Chapter 8

Case study 2: Formula funding of schools in England and Wales

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This chapter is about the system of formula funding of schools in England and Wales. Scotland has a separate education system administered under Scottish legislation and Northern Ireland has its own version of English and Welsh legislation. As will be explained below, the chapter focuses on the formula funding of schools maintained by local education authorities which are the education departments of multi-service locally elected government authorities.

The origins of formula funding

The formula funding of all state schools for the vast majority of their expenditure requirements was introduced into England and Wales by the 1988 Education Reform Act, which ushered in a period of continuing managerial and curricular change. In terms of the three major functions of a school funding formula set out in *Chapter 3*, the market regulation function was predominant from 1988 until the Conservative Government left office in 1997. The directive and equity functions have received greater emphasis under the Labour Government. The main thrust behind each government's education reforms has been the desire to make the education system produce a more highly skilled and productive workforce in order to enhance the United Kingdom's international competitiveness.

A major innovation of the 1988 Act was 'local management of schools' – the requirement that all schools have delegated to them extensive management responsibilities and the budget to support these. Local education authorities (LEAs) are required to distribute the delegated budgets of their schools by means of a formula within guidelines set by the Department for Education and Employment (DFEE). LEAs have some discretion to determine their own formula within the parameters set but must have their local management schemes approved by the DFEE. The amount of local education authority spending is jointly determined by central and local government. The latter raises about 20 percent of its spending from domestic property tax, receiving the rest as a block grant from central government, which the local authority can distribute as it pleases amongst all its public services. From 1992 to 1996 formula funding operated in the context of central government reductions in school funding in real terms per capita. The Labour Government has continued with much of the previous government's education policies and intends to extend budget delegation (DFEE, 1998).

Prior to the 1988 Act there were three main kinds of formulae used by LEAs for resourcing schools: student/teacher ratios for establishing basic funding levels and per capita funding for books, materials and equipment (Component 1); additional allocations for special (supplementary) educational needs (Component 3). Many LEAs used student/teacher ratios for allocating teaching staff to schools, usually allocating whole number of teachers according to the number of classes the LEA expected each school to form given the numbers of students in each grade and the LEA's class-size norm for that grade. The move to funding schools on a per capita basis, where each student is funded for a fraction of a teacher, rather than allocating whole teachers to schools according to the number of classes, was quite significant. It required a change in LEA thinking to implement the new funding methodology, as well as a transitional period in which schools could adapt to per capita funding.

Earlier government encouragement of formula funding in the United Kingdom was related to the equity function. In 1967 additional funding for schools in socially deprived areas was recommended by the Plowden Report (CACE, 1967) following commissioned research establishing how socio-economic disadvantage and low educational attainment reinforce each other. Plowden recommended that objective factors be used for allocating additional resources and considered eight specific indicators of social and family background. Following Plowden, schools in designated 'educational priority areas' were funded through their LEA for additional resources, usually expenditure on staffing. LEAs were encouraged to develop their own formulae for this purpose. The most highly developed of such educational priority formulae was that of the now defunct Inner London Education Authority. In the 1980s the Inner London Education Authority (ILEA) developed indicators based on socio-economic data on a sample of students in each school. This was a well-researched funding formula, where the indicators of special educational need were selected on the basis of the degree of correlation between the indicators and students' subsequent educational attainments (ILEA, 1984; ILEA, 1987). Other authorities also developed special educational needs indicators based on census and government department data of welfare benefit recipients and family background characteristics, or on the results of standardized educational tests. In response to low educational achievement in socially disadvantaged areas, the Labour Government is introducing educational action zones, where contracted partnerships of LEA, schools, and business are funded to experiment with new practices.

Local management of schools developed out of some LEA initiatives to delegate budgets to schools. One of the early pioneers of local management, Cambridgeshire LEA, had already begun to implement a funding formula prior to the national scheme (Howard, 1989). In the formula that LEAs were subsequently required to develop, LEAs utlized their earlier work on apportioning funds for basic needs (Component 1) and supplementary needs (Component 3).

Policy context for formula funding

As noted in *Chapter 3*, the role of a funding formula depends on the education system and policies within which it is embedded. The funding formula in England and Wales was an essential component of the Conservative Government's more market-driven education system. Its role has to be understood in relation to the other key measures in the 1988 Act and those structures from earlier legislation which remained. An important element of these educational changes was the reduction in the powers of local government and the increase in those of central government. This occurred in the context of an unwritten constitution which does not give local government any constitutional safeguards.

The regulatory framework, within which formula funding plays its part, is outlined in *Table 8.1*. Taking stakeholders first, the 1988 Act gave parents greater choice of school and LEAs were prevented from protecting unpopular schools by forcibly allocating students to them. A child must be admitted to the state school chosen by its parents, provided that the school has not yet filled all its 'standard number' of places and, in relevant cases, the child meets any selection criteria of religious affiliation or ability. Schools may be forced to admit more students than their standard number of places available if parents are successful in appealing to a special panel. Schools have a financial incentive to recruit students since currently at least 80 percent of the schools' budgets must be allocated according to the ages and numbers of students in each school. Thus formula funding is explicitly linked to parental choice of school and is an essential component of the 'quasi-market' for schools. The formula sets the terms under which the LEA purchases a school place, on behalf of parents, from the school as provider.

The creation of the schools' 'quasi-market' was accompanied by extending the domain of management decision-making at school level. As indicated in the first and second columns of *Table 8.1*, the powers and responsibilities of governing bodies (school councils) and headteachers (principals) were increased at the expense of the LEA.

Table 8.1. Constituent elements of school-based management in England post-1988

Stakeholders to whom decision-making is decentralized	Management domain for school-based decision-making	Regulation
School governing body: Responsible for managing the school. Delegates day-to-day responsibility to the headteacher. ***Parents:*** Elect parent governors; some choice of school. *Local authority:* (reduced powers) Sets overall budget within central government limits. Draws up local management scheme. Responsible for special education, admissions policies for LEA schools, and other remaining functions such as capital programme, property maintenance, central services. From 1998 must have Education Development Plans to improve schools. ***Business community:*** Involvement in local training, education action zones, and co-opted as school governors.	***Budget:*** Schools manage their own budget for almost all their needs. ***Physical resources*:** LEA schools have 'tenant' responsibilities. GM schools control all assets and apply to FAS for capital allocations. ***Staffing:*** Determined by governing body. The LEA or GM governing body is the legal employer. ***Students:*** School admits students according to its admissions policy: GM schools determine own admissions policy within legislative constraints. ***Curriculum:*** School have discretion on how to teach and organize the national curriculum. ***Performance:*** From 1998 it is expected that schools must set targets for national test and public examination results.	***Use of resources:*** Financial audit; teacher qualifications, pay and conditions nationally set with increased local flexibility; national employment laws; no limitations on class size; no minimum space rules; Health and Safety legislation. ***Product specification:*** National curriculum; national tests and other performance indicators; inspection of educational standards and quality; minimum school hours. Target setting. ***Market conditions:*** Exit and entry—new schools, school closure or change in 'standard number' must be approved by DFEE or FAS. Publication of information about school performance. Parental choice of school. More permissive regulation of admission policies, which has permitted more schools to select by ability.

Delegating budget decision-making to school level was a major innovation. Decisions taken at school level include staffing establishment and recruiting, training, disciplining and dismissing staff, although the LEA remains the employer of LEA-maintained schools' staff.

Some aspects of regulation continued or were amended, but new forms of regulatory control were introduced. Particularly radical for Britain was the creation of a national curriculum for all students of compulsory school age (5 to 16 years) and new national tests for children aged 7, 11 and 14. This has been accompanied by the requirement for individual schools' tests and public examination results to be released and published nationally, and by the introduction of regular inspection of all schools by the Office for Standards in Education (OFSTED), with open publication of reports.

These measures were based on the explicit view that an injection of market forces, combined with increased regulation of schools' educational outputs, would stimulate schools to improve educational standards, in order to recruit students and secure finance. In the government's own words:

> *"The objective has been both to put governing bodies and head teachers under the greater pressure of accountability for better standards and to increase freedom to respond to that pressure" (DFE, 1992, para. 2.8).*

The 1988 Act was also significant in creating a new state school sector to compete with the local authority sector by enabling schools to opt out of local authority control and become grant maintained if this was approved by a majority of voters in a ballot of parents. Grant-maintained (GM) schools were financed by a special Funding Agency for Schools (FAS) using money creamed off from the LEAs from which the GM schools had opted out. By 1997 there were 1,139 (GM) schools – 17 percent of secondary and 2 percent of primary – educating 18 percent of secondary and 3 percent of primary students (CIPFA, 1997). The existence of the grant-maintained sector has considerably complicated school finance in England and Wales. This is because LEAs spend differing amounts per student, so GM schools have been funded as if they were still with the LEA, but with additional grants in lieu of LEA services. The School Standards and Framework Act (1998) creates a new category of foundation school to which most GM schools will transfer. It also creates a category of community school for LEA-maintained schools and allows for equivalence of funding of both categories of school, with both categories able to have 100 percent budget delegation (DFE, 1998).

Criteria: government objectives for formula funding

The broad objectives served by formula funding in the Conservative government's view were indivisible from those it had for local management of schools (LMS):

> *"The purpose of local management of schools is to enhance the quality of education by enabling more informed and effective*

> *use to be made of the resources available for teaching and learning. As such LMS is a key element in the Government's overall education policies" (DFE, 1994, p. 7).*

A clear statement of these overall aims was given in the White Paper *Choice and Diversity*:

> *"The overriding aim of government policy is continuously to raise the standards achieved in schools by all students of all abilities" (DFE, 1992, para. 2.1).*

More precise objectives for formula funding were published in 1988 (DES, 1988) and reiterated in 1994:

> *"The purpose of formula funding is to bring about an equitable allocation of resources between schools, based on objectively measured needs rather than historical patterns. Within each LEA, schools with the same characteristics and the same number of students should receive the same level of resources" (DFE, 1994, p. 7).*

As well as the above objectives which reflect the criteria of effectiveness, efficiency and horizontal equity between schools, accountability and transparency were also included as government objectives – an LEA's formula "should be as simple and clear as possible, so that governors, staff and the local community can readily and fully understand how it operates" (DFE, 1994, p. 7).

A significant aspect of the formula funding guidelines is disallowing any features which would permit local authority officers discretion in the allocation of resources to individual schools, as used to be the case, and replacing this with a transparent formula agreed through consultation with stakeholders, to be impartially applied.

Therefore the main criteria for assessing formula funding in England and Wales are effectiveness, efficiency, transparency, sensitivity to local needs and accountability. While there are provisions for equity in the formula, as we shall see below, equity, not surprisingly, took a back seat in educational reforms, which concentrated on increasing competition and the state's regulation of school outputs. The emphasis on competition has shifted to performance management, under the Labour Government. LEAs and schools have to set targets for national test and public examination results and are monitored against these. Equity of outcome is receiving greater prominence through the funding of national literacy and numeracy projects and the setting up of specially funded education action zones.

School budgets: centralized and delegated portions

The general thrust since 1988 was to extend the types of school for which schemes were required so that, eventually, all secondary, primary, and special schools had delegated budgets. Also, the DFEE continued to put pressure on LEAs to increase the proportion of school expenditure delegated to schools.

(a) Rules regarding retentions

The government does not specify how much LEAs should spend on schools, but it does have clear rules regarding which expenditures are to be retained centrally by the LEA and which delegated to schools. A key element of the framework is defining categories of expenditure. At the time of writing the DFEE is proposing to change the rules regarding the division of funds between LEAs and schools and their relative responsibilities. This chapter describes the system extant, since illustrative statistical data are expressed in terms of constructs belonging to the current system.

From 1988 to 1998 the *General Schools Budget* (GSB) was the starting point for the division of moneys between LEAs and schools. The GSB is the LEA's total direct and indirect expenditure on schools. The GSB differs from the Total Schools Budget defined in *Chapter 3* because it includes capital expenditure. The total delegated budget to all schools in the LEA is called the *Aggregated Schools Budget,* or ASB. The ASB is the GSB minus the expenditure items which the LEA retains centrally. There are two types of expenditure which the LEA retains centrally. The first consists of those items which the LEAs must retain: these are called the *mandatory exceptions* (equivalent to essential retentions in *Chapter 3*). The items included in mandatory exceptions are:

- capital expenditure;
- central government and EC grants;
- premature retirement and dismissal costs; and
- educational psychology and welfare services.

There is a further list of *discretionary exceptions* (equivalent to optional retentions in *Chapter 3*). These are expenditure items which the LEA may choose to delegate to schools. LEAs must delegate to schools at least 85 percent of a total called the *Potential Schools Budget* (PSB). The Potential Schools Budget is the General Schools Budget minus the mandatory exceptions and those discretionary exceptions which are not included within the PSB. Hence there are two types of discretionary exceptions – those included and those not included in the PSB.

Discretionary exceptions not included within the PSB are:

- school meals;
- home-to-school transport;
- student support (for example, clothing grants);
- governors' insurance;
- LEA initiatives (restricted to .05% GSB); and
- contingencies (for unanticipated costs incurred by individual schools).

Discretionary exceptions included within the PSB are:

- structural repairs and maintenance;
- premises and equipment insurance;
- special staff costs (for example, absences for jury duty and union representatives, long-term sick leave);
- LEA support-teams for students with special needs; and
- support for schools 'requiring special measures' after an inspection report.

The Aggregated Schools Budget (ASB) is the amount left to delegate to schools when the mandatory and both types of discretionary exceptions have been subtracted from the General Schools Budget. The relationship between these different budget categories is shown in *Figure 8.1.*

Figure 8.1. Relationship between General Schools Budget (GSB), Potential Schools Budget (PSB) and Aggregated Schools Budget

General Schools Budget (GSB)
subtract:
Mandatory exceptions
subtract:
Discretionary exceptions not included in the PSB
equals:
Potential Schools Budget (PSB)
subtract:
Discretionary exceptions within PSB retained by LEA
equals:
Aggregated Schools Budget (ASB)

The way these constituent parts of the General Schools Budget are allocated in relation to the four main funding components, defined in *Chapter 3*, is shown in *Table 8.2*. The grid in *Table 8.2* shows how the three categories of central retentions and the aggregated schools budget are allocated in relation to the four funding components. *Table 8.2* brings out quite clearly the way central retentions are mainly for Component 4 (school-specific factors) with some allocations for Component 3, but that basic needs are funded out of the delegated schools budget, which is considered in more detail below. This pattern of allocation illustrates the application of the criteria of effectiveness and efficiency as expressed in the subsidiarity principle. Expenditures which vary considerably in incidence across schools and cannot be predicted from data on measurable objective factors are not suited to delegation to schools by formula.

Table 8.2. The relationship between the funding Components (see *Chapter 3*) and the constituent parts of the General Schools Budget (GSB)

Parts of the GSB	Component 1: Basic student allocation	Component 2: Curriculum enhancement	Component 3: Student supplementary educational needs	Component 4: School site needs
Mandatory exceptions.			Educational psychology and welfare services.	EC and central government grants. Early retirement and dismissal. Capital expenditure.
Discretionary exceptions.	Governors' insurance. Premises and equipment insurance.	LEA initiatives.	Student grants. LEA support teams.	School meals. Transport. Contingencies. Structural repairs. Special staff costs. Special measures for failing schools.
Aggregated Schools Budget.	Student-led element.		Up to 20% of the ASB can be allocated for these components.	

The distribution of the general, total, and potential schools budget between English LEAs' centrally retained spending and the aggregated schools budget is shown in *Table 8.3*. In order to facilitate comparisons with the other country case studies, capital expenditure has been subtracted from the GSB. The resulting concept is referred to as the Total Schools Budget (TSB) in order to create an internationally comparable statistic. However, the term 'Total Schools Budget' is not used in England and Wales in the sense that it is in this chapter. Taking all three school sectors together for all English LEAs, 22 percent of the TSB is centrally retained and 78 percent is delegated to schools. Of this, 62 percent is allocated for Component 1 (basic needs), leaving 16 percent for Components 3 and 4. *Table 8.3* also shows these amounts and percentages for the three school sectors separately.

Table 8.3. General, Total, Potential and Aggregate Schools Budgets 1997/98 (totals for English and Welsh LEAs)

	Primary		Secondary		Special		All sectors	
	£M	% TSB	£M	% TSB	£M	% TSB	£M	% TSB
General Schools Budget	9,303	104	7,392	105	1,200	105	17,895	100
Minus								
Capital expenditure	380		379		56		815	
Total Schools Budget	**8,923**	**100**	**7,013**	100	**1,144**	100	**17,080**	100
Minus								
Mandatory exceptions	967	11	789	11	125	11	1,881	11
'Excluded' discretionary Exceptions	648	7	457	7	234	19	1,339	8
Equals								
Potential Schools Budget	7,688	86	6,146	88	842	74	14,675	86
Minus								
'Included' discretionary exceptions	814	9	471	7	81	7	1,366	8
Equals								
Total Aggregated Schools Budget	6,874	77	5,674	81	760	66	13,309	78
Components of ASB								
Age-weighted student unit component	5,659	63	4,916	70	41	4	10,616	62
Additions	1,215	14	758		122	11	2,096	12
Place element (Special schools only)					597	52	597	3

Source: Adapted from Table 6, and Appendix E, CIPFA (1997) : Education Statistics Estimates 1997/98.

In 1998 the Labour Government consulted over proposals to increase the amount LEAs are required to delegate to schools (DFEE, 1998). It expressed dissatisfaction that some LEAs were retaining too much, using the money inefficiently and obscuring this in their accounts. The government therefore proposed to replace GSB with a new definition called the Local Schools Budget (LSB), which is the total of all LEA revenue expenditure minus expenditure on non-school education services and ongoing school-related commitments. From the LSB, LEAs would be permitted to retain money for approved functions. All the rest of the LSB would be known as the Individual Schools Budget, which would be the equivalent of the ASB. LEAs would be required to delegate 100 percent of the Individual Schools Budget. The new definitions are set out in *Figure 8.2.*

Figure 8.2. Relationship between Local Schools Budget and Individual Schools Budget

Total LEA revenue budget
subtract:
Non-school expenditure
subtract:
Ongoing school-related commitments:
Debt-servicing;
early-retirement and redundancy costs (before April 1999);
recruitment and retention schemes.
equals:
Local Schools Budget (LSB)
Subtract LEA expenditure on:
Strategic Management
Access (infrastructure, admissions, attendance)
Support for school improvement
Special education
Special cases *(music service, school insurance)*
equals:
Individual School Budgets
100 percent delegated to schools, which can ask LEA not to delegate expenditures it retained before April 1999.

(b) Delegated expenditures

Up to April 1999, LEAs were required to delegate at least 85 percent of the PSB as the ASB, but in fact most delegated between 85 to 95 percent. The expenditure items which must be delegated for school-level decision-making include, most importantly, staff – which typically accounts for around 80 percent of schools' total spending. Other items which schools decide for themselves are supplies and services including utilities, and ground, buildings, and equipment maintenance. Grant-maintained schools had 100 percent delegation, including money for minor capital works. In order to bring ex-GM schools and LEA schools under a common funding framework, the government is proposing that LEAs delegate 100 percent of the Local Schools Budget. Schools which do not want to take on additional responsibilities would be able to ask the LEA to retain what was not delegated before April 1999.

The delegation of all current staff expenditures is a particularly significant feature of the English and Welsh school-based management. It is up to the school's governing body to determine the staffing establishment, including numbers of specific teaching and non-teaching posts. While the pay scales of teachers and ancillary staff are set nationally, governing bodies have some discretion on awarding additional scale points to teachers and senior staff and in determining the job descriptions of ancillary (support) staff. A particularly contentious feature of the English and Welsh schemes is that schools are funded according to the average cost of the LEA's teachers (differentiated by sector) but have to pay the actual salaries of the teachers employed. This rule is consistent with the function of the formula in regulating the schools' quasi-market. The official justification for this 'average-in-actual-out principle'was that:

> *"it secures a key aspect of delegation by making local managers directly responsible for the costs of their services and giving schools an incentive to manage the total resources under their control effectively" (DFE, 1994, p. 36).*

The only exception is that the LEA has discretion in relation to schools with not more than 12 teachers or 330 students, to fund the difference between actual salaries of the schools' teachers and the average LEA salary. Under Labour this rule is being reviewed with a view to adopting the average-in-average-out salary rule instead.

Financial regulations with respect to school budgets

The LEA is required to allocate a 'budget share' to each school calculated according to the funding formula, the parameters of which must be published before the budget shares are announced prior to the start of the financial year. In practice, while schools are usually given a provisional budget two or three months before the start of the financial year, the actual budget share is announced only a few weeks before the beginning of the financial year in April. However, schools are still uncertain of their financial position because they are not informed of their carry-forward amount until two or three months into the next financial year. As the financial and academic years do not coincide, there is an issue as to when the count of students which are funded by formula is taken. The DFEE undertakes a national census every January, whereas students are newly recruited for September. For funding purposes LMS schemes measure school enrolments by using various combinations of school census figures for the previous and next January or LEA school estimates for the coming September. There are delays in adjusting school budgets to reflect differences between the number of students a school actually enrols in September, and the number of students funded for the previous April. These discrepancies add a further source of financial uncertainty.

The circulars specify that the LEA cannot alter a school's budget in the current financial year, other than in exceptional cases of contingency funding. However, it has been established through the courts that if an LEA has issued school budgets assuming it would be able to raise more finance than the government allows it to, the LEA can then claw back school budgets in line with its reduced overall budget. LEAs can, if they wish, provide for a degree of stability for schools by limiting the year-on-year change in any school's budget share to 5 percent or less. An important feature of LMS schemes is that schools must be able to carry forward surpluses or deficits into the next financial year, in contrast to the previous regulations when anything not spent in the financial year was taken back, encouraging inefficient spending by schools to prevent this. Schools are not allowed to plan for a deficit, unless it is agreed as a capital investment project to be paid out of next year's budget. Only a very small proportion of schools has fallen into actual deficits. Schools in deficit have been quietly assisted out of this position by the LEA or, in a few cases, selected for closure. At the other extreme, it has been more usual for schools to accumulate unspent reserves, either to ensure financial security or to save up for a capital project. As a proportion of schools has underspendings in excess of the accepted 5 percent of their budgets, there is some concern that these schools are not managing their budgets effectively.

A further efficiency incentive under local management is that schools can keep all income earned – mainly from renting premises, or from sponsorship. This is in addition to funds raised by parent/teacher associations, which are accounted for separately. School-generated income is typically about 1-3 percent of the budget. Schools vary in their judgements as to the value of devoting time to income earning and sponsorship. The latter has been encouraged by government schemes to give matching funding to specialist secondary schools which obtain significant sponsorship from the business sector. A few schools have been outstandingly successful at raising resources through sponsorship.

Certain contractual arrangements are required of schools. In particular, schools are subject to the same compulsory competitive tendering legislation as local authorities for a range of services (for example, building, maintenance, catering, sports and leisure management). Schools employing less than three full-time-equivalent staff on cleaning and grounds maintenance are exempt.

Budget delegation does not necessarily imply that schools have actual cash allocated to them. At the start of local management most of the school budget was held in an account by the LEA: the school told the LEA how it wanted it spent. As LEA accounting was often slow and inaccurate, this led initially to considerable frustration and, in response, school cheque accounts were more extensively used. While this requires more clerical work in schools, cheque accounts earn schools interest and prompt payment discounts, as well as ensuring more timely and accurate financial records. The DFEE (1998) proposes that all schools should have the right to a bank account for their delegated budgets.

The design of the funding formula

The Aggregated Schools Budget has to be allocated to schools by a formula which determines each school's *Budget Share*. The funding formula is a major part of each LEA's local management of schools scheme. Following the analytical framework set out in *Chapter 3*, the English and Welsh LEA funding formula consists of three of the four Components: (1) basic allocation, (3) student-specific factors (4) school-specific factors. The student-driven nature of the funding formula was a significant aspect of Conservative Government policy:

> *"In order to ensure that the central determinant of need is met and that schools have a clear incentive to recruit and retain students, the total of resources allocated on the basis of the number of students must account for at least 80 percent of the LEA's ASB, less the total budget shares for special schools" (DFE, 1994, p. 31).*

Within the 80 percent of the ASB which must be student-led, up to 5 percent may be used for other student measures than head count and age, in particular, indicators of special educational need. The DFEE guidelines also advise LEAs to include Components 3 and 4 in their schemes: these may account for no more than 20 percent of the ASB. The DFEE also restricts the types of indicators to those which can be objectively measured so that budget allocations do not depend on LEA officer discretion. Under the proposals to extend delegation to 100 percent of the Individual Schools Budget, it seems most likely that the 80 percent requirement will be reduced and/or modified.

Table 8.4 presents a summary of the characteristics of the English funding formula specified in DFEE guidelines by showing the

Table 8.4. Relationships among components, dimensions, and indicators in the development of a school funding formula in the United Kingdom

Components	Dimensions	Indicators
Component 1: Basic student allocation		
1(a) Basic allocation	1(a) Total enrolment	1(a) Weighted total enrolment
1(b) Grade-level supplement	1(b) Grade-level differentiation	1(b) Weighted enrolment in each grade level
Component 2: Curriculum enhancement		
	2(a) Specialist curriculum	2(a) Weighted total enrolment in technology school
Component 3: Student supplementary educational needs		
	3(a) Socio-economic disadvantage	3(a) Number of students with low scores on composite indicator that includes entitlement to free luch, family on welfare benefits, and various socio-economic information drawn from the Census
	3(b) Non-fluency in language	3(b) Number of students not fluent in English
	3(c) Low educational achievement	3(c) Professional audit of students below cut-off on standardized tests
	3(d) Disabilities, impairments, etc.	3(d) Professional audit of students with official 'statement' of special needs
Component 4: School site needs		
	4(a) School size	4(a) Supplement to small schools with size designation set by LEAs
	4(b) Site running costs (buildings)	4(b) Interior area of school buildings
	4(c) Site running costs (services)	4(c) Fixed amounts according to nature of building
	4(d) Site running costs (facilities)	4(d) Fixed amounts according to facilities (for example, swimming pools)

dimensions and indicators which relate to each Component. The Components are now considered in turn, noting that Component 2 (curriculum enhancement) does not appear in the ASB part of LEA formulae. The second Component is only used outside the main formula with respect to the funding of 'technology schools'. To obtain designation, a technology school has to obtain £100,000 of business sponsorship for curriculum enhancement such as technology or modern languages. The school then gets a matching grant of £100,000 plus £100 extra per student. There are also 15 Technology Colleges – schools which were set up with capital funding by a business sponsor in inner cities providing an enhanced curriculum in technology. They are directly funded by the DFEE.

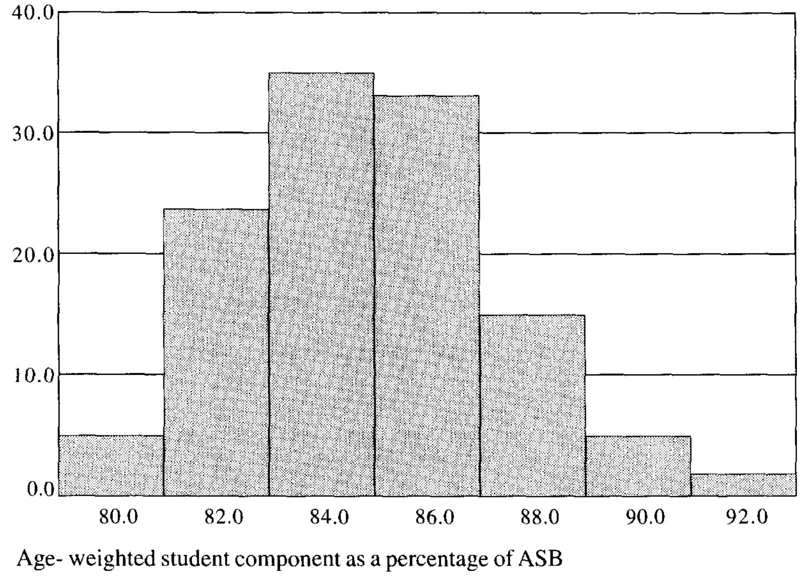
(a) Component 1: Basic student allocation

The cash amount allocated per student in a given age group is called the Age-Weighted Student Unit or AWPU. Most LEAs delegate more than 80 percent of the ASB by means of Age-Weighted Student Units – as shown in *Figure 8.3*. The proportion of the student-led component in the formula for special schools (which had to be locally managed from 1996) is not specified and LEAs are advised to include an amount per special school place. The 1993 Education Act provides for the AWPU for students who are permanently excluded from school to be withdrawn from the school, thus reducing the financial incentive for schools to exclude difficult students and compensating schools which admit them.

LEAs are free to choose both the absolute and relative cash values of the Age-Weighted Student Units. A high proportion of costs needs to be related to the number and ages of students in order to meet the 80 percent of ASB stipulation so as to leave the rest of the ASB for costs which vary with other variables which are specific to individual students or schools. The AWPU thus includes the costs of teachers for both teaching tasks and other work including school management, of support staff, and those non-staff costs which vary with the number of students. The costs are then allocated on a per-student basis. An LEA example of an AWPU allocation is shown in *Table 8.5*.

Initially there was enormous pressure on LEAs to get local management schemes up and running very quickly and without serious complaints from schools. This biased the construction of funding formulae to reflect historic practice. A particular feature of this is that primary students are less funded than secondary students, as in the example in *Table 8.5*. This is mainly because secondary students are taught in smaller classes due to subject specialism and secondar teachers get more non-contact time. How the average age-weighted student unit cash allocations for all English and Welsh LEAs vary with student age

Figure 8.3. Age-weighted student component as a percentage of the ASB (116 English LEAs 1997/1998)



Source: Education Statistics 1997/1998 Estimates, CIPFA (1997).

is shown in *Table 8.6*. LEAs can fund each of the ages between 3 to 19 differently. However, in *Table 8.6* the five key phases of schooling are shown separately.

As local management has bedded down, so LEAs have continued to review their funding formulae. There has been considerable interest in replacing formulae derived from replicating past funding patterns by the activity-led funding approach, particularly for Component 1, so as to improve the effectiveness and efficiency of the resource allocation system (see *Chapter 4*).

(b) Component 3: Student supplementary educational needs

Additional funding for special educational needs predated local management of schools. The first major development was educational priority areas, but these fell into disuse. Research showed that allocating by area rather than by individual student meant that the money was not well targeted to individual student need (Barnes and Lucas, 1975; Holtermann, 1975). Another landmark in Britain was the 1981 Education Act which introduced a formal process of identifying or 'statementing' students with special educational needs,

Table 8.5. Primary schools cash values per student (AWPUs) 1996/1997 (Hampshire)

Budget share description	National Curriculum year group: Primary							
	Nursery	R	1	2	3	4	5	6
Staffing: teacher	207	978.25	926.65	926.65	926.65	926.65	968.15	968.15
Staffing: other	897.01	332.11	125.76	125.76	111.11	111.11	111.11	111.11
Premises excluding rates (local tax)	30.71	30.71	30.71	30.71	43.17	30.71	30.71	30.71
Supplies and services	79.35	79.35	79.35	79.35	76.71	84.58	84.13	79.42
Management partnership*	12.69	15.10	15.10	17.51	29.56	29.56	29.56	24.74
Per-student value totals	1231.92	1440.68	1182.73	1185.14	1192.36	1202.31	1243.36	1233.83
	National Curriculum year group: Secondary							
	7	8	9	10	11	12	13	14
Staffing: teacher	1285.05	1285.05	1434.00	1599.22	1599.22	2108.08	2108.08	108.08
Staffing: other	129.61	129.61	129.61	129.61	189.36	184.26	184.26	184.26
Premises	70.76	70.76	70.76	70.76	70.76	70.76	70.76	70.76
Supplies and services	109.37	109.37	109.37	121.62	242.97	176.31	176.31	176.31
Per student value totals	1594.8	1594.8	1743.1	1921.2	2102.3	2539.4	2539.4	2539.4

* Management partnership includes inspection and advisory support, music services, personnel services, cleaning management, education training agency, support staff training (and financial services and IT services which are allocated as a flat rate irrespective of student numbers).
Source: Local Management of Schools: Guidance notes for primary schools 1996-1997, Hampshire County Council.

Table 8.6. Average age-weighted cash allocation per student: English and Welsh LEAs 1997/1998

National Curriculum Key Stage	Age	Average funding	Ratios
One	4 - 6	1,246	1.00
Two	7 - 11	1,166	0.94
Three	11 - 14	1,672	1.34
Four	14 - 16	2,010	1.61
Five	16 - 18	2,419	1.94

Source: CIPFA (1997) Education Estimates 1997/98, Table 9.

who then had to be given additional resources. Prior to local management of schools the resources for statemented students were allocated to schools as staff and physical resources. Subsequently, the government extended local management of schools to include statemented students and special schools which such students might attend in preference to mainstream schools. However, there is also the need for additional resources for students who have learning difficulties which are not sufficiently severe to justify a statement. Since the Warnock Report (1978) on special educational needs, it has been generally accepted that about 18 percent of students have special educational needs. Students with special educational needs but without statements are often referred to as non-statemented special educational needs (NSSEN) students.

The formula guidelines specify that formulae should contain: variations in the additional costs of making provision for students with special educational needs (including students with SEN but without statements).

> *"The Secretary of State expects any weightings for non-statemented SEN students to be both reliable and valid measures of educational need. It is open to LEAs to make use of proxy indicators where this is judged appropriate by LEAs and their schools. However, the Secretary of State hopes that LEAs will consider, as an alternative to proxy indicators, moderated SEN audit schemes such as those which are now in use in some areas. ... It is essential that such audit schemes maintain an objective basis for the funding of schools: a process of moderation is therefore vital" (DFE, 1994, pp. 31-32).*

LEAs are able to fund special needs within two elements of the funding formula:

- up to 5 percent of the ASB may be allocated for special needs within the Age-Weighted Student Unit dimension; and
- in addition to this, special needs can be funded within the 20 percent of ASB that need not be allocated in relation to student numbers (referred to as 'additional elements').

Whichever part of the formula funds special needs, LEAs are required to use indicators of the incidence of special needs in each school. In the United Kingdom the most easily available and most commonly used proxy indicator for NSSEN is student entitlement to free school meals, which applies to children from families who are in receipt of income-support payments from the Department of Social Security. The validity of this indicator depends on the strength of the relationship between educational outcomes and family poverty. This indicator is not a strong indicator of individual students' special needs, but it is a reasonably good predictor of SEN incidence at school level. For example, Marsh (1995) found in one large LEA with 100 schools that when individual students' GCSE examination result scores were correlated with whether or not the student was entitled to free school meals, the correlation was only –0.2. But if the percentage of students at the school was correlated with schools' average GCSE scores, the correlation was around -0.7. The size of the school-level correlation between free school meals and GCSE results was corroborated by Levačić and Hardman (1998) in a study of 330 schools. Less commonly used social disadvantage indicators are Social Economic Status (SES) census indicators of the locality where a school's students live. This is obtained by mapping the postcodes of students' addresses to the enumeration districts used by the Registrar General's census.

An alternative, or an addition, to SES indicators which predict the incidence of special educational needs is indicators which aim to identify NSSEN. LEAs use two basic approaches to obtaining identification indicators – standardized tests and professional audit of individual students' special educational needs. Standardized educational tests are more reliable than professional audit, in that the measures obtained do not depend on individual professionals' judgements; however, they are not so finely attuned to identifying the nature of the individual child's needs. Standardized tests are used to assess cognitive abilities, for example, verbal and non-verbal reasoning and quantitative reasoning and also to assess educational attainments in reading, spelling and numeracy. Some LEAs already had such tests in place prior to LMS in order to assist in transferring students from primary to secondary schools. Others began to administer tests in order to provide a NSSEN indicator for their funding formula. In particular, base-line assessment of children on entry to school at five years old has been introduced by many LEAs, and became mandatory in 1998. Although assessments of very young children are less valid than those for older children, they have the advantage for funding purposes of avoiding moral hazard, since schools are not provided with a financial incentive to depress test results by poor teaching. However, schools may be tempted to depress base-line scores in order to produce better value-added measurements of student progress.

The way in which test results are used to derive an indicator for a formula varies. Some LEAs use a single test, others a weighted average of two or more tests. There are also variations in how the test scores are used to allocate money. In some formulae a cash amount is allocated according to the value of the school's index, which is the aggregate of its students' test results. In this event all schools will receive some allocation, which will depend on the extent of each student's underachievement and on the number of such students. Alternatively, the indicator may specify a cut-off: only students marked below a certain score will count as requiring NSSEN funding, and students will receive an equal amount of funding regardless of how far below the cut-off point is their score. The detailed specification of the NSSEN part of the formula varies considerably across LEAs: most LEAs use more than one indicator, so that both SES indicators and educational tests are included with varying weights. These formulae have been derived and modified in most cases after considerable local consultation involving working parties of headteachers and officers. The NSSEN formulae arrived at reflect past practice in the authority, modified by the local response to the current policy climate.

The third type of special needs indicator is derived from a professional audit in which the child is assessed individually. Professional audit received a boost when the Special Needs Code of Practice was issued (DFE 1994). The Code established a framework of five stages of special needs assessment, starting with level 1 which is action at school level only, proceeding to levels 4 and 5 with the issue of a statement. Thus professional audit for the purposes of formula funding mainstream schools identifies NSSEN students at levels 1 to 3. The Code of Practice requires each SEN student to have an educational plan which is monitored, and resources used identified. Thus professional audit is better than standardized tests – and considerably superior to SES indicators – in providing a framework and data for accountability.

Professional audit is favoured by teachers because they have more confidence in its precision in identifying the nature of the individual need than the other two indicators. However, as professional audit reflects individual professionals' judgements, it has to include moderation in order to be a reliable measure of special need. This requirement, in addition to the one-to-one assessment process, makes professional audit the most expensive of the three methods to administer. Another disadvantage is that individually administered special needs assessment procedures which trigger additional funding encourage schools and parents to put forward children for special needs identification. As more children are identified as having special needs, so a higher proportion of an often fixed education budget is channelled towards special needs. The resulting reduction in resourcing levels for other children adds to further competitive pressures to secure more resources for children with some form of learning difficulty. The percentage of students with statements in England has been steadily rising from 1.6 in 1985 to 3.4 by 1994 (Audit Commission, 1997a).

Most LEAs use more than one indicator of special educational need in their formula and there has been a tendency to increase the number of indicators used. *Table 8.7* shows the popularity of different kinds of special need indicator and *Table 8.8* the numbers of indicators used.

Table 8.7. Indicators used by English LEAs for funding special educational needs

Indicator	No. of LEAs	% LEAs (1996 survey)	% LEAs (Lee, 1992)
Free school meals	77	91	81
Educational tests	26	31	28
Student turnover	25	29	18
Ethnicity/lack of fluency in English	20	24	29
Professional audit/Code of Practice	17	20	7
Other	12	14	0
Education welfare benefits	7	8	14
Student numbers	5	6	0

Source: Marsh, A. (1997).

Table 8.8. The number of indicators used by English LEAs for funding special educational needs

No. of indicators	No. of LEAs	% LEAs (1996 survey)	% LEAs (Lee, 1992)
0	1	1	3
1	27	32	42
2	26	30	28
3	15	18	18
4	11	13	7
5	4	5	1
6	1	1	1

Source: Marsh, A. (1997).

Statemented SEN students have additional resources attached to them and may be educated in special or in mainstream schools. Special schools and statemented students have now come within the remit of local management of schools, whereas in the first four years they were not included. The DFEE guidelines encourage LEAs to delegate funds for statemented students via formula but, recognizing the difficulties of accurately predicting costs, do not require it.

Special schools are now included within the LEA's LMS scheme but are exempted from the requirement that 80 percent of ASB is funded according to AWPUs. Following the recommendations of the Touche Ross report (1990), formulae for special schools can be made up of a place element and a per-student element.

Overall, there is considerable variation in local authority practice with respect to the funding of special educational needs. Authorities differ considerably in the percentage of the ASB which they distribute according to special needs. It is not necessarily the authorities with the highest incidence of SEN which allocate the highest proportion of ASB to it. Nor is this necessary since, if the incidence of SEN were the same across all schools, differential funding of schools would not be needed. However, a specific element in the formula for NSSEN increases its visibility and in so doing raises the issue of accountability more prominently.

(c) Component 4: School site needs

The DFEE guidelines specifically indicate that formulae should include "the additional costs in small schools of maintaining a curriculum comparable to that available in larger schools where the LEA considers that appropriate" (DFE, 1994, p. 31). In addition, there is the small schools teacher salary adjustment to compensate small schools for part of the difference between their teachers' salaries and the average for the LEA.

LEA formulae allocate additional finance to small schools (other than for teacher salary cost differentials) in two main ways. One is in using tapering supplements dependent on the difference between a threshold number of students and the actual number. The second is through lump sums either to all schools or to schools below a specified size. Generally schemes use a variety of small school protection items broken down into considerable detail. Thomas and Bullock (1992) in an early study of 81 LMS schemes found only 11 which relied just on lump sums; 30 LEAs used sliding scales and 40 a combination of a lump sum and a sliding scale. This study also noted a wide range in LEAs' definition of smallness. It varied from below 150 to 250 students for primary schools and from below 470 to 830 students for secondary schools. On average, in 1997/1998 LEAs allocated 2.5 percent of ASB for a small schools allowance (see *Table 8.10*), but this percentage ranged from 0 to 12 percent, as shown in *Table 8.9*. Generally, the evidence indicates that smaller schools were financially disadvantaged by the introduction of local management schemes (Thomas and Bullock, 1992; Levačić, 1993).

Table 8.9. Percentage of ASB allocated with respect to school size

% ASB allocated with respect to school size	% LEAs
Zero	13
0.1 to 0.4	20
0.5 to 0.9	13
1 to 1.9	14
2 to 4.9	19
5 to 9.9	19
10 to 12	1

Source: Education Statistics 1995/96 Estimates, CIPFA, 1995.

Apart from size, there is a range of school site factors which LEA formulae take into account and these can be very detailed. LEA allocations for premises in 1997/1998 were on average 7 percent of ASB (see *Table 8.10*) and ranged from 1 to 15 percent. In most formulae premises costs are related to area of the school as well as to the number of students. Schools may also get additional allocations for swimming pools, split sites and other site-specific factors. Thus Component 4, although delivering only 14 percent of the aggregated schools budget, has added considerable complexity to the formulae as LEAs have sought to be sensitive to local differences at school level.

Table 8.10. The three main elements of the funding formula as percentages of ASB (LEA averages for England and Wales 1997/1998)

Component	ASB %
Component 1	
Age-weighted student component	79.8
Age-weighted component excluding other student-led factors (5 percent limit)	76.1
Component 3	
Special needs in mainstream schools	4.1
Special schools place element	4.5
Component 4	
Small schools related	2.5
Premises related	7.0
Transitional and other	4.6

Source: Education Statistics Estimates, 1997/98, CIPFA.

Transitional adjustments to funding formulae

The English example shows that the move from the past practice of administrative allocation of resources to funding schools by formula creates winning and losing schools. Winners and losers in terms of budgets can be defined relatively or absolutely. In the relative definition one compares the allocation of the LEA's ASB for a single year under historic and formula methods. What each school would receive if their budgets were allocated according to the historic administrative method is compared to the budget that was allocated by the new funding formula before any transitional adjustments are made (see Levačić, 1993). In the absolute definition of loss or gain, the real value of each school's budget the year before formula funding was introduced is compared to its real budget in the next year under formula funding. This absolute definition does not distinguish between budget changes due to the formula and those due to changes in the real level of the LEA's aggregated schools budget or to changes in the school's indicators from one year to the next, whereas the relative definition of budget change due to formula funding does.

Since schools which lose budget need time to adjust, equity considerations imply that such schools need to be supported with an additional allocation while these adjustments are made. The initial guidelines (DES, 1988) allowed LEAs to build transitional arrangements into their formulae for up to four years and then subsequently to protect schools in an absolutely losing situation from having budget cuts in excess of up to 5 percent a year. This meant that in the transitional years LEAs calculated two sets of budgets, those that would apply if the pure formula was in operation, and the transitional budgets which were actually allocated after making modifications to the formula in order to protect losing schools. In effect, money was taken from schools which gained by the introduction of formula funding and redistributed to those that lost out. Transitional arrangements also added to the complexity of school funding formulae.

An overview of the components

The relative importance of the three components used in LEA formulae is indicated in *Table 8.10*. The discretion which LEAs have to use up to 25 percent of ASB for special needs (5 percent within AWPU) and school site cost differentials has given rise to considerable differences in the percentages of ASB allocated to these various categories, indicating that LEA formulae respond to differences in local conditions.

A brief evaluation of the English formulae against the assessment criteria

Evaluating the impact of formula funding is a complex task made more difficult by the limited amount of research formula funding in England (for example, The LMS Initiative, 1992 (internal to LEAs); Bullock and Thomas, 1994; Levačić, 1993 and 1998b; Thomas, 1991; 1992). Most work is internal to LEAs or commissioned by them from consultants. It must also be borne in mind that formula funding is only one of a number of major government-inspired changes to affect schools since 1988. In view of these considerations, this part of the chapter aims to provide a brief evaluation of English LEA formulae using the seven criteria introduced in *Chapter 1* in order to illustrate their application.

The division between central retentions and the delegated schools budgets

The DFEE's insistence on the delegation of a high proportion of the Potential Schools Budget was entirely consistent with the main function of the English funding formula – that of market regulation. A particular issue with respect to English LEAs is whether they have been forced to delegate too much. *Table 8.2* indicates how LEAs have retained only those expenditures for which the subsidiarity principle is weak. The effectiveness and efficiency criteria indicate that such unevenly spread and unpredictable expenditures are better retained centrally. In the climate of financial stringency operating in LEAs from 1992-1997 (stemming from restrictions on central government grants, which finance 80 percent of local spending), LEAs have cut back more on their central spending than on school budget shares. LEAs have also been forced to delegate money for previously centrally provided services such as the advisory service, music tuition, library and museum services, in-service training courses and teacher centres.

There is considerable debate over the extent to which such services are best provided by LEAs and funded through discretionary exceptions, or whether the money is best delegated to schools who are then free to determine how much to spend on these services and from whom to purchase them. One view is that LEA centrally provided services were of an indifferent quality since teachers in schools had no power to determine their content and the providers no financial incentive to satisfy their clientele. The opposing view is that once money is delegated to schools, especially in a climate of financial constraint, then schools no longer buy back sufficient of the LEA's central service for it to remain cost-effective. Small schools have a particular problem in that the total they are allocated by formula for such services is often too little for purchasing anything worth while. In contrast, larger schools have tended to welcome the ability to choose their own service providers. There has been considerable concern at the reduction in musical instrument teaching in many LEAs, as schools have diverted the delegated funds to other uses. In response, the DFEE (1998) proposed that LEAs could retain money for music tuition.

The impact on LEA central services has not been uniform. In some areas they have collapsed more than in others, with LEA employees becoming self-employed consultants and trainers. In other areas, LEAs have retained the loyalty of schools, refashioned their central services in consultation with schools, delegated the funds and entered into service agreements with schools to buy back packages of different services. In such LEAs it is generally felt that central services are now more efficient and more effectively attuned to schools' needs than previously.

It is interesting to note that the DFEE continues with a policy of annual categorical LEA grants of around 1 percent of all state spending on schools. LEAs obtain these grants by bidding and putting up matching funds for DFEE-specified areas such as teacher appraisal, school effectiveness and staff development. This policy clearly indicates that the DFEE is not prepared to leave purchasing decisions entirely to schools (as in the case of music), but intervenes to impose its own effectiveness criteria.

In general there have been considerable improvements in the efficiency with which these resources are deployed by schools making their own decisions (Levačić, 1995), but there is also concern at the equity implications of the demise of free extra-curricular provision.

The schools' budget share

(a) Efficiency

There are two aspects of the efficiency incentives of the funding formula to consider: the system-wide impact of the way the formula changed the distribution of resources between schools, and the impact on changing patterns of resource allocation within schools.

With respect to the first aspect, what evidence is available indicates that funding formulae have provided incentives towards a more cost-effective restructuring of the infrastructure by favouring lower unit cost schools at the expense of higher unit cost schools. This finding was reported by Levačić (1993) in a detailed analysis of one LEA's formula, and by Thomas and Bullock (1992) for a large sample of LEAs. However, as pointed out by the Audit Commission (1997b), the system-wide incentives conveyed by government policy, in particular the creation of a rival GM sector, impeded LEAs in improving infrastructure efficiency for fear that schools would opt out of LEA control if faced with reorganization or closure.

With respect to the second aspect above, the flexibility brought in by the new financial regulations, together with the allocation of lump-sums rather than earmarked budgets to schools, have resulted in greater efficiency in the way resources are used within schools (Audit Commission, 1993a; Bullock and Thomas, 1994; Levačić, 1995). Schools have been responding both to the introduction of local management and formula funding and, since 1992, to widespread reductions in real per-student funding. The main types of cost-efficiency responses by schools have been:

- pruning of school building running expenses in order to spend a higher proportion of their budgets on directly resourcing teaching and learning (Levačić, 1995);
- particularly in primary schools, employing more classroom assistants and increasing the student/teacher ratio (Dean, 1997);
- employing more staff on temporary contracts (Maychell, 1994);
- reducing the number of deputy heads (Merrick, 1994); and
- employing more ancillary support staff so that teachers can concentrate on professional tasks (Mortimore et al., 1992).

Schools have also responded to the average-in-actual-out salary principle by employing younger and cheaper teachers and retiring older teachers prematurely on enhanced pensions. This cuts school costs because the pension costs have been met from the national pension fund, but it is unlikely to be socially efficient for the system as a whole. Central government in 1997 announced that in future enhanced pension costs would have to be met by school budgets (Passmore, 1996), causing an upsurge in early retirements while these were still available.

There is also some evidence for an increase in adverse selection, which may well be socially inefficient as an increasing number of students are being excluded (that is, expelled) from school (Doe, 1996; Parsons, 1996a, b). To what extent this is because of a greater number of disruptive students, or because of their impact on a school's reputation – and hence ability to recruit students and secure finance – is not known.

(b) Effectiveness

In judging the effectiveness of a funding formula one needs to assess what incentives it provides for improvements in the quality of teaching and learning. As already argued in *Chapters 3* and *4*, in order to promote educational effectiveness the funding formula must be needs based. If the basis for the allocation of school budgets bears little relationship to the actual resourcing needs of schools, then it is more difficult for school managers to resource education effectively.

As already indicated, a major feature of LEAs' funding formulae is that they were largely devised in order to reflect historic funding patterns and so minimize transition costs for schools. At the same time as local management of schools was instituted, the government introduced a new national curriculum. It has not publicly costed the resources required for schools to implement the national curriculum. Consequently there is an absence of an activity-led basis for funding formulae unless LEAs implement this themselves (see Case Study 2 on Cambridgeshire LEA in *Chapter 4*).

A key feature of the replication in LEA formulae of historic funding patterns is the lower funding of primary compared to secondary students. It is arguable that the relative underfunding of primary students is not educationally effective because of the evident number of low-achieving students entering secondary schools two to three years behind in basic skills and demotivated by early experience of educational failure. There has been considerable debate on the justifications for this discrepancy and pressure to increase primary sector AWPUs (House of Commons, 1994). An increasing number of LEAs have undertaken internal research into activity-led funding (for example, West, 1994). Such reviews conclude that considerably more needs to be spent than LEAs can afford in order to deliver the activities teachers are supposed to be undertaking and to have appropriate physical resources. In particular, funding reviews using activity-led methodology show that the requirements of the national curriculum and related legislation mean that primary teachers need more non-contact time than LEAs can presently afford to fund.

While there has been some reduction in the differential between primary and secondary students (Hardman and Levačić, 1994), it remains considerable. It has proved difficult for LEAs to reduce the primary-secondary differential. From 1992-1997 real per capita funding declined so any improvement in the primary age-weighted student unit would in most LEAs mean a redistribution away from secondary students and could prompt secondary schools to opt out. The increase in the proportion of primary-school classes with above 30 students, prompted the Labour Party to give an election pledge that no five to six-year old children would be in classes of over 30. It is, however, proving difficult to implement this pledge without either restricting parental choice or increasing education expenditure by adding classes to popular schools, while spare capacity exists in less popular schools.

The evidence for a positive impact of the implementation of formula funding on teaching and learning is particularly difficult to assess when there have been other significant changes as well, such as a national curriculum, testing, and a system of inspection. Whatever the incentives for effectiveness the formula provides, they will have no impact unless school managers relate their financial decisions to educational decisions about deploying resources to ensure effective teaching and learning. There has been considerable emphasis by OFSTED (1993), the Audit Commission (1992, 1993b), and the National Audit Office (1994) on improving this aspect of school management. There is some evidence of increased efficiency in the secondary sector, since the proportion of students obtaining higher grades in the General Certificate of Secondary Education has steadily increased, while the real value of per-student funding declined in about half the schools sampled (Levačić and Hardman, 1998).

With respect to the efficiency responses of schools noted above, there is insufficient evidence for specified input-output relationships in the form of school education production functions in the United Kingdom, to be sure that any of these measures enhance educational effectiveness (Levačić, 1998). All that can be said in their favour is that, given that the subsidiarity principle applies, then these are decisions taken by headteachers, their staff, and governors which reflect their judgements about the best use of available school resources.

There are particular concerns about the impact of the average-in-actual-out salary principle on the quality of education, if decisions on replacing older teachers by cheaper young ones are driven by the need to reduce school costs in the face of cuts in real per capita funding. It is possible that the experienced staff leaving the profession are effective teachers, or it may be that burnt out and ineffective staff have been induced to retire earlier than they would have done without the budgetary incentives brought in by formula funding, together with budget cuts. As noted earlier in the chapter, this rule seems likely to be amended.

(c) Equity

The funding formulae guidelines enable LEAs to reflect their own policies with respect to equity considerations by utilizing Components 3 and 4. It would appear that LEAs have been able to continue reflecting their local policies with respect to additional allocations for social and educational disadvantage in the funding formulae (Marsh and Levačić, 1995; Levačić, 1993). The requirement for formula funding has had beneficial effects in that LEAs have been stimulated to undertake further work on improving their indicators of special educational need (Marsh, 1997) so that free school meals, criticized by the Local Management in Schools (LMS) Initiative (1992), have been replaced or modified by the use of other indicators.

The overall impact on equity of the funding formula, in the context of its main function up to 1997 as a market regulation instrument, is more complex and difficult to disentangle. From the beginning, local management commentators have expressed concerns about the consequences on students in schools which, in the face of competition, fail to maintain their student rolls and hence resources. One piece of evidence comes from the ICOSS study being conducted at the Open University on a longitudinal sample of 330 schools from 1989/1990 to 1995/1996. This shows that over the period there has been a slight tendency for schools with higher proportions of socio-economically disadvantaged students to have falling rolls and thus reduced budgets (Levačić and Hardman, 1998).

(d) Sensitivity

The English formula guidelines enable LEAs to be sensitive to their political, social, geographic and infrastructure differences. As a consequence of the way educational finance decisions are taken at both central and local government level, there are considerable differences between LEAs in per-student funding for equivalent ages. Given the history of LEA funding differentials and policy differences it is extremely difficult to introduce a national funding formula, even if this was considered to be desirable.

(e) Local democracy

This is preserved to a degree with respect to the determination of the LEA's version of the funding formula, although not with respect to local education authorities' overall powers. Under the Labour Government, LEAs are being fashioned into instruments of central government administration at local level. They have been set school improvement targets in terms of proportions of students achieving particular test and examination results and are required to have DFEE-approved Education Development Plans for achieving these targets. LEAs are to be subject to inspection and, if deemed to be failing, will be taken over by DFEE appointees.

(f) Transparency

As a consequence of sensitivity to local contexts, funding formulae are complex. This is particularly so in many formulae for

Component 4. School site factors tend to be many and highly differentiated. The complexity of the funding formulae means that although they are published annually – as required by legislation – and communicated to governors, very few people actually take an interest in the funding formulae or attempt to understand them. Thus the government's objective has not been fully met in this respect. Although the Labour Government's 1998 proposals envisage more transparent LEA accounting, 100 percent delegation is most likely to increase the complexity of school funding formulae for lay people. Nevertheless, much more is known about school resourcing than used to be the case when school cost data were very difficult to obtain (Hough, 1981). This improved transparency has in particular fuelled the debate about the disparity between primary and secondary funding.

(g) Low administrative costs

Given the complexity and variety of the funding formulae, administrative costs are clearly higher than they would be if a single simple national formula could be successfully implemented. It has also taken a number of years for all LEAs to develop workable and acceptable formulae. Administrative costs have also been higher because LEAs have sought to revise and improve their formulae (Yarnit, 1992). However, the formula funding system has been successfully implemented and once in place the LEA formula and its distribution mechanism can be maintained by just a handful of staff.

(h) Overall assessment

The English funding formula is relatively strong on efficiency, equity (within the formula itself), and local sensitivity. It is less strong on effectiveness and transparency. The weaknesses in the performance of the formula have more to do with systemic factors, in particular the Standard Spending Assessment methodology for allocating central government grants to local authorities and the previous government's promotion of the grant-maintained schools sector, than with the design of the formula as a technical construct.

Conclusion

In the last decade policies with respect to education finance were formulated and implemented in the United Kingdom in the context of a wider struggle for power between central and local government.

This was not a good climate for achieving a rational approach in which the financing of schools is clearly related to the costs of providing the quality of education which the national curriculum and the national school inspection framework specify. The government still does not make clear links between its specifications for the educational outputs of schools and schools' consequent resourcing needs. However, formula funding and local management of schools have won widespread acceptance and are set to continue. These trends have seen schools being gradually brought within a common funding framework that should reduce complexity and improve the equity of school financial allocations.

The previous Conservative Government evolved a policy of decentralization of resource management within a framework of centrally determined standards. This is being reinforced by the present government as it becomes more directive towards LEAs, while increasing the extent of budget delegation to schools. This is being done both to create a common funding framework for ex-GM schools and LEA schools in which the former keep their budgetary freedoms, as well as to give the appearance of additional funding being available for schools.

While the rhetoric of competition as a means of raising standards no longer finds favour with government, it is reluctant to restrict parental choice. For example, the government wants the guarantee that all five to six year-olds are taught in classes of 30 or less to be achieved without restricting parental choice, though this requires extra expenditure on new classes in popular schools. It would be more efficient if the government ensured that LEAs could fund the AWPU for five and six year-olds so that a class of 30 could be afforded, and left schools to determine their own class organization and staff deployment. As it is, the government's insistence on a particular class size is inconsistent with the principle of subsidiarity. There is a distinct tendency for government to intervene whenever decision-makers at school level, operating within government-set budget constraints, produce decisions to which other interest groups object on educational grounds. (The music service and the class-size issue are both examples of this.)

A major issue is the vertical equity disparity between primary and secondary students. This is of long standing but has come to prominence as a result of the greater transparency of formula funding and the specification of a national curriculum. The government's attempt to impose a class-size limit of 30 for five to six year-olds addresses this problem to some extent, but only at the cost of creating inconsistencies between having new detailed regulations and schemes, on the one hand, and the objectives of parental choice, school budgetary flexibility and efficiency of resource use, on the other. It is difficult to resolve the primary-secondary funding disparity without a major reform of the methodology whereby central government allocates local government grants for education – a topic beyond the scope of this chapter.

Another key issue is that of a national formula for schools. While this would fund children equivalently throughout the country, its political drawback is that it removes local political discretion and, from the central government's point of view, makes it openly responsible for the amount spent on schools. It would also be difficult to implement without providing for some sensitivity to local school needs, unless there was to be a massive increase in funding. Some proposals advocate reforming the method by which central government allocates grants to local government, while retaining local discretion (for example, West, 1994). The formula for allocating grants to local government (the Standard Spending Assessment (SSA)) could be made more rational by making it activity led, so that it is clear how the annual change in nominal budgets matches changes in student numbers, in key costs such as teachers' salaries and in major educational innovations which require additional resourcing.

More narrowly, with respect to the funding formula, two major concerns stimulate further LEA modifications of their formulae: the justification for differences in per-student funding between grade levels (year groups), and improving methods of allocating additional finance for supplementary educational need. In investigating the first of these issues an increasing number of LEAs are reviewing activity-led funding (for example, West and Pennell, 1994), but have been constrained in implementing the results of these studies by the system-wide factors with respect to the SSA system and the grant-maintained sector. Special educational need is another key area in which LEAs are still actively reviewing and modifying their formulae. In general, there is a move away from just using social indicators and the development and wider application of educational tests and professional audit. The former are associated with the growing interest in value-added information as a crucial element in school evaluation and improvement.

It is difficult to improve the effectiveness, equity, transparency and administrative cost properties of English and Welsh LEA funding formulae unless there is a reform of the methodology and practice of central government funding of local authority educational spending. The English case illustrates well the fundamental point made in *Chapter 3*: a funding formula is an instrument of policy and needs to be designed as such. Its operation will help or hinder the implementation of educational policies and will itself be formed and constrained by them.

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