2004a). However, Wylie (1999) argues that, although the government professes an increase in operations grant funding over the last decade, when adjusted for inflation, the increase is less marked than stated.

Key features of the education system

The New Zealand education system can be divided into three major sections: state schools, state integrated

schools and independent schools. State integrated schools are former private schools which have been integrated into the state system. They are owned by private organisations, such as churches, but receive government funding on the same basis as state schools and are required to adhere to various state requirements. Independent schools can charge fees but are also eligible to receive government funding if they are registered (i.e. subject to suitable premises, appropriate staffing, equipment and resources) (Nesdale, 2003). Compulsory schooling is from age six to 16 years, although it is available to children from the age of five.

In 1987, the Labour government began a major reform of the education system and created the Picot Taskforce to examine the administration of education in New Zealand. The subsequent government White Paper, 'Tomorrow's Schools', accepted most of the recommendations set out following the review which were then implemented in the Education Act 1989 (New Zealand Statutes, 1989). The outcome of the review was to decentralise governance and management of the education system, making the school the basic unit of education administration, which would set its own objectives (within overall objectives set by the state) and determine how resources were to be used to meet those objectives (Harrison, 2004). Under the Picot Taskforce reforms, boards of trustees were set up to govern each school and employ staff. In consultation with the

principal, staff and community, a school charter is devised which defines the purposes of the school and its aims and objectives for students. The charter serves as a contract between the community, the school and the state. The board is accountable to a national review and audit with respect to its use of funds and success in meeting the charter.

Financial source and flow (see Figure 8)

The government provides virtually 100 per cent of the funding for New Zealand schools (state and integrated) (OECD, 2003). In addition, schools may also raise a percentage of revenue themselves through various means, including voluntary fees, fund raising activities, foreign fee-paying students and parental donations. Revenue through these means accounted for seven per cent of school revenue in 2002 (Harrison, 2004). The main source of funding for private schools is from tuition fee revenue from parents. However, registered private schools are entitled to receive a per-student government subsidy should they wish to do so. Teachers' salaries and 'operations grant' funding represent 98 per cent of government grants to schools.

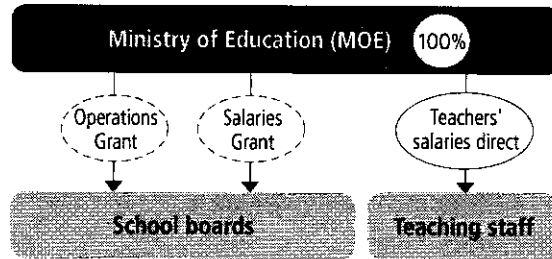
The grants are administered by school boards. Schools are able to use the funding provided according to their priorities. The operations grant is used to employ administrative staff, for school maintenance, for services (e.g. electricity), for books and can be used for extra teaching staff and learning resources. In addition, schools can also apply to the Ministry for a share of 'contestable funding' which may be provided through various available programmes. This is discussed in more depth in the final section.

Division of responsibilities

Despite the move towards decentralisation over the last decade, not as much responsibility was decentralised as the Picot Taskforce recommended and the state has quickly reasserted, or kept, much central control over individual schools and the education system, particularly in terms of funding. As such, the current system in New Zealand remains, in many respects, highly centralised. For state schools, the Ministry provides and allocates capital funding, owns school buildings and land, manages major maintenance and controls school expansion. In addition,

it funds, provides and regulates teacher training. There are no local authorities in New Zealand.

Figure 8 New Zealand



Source: Various

Role of schools

Boards of trustees are responsible for setting priorities and managing the total funding. In doing so, the board must meet the requirements of the National Education Guidelines, comprising the National Educational Goals and the National Administration Guidelines. They are also responsible for achieving the objectives specified in their charter. After these responsibilities, requirements and objectives are achieved, any surplus funds may be used by the board within the current year or carried over for future years. Despite central control of capital allocation, components of the operations grant are not 'tagged' funds and do not need to be accounted for individually. As such, boards are free to decide how the grant should be spent.

Allocation of funding to schools

Method for determining allocation

A systematic common rule is applied for the allocation of primary and secondary operational resources and staffing. A salaries grant is paid to state and integrated schools to remunerate staff holding designated management positions. The Ministry arranges for teachers to be paid their salaries directly. The Ministry determines each school's teaching entitlement based on the number of students and their grade distribution and it meets the cost of teacher transfers and relief teachers. If a school does not employ the staff, it does not receive the funding, giving schools the incentive to hire their full entitlement of teachers. Each school's board of trustees selects its teachers, who are then paid according to the national salary schedule, which rewards years of teaching experience. As teachers at a school gain salary increments, the extra funding needed

to cover the higher salary bill is automatically provided. Schools with a more experienced teacher profile, therefore, receive more funding than schools with the same teacher entitlement, but more junior (and cheaper) staff. In addition, the government pays operations grants based mainly on the number and grade distribution of students, as well as several other factors. Per-pupil rates are universal, however, four levels of per-pupil funding are set to recognise costs associated with educating students at that particular level.

Range of factors taken into account

A broad range of summary indicators are used for staff and operational goods and services for primary and secondary schools. The Operations Grant is based on a variety of factors (MOE, 2003a), which are discussed in the next section. The Operations Grant is bulk funded and is paid directly to state and integrated schools and includes targeted funding for disadvantaged groups (including Targeted Funding for Educational Achievement and Special Education).

Indicators used

The Operations Grant is based on a variety of factors, including the number and grade distribution of students, school type, location and decile rating (deciles are ten per cent groupings). A school's decile rating indicates the extent to which the school draws its students from low socio-economic communities. Each state and state integrated school is ranked into deciles. Decile 1 schools are the ten per cent of schools with the highest proportion of students from low socio-economic communities, whereas decile ten schools are the ten per cent of schools with the lowest proportion of these students (MOE, 2003a).

A school's decile is calculated using census information and is based on six factors including: household income, (i.e. the percentage of households with equivalent income); occupation, (i.e. the percentage of employed parents in the lowest skilled occupational groups, e.g. labourers, machine workers); household crowding (i.e. the number of people in the household divided by the number of bedrooms); educational qualifications (i.e. the percentage of parents with no tertiary or school qualifications); income support (i.e. the percentage of parents in direct receipt of benefits) and ethnicity (i.e. the percentage of Maori and Pacific students and/or refugees with English as a second

language). Ratings are reassessed following each census (MOE, 2003a).

Allocation of funding for pupils with special needs

For New Zealand, all of the three main models for targeting need were evident within the literature.

Increasing the general allocation

As noted, specific components of the operations grant, namely Targeted Funding for Educational Achievement, a resource to assist schools to lower barriers to learning faced by students from low socio-economic communities and the Special Education Grant to assist schools to help students with moderate special education needs, such as learning and behaviour difficulties, are allocated to schools as part of the operations grant.

Funding for centrally defined activities

In addition, however, a number of supplementary entitlements are available to schools to address the needs of certain pupils groups as determined by the Ministry. The Ongoing and Reviewable Resourcing Scheme, for example, provides resources for a very small group of students throughout New Zealand who have the highest need for special education. Students are verified for the schemes by a Ministry-appointed panel as having combined moderate, high or very high special education needs. The funding is generated according to these and is used for: extra teaching, specialist support programmes, therapy, consumables and education support. Students are eligible when they meet at least one of nine criteria. To meet the criteria pupils must have significant educational needs that arise from an extreme or severe difficulty with one of, or moderate to high learning difficulty with any two of the following: learning; hearing; vision; mobility; language use and social communication.

In addition, schools with a disproportionate number of students with moderate special education needs are eligible for a supplementary grant called the Enhanced Programme Fund (EPF). The EPF was introduced to help eligible schools enhance, refine and/or further develop effective special education programmes. The EPF targets schools with the greatest need nationally. Schools that are funded provide data to show that

they have a disproportionate number of students with moderate special education needs when compared with other schools. Priority for the EPF is given to schools that, as a result of a disproportionate number of students with moderate special education needs, are able to show why they are not able to provide effective programmes within the regular resources available to them.

Funding for locally proposed projects or schemes

Schools can also apply to the Ministry for a share of 'contestable funding' by making an application to the

Ministry for funding of specific projects, although these must relate to specific centrally determined funding areas. A number of the areas for which contestable funding may be applied for relate to addressing the social needs or characteristics of specific groups including: GSE (Group Special Education); Refugee and English for speakers of other languages (ESOL) Funding; Pacific Liaison Funding; Flexible Funding Pool for ESOL students; Second Language Learning Pool; Moderate Needs Funding. In order for schools to obtain this funding a detailed proposal must be submitted to the Ministry which then decides on the provision of money for particular projects (Post Primary Teachers Association, 2003).

6.9 Australia

Key statistics

		Country mean
Total population of the country (in thousands)	19,157	
Performance ranking	5	
Expected years of schooling (primary and lower secondary)	11.9	9.4
Ratio of students to teaching staff (primary)	17.0	17.0
Ratio of students to teaching staff (lower secondary)	No data	14.5
Expenditure per pupil (primary) in US\$/PPP	4967	4381
Expenditure per pupil (lower secondary) in US\$/PPP	6579	5575
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of GDP	3.9 per cent	3.5 per cent
Public expenditure on education (primary, secondary and post-secondary non-tertiary) as percentage of total public expenditure	10.6 per cent	8.9 per cent

Source: Organisation for Economic Cooperation and Development (2003)
Year of reference: 2000

In 2000, Australia ranked fifth in comparison with other OECD countries for overall educational performance. The expected years of compulsory schooling were significantly higher than the country mean, whilst the ratio of students to teachers equalled the country mean for lower secondary education, but was higher than the country mean for primary education. More money is earmarked for secondary education than primary, particularly in the latter secondary years. In Australia, in 2000, just over a tenth of public expenditure was spent on education. Of all the countries illustrated, this is the second highest level of public expenditure on education. From 1995 to 2000 the private funding share in Australia increased from around 20 per cent to over 24 per cent, although public investment has not decreased, rather it has risen.

Key features of the education system

School education, which can last up to 13 years, has a similar structure across Australia, with minimal variations occurring amongst states and territories. It is divided into a non-compulsory, although almost universally taken, preparatory year and primary and secondary schooling. Primary schooling lasts six or seven years and secondary schooling lasts five or six years (Ministerial Council on Education, Employment, Training and Youth Affairs, 2000). In August 2002, there were 9632 schools

in Australia, of which 6969 (72 per cent) were government schools and 2663 (28 per cent) were non-government schools. Whilst the government sector has declined slightly in recent years, the non-government sector has grown with most growth occurring in independent, non-systemic, low fee schools (Commonwealth Department of Education, Science and Training, 1997). In 2002, only 65 per cent of full-time school students in Australia attended government schools, the remaining students attending non-government schools. Within the non-government sector, schools represent a variety of social and religious traditions and pedagogical approaches and cater for students from a wide range of socio-economic and ethnic backgrounds. Religious affiliation is one of the main reasons for choice of non-government schooling in Australia, for which the federal government provides the bulk of their public subsidisation.

Throughout Australia, there has been increasing devolution of responsibility, authority and accountability in the education system directly to the school level. Government schools have been encouraged to accept increased autonomy, aimed at improving the decision making and quality of education provided to students. A key feature of this devolution has been the implementation of school-based funding models, such as the 'Schools Global Budget', implemented in 1995 (Hill, 1997).

Financial source and flow (see Figure 9)

According to statistics relating to 2000, approximately 27 per cent of the funding for government education comes from central government, the remaining 73 per cent being raised from regional sources (OECD, 2003).

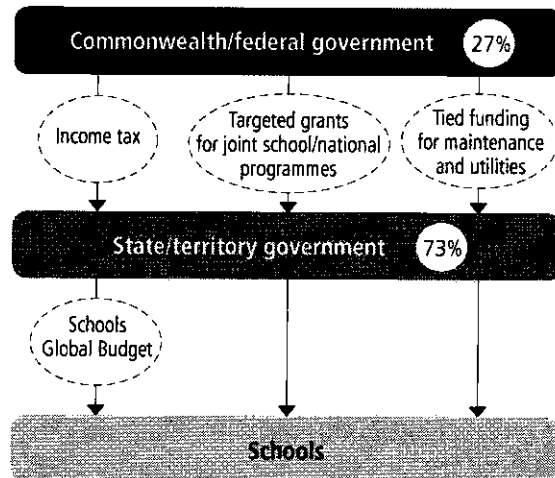
The state governments in Australia have primary responsibility for the provision and regulation of school education. The commonwealth government provides funding through the collection of income tax. It also provides a source of tied, supplementary funding for specific utilities and maintenance use and also for targeted grants for joint school or national programmes. There are no local contributions to funding for state education, apart from fees, charges and levies paid by students or their parents and private donations and income (including that derived from fundraising), which are more typically associated with non-government schools (Ministerial Council on Education, Employment, Training and Youth Affairs, 2000).

Government schools receive the majority of their funding from state and territory governments, while non-government schools received the majority of their government funding from the commonwealth. Government funding is used to supplement that raised by the state and territory governments (Hill, 1997).

Division of responsibilities

Traditionally, Australia's funding system was a centralised budget system. More recently, Australian schools across all states have been given control over their budgets through the Schools Global Budget. Through this, responsibility, authority and administration have been devolved to the school level, giving schools in Victoria, for example, 87 per cent of the control over the total recurrent budget for school education (Hill, 1997). Australia has now moved from a system where schools and the national government had virtually no control over financial management and resource allocation to a system in which the state government, schools and national government operate in collaboration across all decision fields (Ainley and McKenzie, 2000).

Figure 9 Australia: Government schools



Source: Various

Role of states and territories

States and territories have considerable discretion over the actual amount which they spend on school education. However, there is not a great deal of variation in expenditure between them, with the exception of the Northern Territory, where isolation imposes high costs of provision and there is a high proportion of indigenous people living in poverty (Hill, 1997).

A small percentage of the funds available for the Schools Global Budget at state level are retained by the state. This is spent on state administration, including the salaries of regionally and centrally based personnel, administration and office and accommodation costs etc. Further funds may be retained by the state, even though the costs are incurred at the school level for three reasons: first, they will be retained where schools are not in a position to control their expenditure; second, if it was anticipated that there would be excessive variation of expenditure; third, if expenditure patterns were likely to be unpredictable (Hill, 1997).

The state allocates funds to schools according to the criteria laid out in the Schools Global Budget. This is supplemented through a statement of resource entitlement with funds from the Commonwealth and state for utilities and maintenance (Department of Education and Children's Services, 2004)

Role of schools

After the cuts made to the Schools Global Budget at state level, a high percentage of total recurrent funds are provided directly to individual schools. For example, in

the 1995-96 financial year, at least 87 per cent of the budget reached schools in the state of Victoria (Hill, 1997). The school then has relative autonomy over how it chooses to spend those funds. As such, any savings or over expenditure by the schools are retained by the school site and schools manage their own budgets using a one-year firm budget, supported by a two-year projected budget. Each school has an overdraft facility equivalent to a set amount per student and this is supported by a three-year cash flow plan. Schools, however, are still required to submit monthly and annual financial reports to assist planning and monitoring, so they are not entirely autonomous. In addition, support is provided through a shared service centre for the state, which shares or removes any increase in workload associated with the increased financial management.

Allocation of funding to schools

The method for determining the funding allocated to schools is relatively comprehensive. A systematic common rule is applied for the allocation of funding through the Schools Global Budget. This allocates full funding for schools and is supplemented through the Statement of Resource Entitlement. The Schools Global Budget is applied to all states. A broad range of indicators are taken into account for allocating funding to schools.

Indicators used

In allocating funding to schools, the Schools Global Budget takes into account indicators from seven main areas, forming the seven sub-components of the budget (Hill, 1997). Core funding is calculated on the basis of pupil numbers and grade levels, together with a size adjustment factor. A very wide range of other indicators may also be taken into account, including historical spending data, geographical location and school premises/maintenance.

Allocation of funding for pupils with special needs

Two of the main models for allocating funding for pupils with special needs are found in Australia: increasing the general allocation and funding for centrally defined activities.

Increasing the general allocation

The Schools Global Budget has a needs-based allowance in its general allocation formula. This includes various components which are designed to resource and meet the needs of students with particular requirements. These include increased funding for Aboriginal students, for students with disabilities and challenging behaviours and for students with English as a second language. Students from low socio-economic backgrounds are also included in the general allocation formula (Department of Education and Children's Services, 2004). Further funds are allocated through priority programs which make up about 2.3 per cent of total funding for school education through a number of state-wide initiatives and specific purpose programs. All schools with special programs of any kind are provided with sufficient funding in the global budget to continue with those programs. Some of these programmes pertain to special educational provision. For example, the disadvantaged schools funding is distributed to schools in the global budget as part of the funding under the low socioeconomic background component.

Funding for centrally defined activities

In Australia, there are a number of programs that provide funding to schools outside of the formula in the global budget. These programs are either short term and transitional in nature and reflect government priorities, are new government initiatives, or relate to the provision of a service to the community beyond schooling. Examples include Additional Classroom School Services Officer Time, which is a state government program to support students with learning difficulties in South Australia. Primary counsellors, originally provided for through the Index of Educational Disadvantage in the global budget, are also funded as a special targeted program (Department of Education and Children's Services, 2004).

Appendix 1 Record of searches undertaken

Australian Education Index (AEI)

AEI is produced by the Australian Council for Educational Research. It is an index to materials at all levels of education and related fields. Source documents include journal articles, monographs, research reports, theses, conference papers, legislation, parliamentary debates and newspaper articles.

- #1 Budgeting
- #2 Budgets
- #3 Educational Economics
- #4 Education Finance
- #5 Educational Finance
- #6 Educational Funding
- #7 Financial Management
- #8 Financial Policy
- #9 Financial Support
- #10 Funding
- #11 Funding Formulas
- #12 Funding Models
- #13 Grants
- #14 Resource Allocation
- #15 School Accounting
- #16 School Finance
- #17 #1 OR #2 OR #3 ... #16
- #18 Elementary Education
- #19 Primary Education
- #20 Primary Secondary Education
- #21 Secondary Education
- #22 #18 OR #19 OR #20 OR #21
- #23 Further Education
- #24 Higher Education
- #25 #23 OR #24
- #26 #17 AND #22
- #27 #26 NOT #25
- #28 Governance
- #29 Governing Boards
- #30 Governing Bodies
- #31 School Boards
- #32 #28 OR #29 OR #30 OR #31
- #33 #32 NOT #25
- #34 Local Education Authorities (LEA)
- #35 Local Education Authorities/Great Britain
- #36 Boards of Education
- #37 State Boards of Education
- #38 School Districts
- #39 School District Spending
- #40 #34 OR #35 OR #36 OR #37 OR #38 OR #39
- #41 #40 NOT #25
- #42 school funding model* (ft)

British Education Index (BEI)

BEI provides bibliographic references to 350 British and selected European English-language periodicals in the field of education and training, plus developing coverage of national report and conference literature.

- #1 Budgeting
- #2 Budgets
- #3 Educational Economics
- #4 Educational Expenditure
- #5 Educational Finance
- #6 Finance
- #7 Financial Management
- #8 Financial Policy
- #9 Financial Support
- #10 Funding
- #11 Grants
- #12 Resource Allocation
- #13 #1 OR #2 OR #3 ... #12
- #14 Further Education
- #15 Higher Education
- #16 #14 OR #15
- #17 #13 NOT #16
- #18 Governance
- #19 Governing Boards
- #20 School Governing Boards
- #21 Governing Bodies
- #22 School Governing Bodies
- #23 Governors
- #24 School Governors
- #25 #18 OR #19 OR #20 ... #24
- #26 #25 NOT #16
- #27 Local Education Authorities
- #28 Local Management of Schools
- #29 School Districts
- #30 #27 OR #28 OR #29
- #31 #30 NOT #16
- #32 school funding model* (ft)

The Educational Resources Information Center (ERIC)

ERIC is sponsored by the United States Department of Education and is the largest education database in the world. It indexes over 725 periodicals and currently contains more than seven million records. Coverage includes research documents, journal articles, technical reports, program descriptions and evaluations and curricula material.

- #1 Budgeting
- #2 Budgets
- #3 Educational Economics
- #4 Educational Finance
- #5 Finance
- #6 Financial Management

- #7 Financial Policy
- #8 Financial Support
- #9 Funding
- #10 Funding Formulas
- #11 Grants
- #12 Resource Allocation
- #13 School Accounting
- #14 School Finance
- #15 #1 OR #2 OR #3 ... #14
- #16 Elementary Education
- #17 Elementary Secondary Education
- #18 Secondary Education
- #19 #16 OR #17 OR #18
- #20 #15 AND #19
- #21 Governance
- #22 Governing Boards
- #23 School Boards
- #24 School Governors
- #25 #21 OR #22 OR #23 OR #24
- #26 #25 AND #19
- #27 Local Education Authorities (United Kingdom)
- #28 Boards of Education
- #29 School Districts
- #30 School District Spending
- #31 #27 OR #28 OR #29 OR #30
- #32 #31 AND #19
- #33 school funding model* (ft)

Internet searches

Internet searches were undertaken using the exact phrase search term 'school funding'. Documents were retrieved from the following websites:

Europe/International

Bertelsmann Stiftung/ Bertelsmann Foundation www.bertelsmann-stiftung.de

EURYDICE www.eurydice.org

Le Centre de Recherche de Sciences Économiques et de Gestion/Research Centre in Economics and Management, Université Louis Pasteur, Strasbourg <http://cournot2.u-strasbg.fr/>

OECD www.oecd.org

Australia

Association of Independent Schools of Western Australia www.ais.wa.edu.au

The Australian www.theaustralian.news.com.au

Australian Broadcasting Corporation www.abc.net.au

Australian Council for Educational Research www.acer.edu.au

Australian Education Union www.aeufederal.org.uk

Australian Government Department of Education, Science and Training www.dest.gov.au

Australian Parents Council www.austparents.edu.au

Centre for Independent Studies www.cis.org.au

Independent Education Union www.ieu.asn.au

Kormilda College www.kormilda.nt.edu.au
Labor Council of New South Wales www.labor.net.au

New Zealand

The Dominion Post www.stuff.co.nz/stuff/dominionpost/0,,0a6000,00.html
Education Forum www.educationforum.org.nz
Education Review Office www.ero.govt.nz
New Zealand Council for Educational Research www.nzcer.org.nz
New Zealand Ministry of Education www.minedu.govt.nz
New Zealand Post Primary Teachers' Association www.ppta.org.nz
New Zealand Principals' Federation www.nzpf.ac.nz
Office of the Clerk of the House of Representatives www.clerk.parliament.govt.nz

Canada

British Columbia Ministry of Education www.gov.bc.ca/bced
Council of Ministers of Education www.cmec.ca
Government of Alberta www.learning.gov.ab.ca
Government of New Brunswick www.gnb.ca
Manitoba Education, Citizenship and Youth/Advanced Education and Training <http://www.edu.gov.mb.ca/>
Ministère de l'éducation, Québec www.meq.gouv.qc.ca
Nunavut Department of Education www.gov.nu.ca/education/eng

USA

Arizona State University www.asu.edu
National Center for Education Statistics www.nces.ed.gov
University of California, Berkeley www.berkeley.edu
U.S. Department of Education www.ed.gov

Throughout, * has been used to indicate truncation of terms and (ft) to denote free-text search terms.

Appendix 2 Example of summary sheet used

Title of publication including date:	
Focus/description	
Country	
Methodology	
Background/trends in funding	
Funding approaches/models	
Pros/cons of funding approaches/models	
Centralisation/ decentralisation issues	
Management and governance issues	
Source	
Further references	

Appendix 3 Initial source of finance and performance

Country	Main source of funding	Rank
Japan	Regional	1
Finland	Local	2
Canada	Regional	3
New Zealand	Central	4
Australia	Regional	5
UK	Local	6
Ireland	Central	7
Austria	Central	8
Sweden	Local	9
Belgium	Regional	10
France	Central	11
Switzerland	Regional	12
Norway	Local	14
Czech Republic	Central	15
USA	Regional	16
Denmark	Local	17
Hungary	Central	19
Germany	Regional	20
Spain	Regional	21
Poland	Local	22
Italy	Central	23
Portugal	Central	24
Greece	Central	25

Source: Adapted from figures provided by OECD (2003)

Appendix 4 Responsibility for finance and performance

Country	Responsibility	Rank
Finland	Local	2
UK	Shared	6
Ireland	Central	7
Austria	Shared	8
Sweden	Local	9
Belgium	Shared	10
France	Shared	11
Iceland	Local	13
Norway	Local	14
Denmark	Local	17
Liechtenstein	Shared	18
Germany	Shared	20
Spain	Shared	21
Poland	Local	22
Italy	Shared	23
Portugal	Shared	24
Greece	Central	25
Luxembourg	Shared	27

Source 1: Rankings adapted from OECD data (OECD, 2003)

Source 2: Responsibility categorised according to data from the European Commission (2000)

Note: 'Shared' means shared between central and more local levels of government. Usually central government has the responsibility for financing staff resources and operational and capital resources are the responsibility of central government

Appendix 5 Models of local authority and school autonomy and performance

Country	Model of local authority autonomy	Model of school autonomy	Rank
Finland	Financial autonomy (all)	Varies with local authority	2
United Kingdom	Financial autonomy (all)	Budget autonomy	6
Ireland	Autonomy in use only	Operational resources only	7
Austria	Financial autonomy (some)	Operational resources only	8
Sweden	Financial autonomy (all)	Varies with local authority	9
Belgium	Shared (some)	Limited autonomy	10
France	Financial autonomy (some)	Limited autonomy	11
Iceland	Financial autonomy (all)	Limited autonomy	13
Norway	Financial autonomy (all)	Varies with local authority	14
Denmark	Financial autonomy (all)	Varies with local authority	17
Liechtenstein	Shared (some)	Limited autonomy	18
Hungary	Financial autonomy (all)	Operational resources only	19
Germany	Financial autonomy (some)	Limited autonomy	20
Spain	Financial autonomy (some)	Operational resources only	21
Poland	Financial autonomy (all)	Budget autonomy	22
Italy	Financial autonomy (some)	Operational resources only	23
Portugal	Financial autonomy (some)	Limited autonomy	24
Greece	Autonomy in use only	Operational resources only	25
Luxembourg	Shared (some)	Limited autonomy	27

Source 1: Rankings adapted from OECD data (OECD, 2003)

Source 2: Models of local authority and school autonomy categorised according to data from the European Commission (2000)

NOTES:

Models of local authority autonomy:

1. 'Financial autonomy (all)': local authorities are responsible for determining the amounts of all types of resources, i.e. staff, operational and capital resources
2. 'Financial autonomy (some)': local authorities are responsible for determining the amounts of operational and capital resources only
3. 'Shared (some)': the responsibility for determining the amounts of operational and capital resources is shared between central and more local levels of government. Usually central government has the responsibility for financing staff resources and operational and capital resources are the responsibility of local authorities.

Models of school autonomy:

1. 'Budget autonomy': schools are free to draw up their own budget and the way it is used
2. 'Limited autonomy': schools receive resources in kind from the central government or local authority which acquires goods and services whose quantity and nature it determines itself
3. 'Operational resources only': school autonomy is limited to operational resources.

Appendix 6 Models of allocation and performance

Country	Models of allocation	Rank
Finland	Local authority rule for all resources	2
Australia	Common rule for all resources	5
UK	Common rule for staff and operational resources Local authority rule for capital resources	6
Ireland	Common rule for staff and operational resources No rule for capital and operational resources	7
Austria	Common rule for staff and operational resources No rule for capital resources Local authority rule for operational and capital resources	8
Sweden	Local authority rule for all resources	9
Belgium	Common rule for all resources	10
France	No rule for staff resources Local authority rule for operational and capital resources	11
Iceland	Common rule for staff resources Local authority rule for operational and capital resources	13
Norway	Local authority rule for all resources	14
USA	Local authority rule for all resources	16
Denmark	Local authority rule for all resources	17
Liechtenstein	No rule for all resources (secondary) Local authority rule for all resources (primary)	18
Germany	Common rule for staff resources Local authority rule for operational and capital resources	20
Spain	No rule for staff resources (primary and secondary) No rule for operational and capital (secondary) Local authority rule for operational and capital (primary)	21
Italy	No rule for staff resources Local authority rule for operational and capital resources	23
Portugal	Common rule for staff and operational resources Local authority rule for operational and capital resources	24
Greece	Common rule for staff resources Local authority rule for operational and capital resources	25
Luxembourg	No rule for all resources	27

Source 1: Rankings adapted from OECD data (OECD, 2003)

Source 2: Models of local authority and school autonomy categorised according to data from the European Commission (2000)

Appendix 7 Summary of main indicators

Indicator	Description	Example	Pros and cons
Number of pupils/ classes	In Europe, the most commonly used variable for assessing school needs directly or indirectly and irrespective of the country or resource category, is the number of pupils.	<p>Denmark</p> <p>In Denmark municipalities freely determine the rules for calculating the award of resources. In some cases, the number of pupils is used as the main indicator. In most cases, this is combined with other factors, such as social characteristics of the school population and characteristics of the teaching staff (European Commission, 2000).</p> <p>Australia (Hill, 1997), New Zealand (MOE, 2003a)</p>	<p>Pros</p> <p>Good approximate assessment of need; transparent; good forecasting of expenditure; increases competition between schools and therefore quality.</p> <p>Cons</p> <p>'Pupil hunting' between schools; some schools may ill-advisedly increase their class numbers; fluctuations in pupil numbers renders forecasting impossible (European Commission, 2000).</p>
Phase of education	In many countries, the per capita rate of funding varies with the phase of education, i.e. the primary and secondary phase. This, together with age-related allocations, leads, in some countries, to marked differences in the per-pupil funding for primary compared to secondary pupils.	<p>Wyoming, USA</p> <p>Prototype funding models are constructed for three different grade-level groupings – elementary, middle and high school. Assumptions are made according to each school grouping as to the resources and associated costs necessary for the running of the school (Christenson, 2000).</p> <p>Australia (Hill, 1997)</p>	<p>Cons</p> <p>Frequent debate over the extent to which funding is biased towards primary and secondary schools; does not account for variations between grade levels, particularly in the transitional years (Hill, 1997).</p>
Age weightings	The use of age weightings or age weighted pupil units (AWPUs), in conjunction with the number of pupils as a method for allocating funds to schools, was frequently highlighted within the literature.	<p>Northern Ireland</p> <p>The AWPU factor is the basic building block of the allocation formula. Pupil numbers in each category are multiplied by the weight for that category to obtain a weighted total for each school. The grand total of AWPUs for all schools is then divided into the remaining funds available to derive the value of an AWPU. This figure is then multiplied again by the number of AWPUs in each school to determine the school's allocation under this factor (DENI, 2004).</p> <p>Australia (Department of Education and Children's Services, 2004)</p>	<p>Pros</p> <p>Recognises that pupils of different ages give rise to different expenditure requirements (DENI, 2004); can reduce differential funding between primary and secondary schools, particularly during transition (Hill, 1997).</p>
Number of hours teaching	The number of hours of required lessons is sometimes used to determine the total volume of staff resources awarded to schools. This would seem to be a move towards activity-led funding compared to the use of pupil numbers.	<p>Austria (European Commission, 2000)</p> <p>Teaching staff have to be assigned to schools with due regard to the required number of hours of teaching, depending on particular subjects and the number of pupils, or the formation of class groups.</p> <p>Germany (European Commission, 2000)</p> <p>Georgia (Sielke, 2000)</p>	<p>Pros</p> <p>A rational and consistent basis of need; levels of need are determined objectively and are therefore more transparent (West <i>et al.</i>, 1999).</p> <p>Cons</p> <p>Activity-led funding models can lead to unrealistically high funding (Johnson, 2003).</p>

Appendix 8 Summary of less commonly used indicators

Indicator	Description	Example	Pros and cons
Performance data (attainment)	Outcome measures, such as pupil attainment, are sometimes used to determine resource allocations. For example, schools may be compensated for low achievement, or awarded for high achievement, or improvements on particular performance measures.	<p>Florida, USA.</p> <p>Through a program known as School Recognition or Merit Schools, the state provides outstanding schools with monetary rewards for high performance. There are currently two performance categories. The first rewards schools that demonstrate sustained performance in maths, reading and writing. The second rewards schools for improved performance, measured by student achievement in at least two of the three subject areas. Criteria used include test scores, attendance rates and site visits (Wood <i>et al.</i>, 2000).</p> <p>Mississippi, USA (Johnson, 2000), Pennsylvania, USA (Carey, 2002)</p>	<p>Pros</p> <p>Motivation to raise standards (Carey, 2002).</p> <p>Cons</p> <p>Can create wrong incentives (CB, 1997); difficult to accurately quantify educational outcomes and to understand the relationship between outcomes, funding levels, student characteristics and school performance (Carey, 2002).</p>
Performance data (attendance)	Other outcome measures, such as attendance are also used to allocate funding. The level of school attendance is integral to pupil number allocations.	<p>Ontaria, Canada</p> <p>The per-student allocation is based on the average daily enrolment of students. Average daily enrolment is calculated on the weighted enrolment counts on the last school days of October and March. The full-time equivalent of pupils enrolled in a school is weighted at 0.5 for each day (National Center for Education Statistics, 2000).</p> <p>Wyoming, USA (Christenson, 2000), Mississippi, USA (Johnson, 2000)</p>	<p>Pros</p> <p>Increases motivation to raise attendance (Carey, 2002); the level of school attendance is integral to pupil number allocations.</p>
Historical spending data	Expenditure from the previous year, adjusted according one or more indicators, such as the rate of inflation, is sometimes used as a basis for funding. This indicator is most often used for operational and maintenance allocations.	<p>Wyoming, USA</p> <p>Calculations for transportation allocations rely upon expenditures in the preceding school year. For example, in the operations and maintenance allocation, school districts receive 100 per cent of the actual district transportation expenditures for the preceding school year. A similar process is used to fund school bus purchases and leases. The district receives 100 per cent of the actual district lease payments made during the previous school year and 20 per cent of the total bus purchase made by the district during the preceding five school years, which results in 100 per cent reimbursement of costs over time (Christenson, 2000).</p> <p>UK (Audit Commission, 2000), Australia (Department of Education and Children's Services, 2004), New Zealand (Post Primary Teachers' Association, 2003), Wyoming, USA (Christenson, 2000)</p>	<p>Cons (West <i>et al.</i>, 1999)</p> <p>Assumes that historical spending is determined by need, yet this not always the case; LEAs often spend less, relative to their needs; can be influenced by government imposed spending restrictions; can lead to stagnation; removes scope for local discretion (DETR, 2000); Fails to take into account new demands imposed on funding each year (Post Primary Teachers Association, 2003).</p>
Geographical location	Some methods of resource allocation consider factors associated with the geographical area of schools. Whether the school is in a rural area is also a key element for some countries. Funding for transportation is often allocated	<p>Australia</p> <p>Funding for rural and isolated students addresses the additional costs of provision associated with rural or isolated schools. Forty per cent of the total is used to provide a base allocation to all rural school sites, 51 per cent to address distance and four per cent is allocated</p>	<p>Pros</p> <p>Transparent, understandable and defensible indicators (DECS, 2004).</p>

Geographical location (cont)	using indicators of geographical location or rurality.	<p>on a per capita basis to all rural schools. Indicators used are distance in kilometres from the nearest metropolitan area, from the nearest provincial centre with more than 20,000 inhabitants and from the nearest primary or secondary school not eligible for funding as a rural or isolated school (Department of Education and Children's Services, 2004).</p> <p>Alberta, Canada (National Center for Education Statistics, 2001a), Wyoming, USA (Christenson, 2000), Georgia, USA (Sielke, 2000)</p>	
School premises/maintenance	In some instances, factors to do with school buildings and their maintenance, or the existence of other facilities, such as sports facilities, are taken into account.	<p>UK</p> <p>Some local authorities in England and Wales take account of the size and general state of school installations, the existence of sports facilities and the type of fuel used when they draw up the budget for schools (covering staff and operational resources) (European Commission, 2000).</p> <p>Portugal (European Commission, 2000), Australia (Department of Education and Children's Services, 2004)</p>	<p>Pros</p> <p>Allocates funding much closer to real expenditure at the school level (European Commission, 2000).</p>
School size	The size of the school may be an additional factor that is taken into account. For example, where pupil numbers fall above or below certain levels, schools will receive additional funds in order to compensate for large or small economies of scale.	<p>Northern Ireland</p> <p>A small schools support factor is incorporated into the national funding formula. The amount to be allocated to eligible schools is determined by the number of pupils in the school. In the primary sector, for example, a lump sum equivalent to 1.2 times the average teacher's salary is allocated to schools of up to 100 pupils, tapering to zero at 300 pupils. In the post-primary sector, a lump sum equivalent to 3.4 times the average teacher's salary will be allocated to school of up to 200 pupils, tapering to zero at 550 pupils (DENI, 2004).</p> <p>Australia (Department of Education and Children's Services, 2004; Hill, 1997), Georgia, USA (Sielke, 2000)</p>	<p>Pros</p> <p>Small schools receive sufficient financial resources to function effectively (DENI, 2004); surmounts issues of economy of scale (DENI, 2004).</p>
Characteristics of teaching staff	In some countries, the seniority of the teaching staff is a relevant factor in establishing the funding for education. Indeed, the costs of teachers' salaries can represent up to 80 per cent of total school funding.	<p>New Zealand</p> <p>Teachers are paid according to the national salary schedule, which rewards years of teaching experience. As teachers gain salary increments, the extra funding needed to cover the higher salary bill is automatically provided to schools. Schools with a more experienced teacher profile therefore receive more funding than schools with the same teacher entitlement, but more junior and less expensive staff (Harrison, 2004).</p> <p>Portugal (European Commission, 2000), Wyoming, USA (Christenson, 2000)</p>	<p>Pros</p> <p>Prevents schools with long established teachers, with higher salaries, from getting into financial difficulties (European Commission, 2000).</p>
Type of school	The type of school is sometimes taken into account when allocating resources.	<p>Belgium</p> <p>In the Flemish community in Belgium, whether schools are focused on general, vocational or technical education is taken into account in order to determine the number of teachers, as well as establishing the surface requirements of school buildings (European Commission, 2000).</p> <p>Australia (Department of Education and Children's Services, 2004)</p>	No pros or cons identified.

Appendix 9 Indicators for the assessment of special needs

Assessment	Description	Pros and cons
Defining the area or target population	<p>The characteristics used to determine schools' needs may be identified in terms of target groups of pupils within a particular school, or with respect to its surrounding area (European Commission, 2000). Countries may therefore identify which of their schools should receive special financing resources through a target population or the residential area. Some countries use a combination of these methods, or assorted methods for different aspects of funding.</p> <p>Examples Europe (European Commission, 2000) Australia (Buckingham, 2000)</p>	<p>Pros Using residential areas compensates for low income levels and the size of disadvantaged populations within the area. It can also act as a spur to competition between schools (European Commission, 2000). The use of students' residential addresses is seen to encompass a range of attributes associated with inequality and disadvantage, the residential data is readily available and catchment areas can be readily specified. It is simple and transparent, publicly verifiable and inexpensively assessed (DEETYA, 1997).</p> <p>Cons Schools do not necessarily enrol children who live in their immediate environment, particularly in countries where there is parental choice. It can lead to segregation in schools and large numbers of high risk pupils in a single school (European Commission, 2000).</p>
Attainment	<p>The use of attainment measures or SEN audits may be used as a direct measure to assess need.</p> <p>Examples UK (West <i>et al.</i>, 2000); (Evans <i>et al.</i>, 2001)</p>	<p>Pros Key stage tests are an educational measure capable of differentiating between children at five levels; they are readily available and provide data on a complete cohort of pupils (DENI, 2004). They are more favoured by teachers than FSM indicators (Fletcher-Campbell, 1996). They provide data at the level of individuals, resource allocations remain stable over time and they are transparent as resource allocations can be tracked back to individual children (Evans <i>et al.</i>, 2001).</p> <p>Cons SEN audits are subjective measures where they rely upon teachers' evaluations of the SEN of individual pupils; they can be burdensome on schools, create a perverse incentive to push pupils into higher need brackets and carry a risk of inappropriate labelling (Evans <i>et al.</i>, 2001).</p>
Free School Meals (FSM)	<p>The use of FSM is quite common for the assessment of need in schools. It is used to represent the social attributes of the school population upon entry into the school.</p> <p>Examples USA (Carey, 2002) UK, (West <i>et al.</i>, 2000), (Evans <i>et al.</i>, 2001)</p>	<p>Pros FSM is arguably a robust indicator of social disadvantage and is closely correlated with poor achievement (DENI, 2004). It is an objective measure in that it relies on standardised procedures and measures, is easily administrated and provides whole school funding (Evans <i>et al.</i>, 2001).</p> <p>Cons It is argued that FSM does not always adequately reflect the needs of pupils; where parents may not complete the necessary forms, funding is lost (West <i>et al.</i>, 2000). It does not effectively differentiate between the needs of individual schools (Fletcher-Campbell, 1996). Small schools may receive very little and additional arrangements may be needed for pupils who experience complex needs (Evans <i>et al.</i>, 2001).</p>

Appendix 10 The range of factors taken into account and performance

Country	Range of factors	Rank
Finland	Local authority dependent for all resources	2
Canada	Broad range (most states) Local authority dependent for all resources (country-wide)	3
New Zealand	Broad range for all resources	4
UK	Broad range for staff and operational resources Local authority dependent for capital resources	6
Ireland	Limited for staff and operational resources (some schools) Broad range for staff and operational resources (some schools) Local authority dependent for staff and operational resources (some schools) Local authority dependent for capital resources	7
Austria	Broad range for staff and operational resources (some schools) Local authority dependent for capital and operational resources	8
Sweden	Local authority dependent for all resources	9
Belgium	Limited for staff and operational resources (French Community) Limited range for operational resources (Flemish Community) Broad range for staff resources (Flemish Community) Broad range for capital resources	10
France	Broad range for staff resources Local authority dependent for capital and operational resources	11
Iceland	Broad range for all resources	13
Norway	Broad for staff resources Local authority dependent for capital and operational resources	14
USA	Broad range for all resources (some states) Local authority dependent for all resources (country-wide)	16
Denmark	Local authority dependent for all resources	17
Liechtenstein	Broad range for operational resources Local authority dependent for staff and capital resources	18
Germany	Broad range for staff and capital resources Local authority dependent for operational resources	20
Spain	Broad range for staff resources Local authority dependent for capital and operational resources	21
Italy	Broad range for staff and operational resources Local authority dependent for capital resources	23
Portugal	Broad range for staff resources Broad range for operational resources (some schools) Local authority dependent for operational resources (some schools) Local authority dependent for capital resources	24
Greece	Limited range for staff resources (primary) Broad range for staff resources (secondary) Local authority dependent for capital and operational resources	25
Luxembourg	Broad range for staff and operational resources Local authority dependent for capital resources	27

Source 1: Rankings adapted from OECD data (OECD, 2003)

Source 2: Models of range of factors categorised according to data from the European Commission (2000)

Appendix 11 Funding for special needs models and performance

Country	Funding for special needs models	Rank
Finland	Government defined	2
Canada	General allocation Province defined	3
New Zealand	General allocation School defined	4
Australia	General allocation	5
UK	General allocation Government defined Local authority defined	6
Ireland	General allocation Government defined School defined	7
Austria	Government defined	8
Sweden	General allocation Local authority defined	9
Belgium	Government defined School defined	10
France	General allocation School defined	11
Iceland	Government defined	13
Norway	Government defined	14
USA	General allocation State defined	16
Denmark	Government defined Local authority defined	17
Liechtenstein	Government defined	18
Germany	General allocation	20
Spain	General allocation Government defined	21
Italy	School defined	23
Portugal	General allocation School defined	24
Greece	Government defined	25
Luxembourg	Government defined	27

Source 1: Rankings adapted from OECD data (OECD, 2003)

Source 2: Funding for special needs models categorised according to data from the European Commission (2000)

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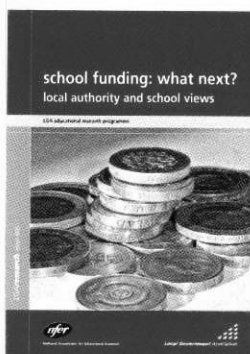
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Mary Atkinson, Emily Lamont, Richard White, Caroline Gulliver and Kay Kinder

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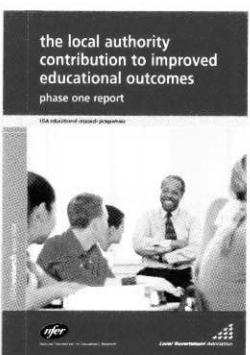
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The methods of funding schools have been an issue of debate in England since the introduction of local management of schools in the early 1990s. Since then, delegation of funding to schools has increased. More recently, changes to the system of school funding have fuelled the debate in England about how schools should be financed.

This report interrogates the literature for alternative models of educational funding from other countries, as well as examining the literature for their strengths and weaknesses. The report provides a review of existing models of school funding in European and Organisation for Economic Cooperation and Development (OECD) countries and the advantages and disadvantages of each model.

The report covers:

- financial source and flow
- division of responsibilities
- allocation of funding to schools.

The report also includes nine country illustrations which provide examples of the models identified throughout the report.

Recommendations arising from the research suggest that there may be much to be learned from examination of other countries' funding models.

This report is important reading for policy makers, local education authorities, headteachers, school governors and all those interested in school funding.