

Building Equity and Effectiveness into School-Based Funding Models: An Australian Case Study

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About the Author

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The Trend Toward School-Based Funding

Traditionally within Australia, as in other English-speaking countries, the financing of government school education has involved central control over all budgeting and financial operations, the use of line-item budgets to identify and account for expenditures, and the use of staffing formulae based on industrial agreements to anchor the major item within education budgets, namely staff salary costs. For many years, all items of recurrent operating expenditure were centrally controlled and administered, and schools were virtually cashless. For example, schools would place requisitions for items such as paper, pencils, chalk, and other requisites and these would be provided on demand from a central store. Over time, schools were given control over budgets for most non-salary operating costs. However, the lions share of the school education budget, namely teaching staff

salary costs, continued to be centrally administered, as was the staffing function generally.

While the centralization of budgeting and financial administration spared teachers from a significant involvement in non-teaching tasks, it resulted in many inefficiencies, delays, and inflexibilities. It also meant that there was little incentive at the school level to regard financial resources as a part of the total mix of ingredients to be brought together and managed in order to maximize student learning.

More recently, the trend both within Australia and in other English-speaking countries has been to reduce the involvement of the center in the day-to-day operations of schools, to decentralize educational administration and to devolve responsibility, authority, and accountability directly to the school level (Caldwell 1993; Caldwell and Spinks 1992; Levacic 1995; OECD 1987; Picot 1988). Government schools

have been encouraged or required to accept increased autonomy aimed at improving the quality and responsiveness of local decision-making and hence the quality of the education provided to students. A key feature of this move toward a more devolved system of self-managing schools has been the development and implementation of school-based funding models which place control over an increasing proportion of the total available financial resources at the individual school level.

This trend toward a more devolved approach to the financial resourcing of schools is most evident in Victoria, Australia where a Liberal-National Coalition Government, building on a long history of devolved management of schools, has implemented a package of reforms known as "Schools of the Future." A key element of the Schools of the Future program is the "School Global Budget," which is intended to give schools flexibility to match financial and staff resources to the learning needs of their students. Through the School Global Budget, government schools in Victoria have been given control of about 87 percent of the total recurrent budget for school education.

The School Global Budget was implemented in 1955, drawing in part on recommendations of an Education Committee, which reported to the Minister for Education in 1994 (Education Committee 1994). The Education Committee was reconstituted in 1995 to make further recommendations to the Minister for Education on matters related to the ongoing design and implementation of this funding mechanism, and to oversee a School Global Research Project to furnish data to guide the work of the Committee. The Interim Report of this committee was published in June of that year (Education Committee 1995). A further Interim Report will be published shortly.

This paper reports on the approach taken by the Education Committee in developing a school-based funding model based on a number of desirable characteristics or principles, which are intended to ensure an equitable and effective approach to the funding of schools.

The Australian Context

Before going into details on the school-based funding model under development, it is useful to know something of the context. In terms of the share of total national resources devoted to school education, the Organization for Economic Co-operation and Development (OECD) data indicate that Australia is one of a group of countries with a low proportion of Gross Domestic Product (GDP) to primary and secondary education (see table 1). Other countries with a similar level of expenditure include Japan and Germany.

The main source of funds for primary and secondary schooling in Australia is income tax collected by the Commonwealth (federal) government and subsequently passed on to the State and Territory governments through general and specific purpose grants. In allocating funds to the States/Territories, the Commonwealth government takes into account the actual costs of provision in different states. States and Territories have considerable discretion over

the actual amount which they will spend on school education. Table 2 summarizes per capita expenditure on government schools within the eight States/Territories. With the notable exception of the Northern Territory where isolation imposes very high costs of provision and there is a significant proportion of indigenous people living in poverty, it will be seen that there is not a great deal of variation in expenditure between States/Territories.

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Table 1.—Education expenditure as a percentage of GDP for primary and secondary education by origin of funds		
Country	Direct public expenditure for educational institutions	Total public expenditure, including subsidies to the private sector
Australia	2.9	3.0
Japan	2.8	2.8
United Kingdom	4.0	4.1
United States	3.9	3.9
OECD	3.5	3.5

SOURCE: OECD (1995: 74).

Table 2.—Per capita expenditure on government schools by level of education, states and territories, 1993–94 financial year, U.S. dollars (at \$U.S. 0.75 per \$A 1.00)						
State	Students	Primary	Secondary	Ratio of secondary to primary	Total	Percent variation from mean
NSW	755,771	2,866	4,283	149	3,446	-3.4
Victoria	520,328	3,051	4,391	144	3,614	1.3
Queensland	403,234	2,920	4,097	140	3,334	-6.6
SA	181,640	3,517	5,322	151	4,096	14.8
WA	223,105	3,007	4,570	152	3,557	-0.3
Tasmania	64,061	3,207	4,297	134	3,667	2.8
NT	26,934	4,726	6,645	141	5,246	47.0
ACT	39,865	3,476	4,598	132	3,970	11.3
Australia	2,214,938	3,036	4,407	145	3,568	0.0

NOTE: Details of inclusions and exclusions are given in an end-note to this paper.
SOURCE: MCEETYA (1996: 36).

Table 2 also indicates that per capita secondary school funding is on average 45 percent higher for secondary schools than for primary schools.

A further piece of information that is relevant to understanding the funding of government schooling in Australia is the high proportion of students (in excess of 29 percent) attending non-government schools. The non-government sector includes a substantial systemic Catholic sector. Non-government schools receive per capita funds from the Commonwealth government according to a 12-category table of per capita funding levels ranging from \$334(US) to \$1,375(US) per primary student and \$530(US) to \$2,011(US) per secondary student, with schools classified into one of the 12 categories according to need. This represents a relatively high level of support, but is nevertheless substantially below that provided within the government sector.

Finally, Victoria is a state with a population of around six million people and with a government school system serving about 520,000 students in approximately 1,730 schools. It has a land area roughly the size of Wisconsin or Missouri.

Principles Underpinning the School Global Budget in Victoria

The development of the School Global Budget has proceeded on the basis of a set of principles that the Education Committee considers should underpin the funding of government schools. They are as follows:

Pre-eminence of educational considerations

Factors included in the construction of the School Global Budget and the relative weighting given to each factor should depend pre-eminently upon educational considerations. This implies the elimination of disparities reflecting historical and

political decisions for which there is no current or future educational rationale.

Cost effectiveness

Relativities among allocations in the School Global Budget should reflect knowledge of efficient ways of achieving school and classroom effectiveness. Thomas (1996) has suggested that school systems should seek to become more cost effective and undertake cost effectiveness analyses that compare alternative ways of achieving the same objective. In practice, systems are able to compare only a limited range of alternatives, thus funding models that are based on this principle will incorporate knowledge about the least costly of the alternatives being compared, which may not necessarily imply the cheapest possible method of attaining the objective.

Fairness

Schools with the same mix of learning needs should receive the same total of resources in the School Global Budget. This means obtaining accurate and comprehensive information on those characteristics which best predict or define learning needs of students and using this information in allocating financial resources to schools.

Transparency

The basis for allocations in the School Global Budget should be made public and should be clear and readily understandable by all with an interest. This is an important principle but one which is often elusive in practice. Because of the complexities involved and the many factors that need to be taken into account in ensuring a system that is fair, many systems find that their funding models have become enormously complicated and therefore lack transparency.

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Subsidiarity

Decisions on resource allocation should be made centrally only if they cannot be made locally. Decisions on items of expenditure should be excluded from the School Global Budget only if schools do not control expenditure, if there is excessive variation of expenditure, if expenditure patterns are unpredictable, or if expenditure is once-off.

Accountability

A school that receives resources through the School Global Budget because it has students with a certain mix of learning needs has the responsibility of providing programs to meet those needs, has authority to make decisions on how those resources will be allocated, and should be accountable for the use of those resources, including outcomes in relation to learning needs. This implies the publication of information on student progress and on the value-added contribution of the school to student learning.

Strategic Implementation

The formulae underpinning the School Global Budget and any subsequent ongoing modifications should be implemented progressively over several years to avoid dramatic changes in the funding levels of schools from one year to another. In practice, given the political difficulties in redistributing funds, this means holding constant the funding of schools that in the past would have received more funds than they would be entitled to under new formulae while funding to other schools is increased as additional funds became available.

Structure of the Global Budget

The structure of the School Global Budget is summarized in table 3. The total recurrent budget for school education in the 1995–96 financial year was \$1,814 million (US) of which a little over five percent (\$96 million (US)) was spent on state administration, including the salaries of centrally and regionally based staff, administration and office accommodation costs, and a proportion of the costs of operating the Board of Studies.¹ Thus a sum of \$1,718 million (US), or just under 95 percent of the total budget for school education, was made available for expenditure at the school level.

A further \$US146m, or eight percent of total recurrent funds, was excluded from the School Global Budget, even though the costs are incurred at the school level. These funds were excluded because schools were not in a position to control their expenditure, or it was anticipated that there would be excessive variation of expenditure, or expenditure patterns were likely to be unpredictable. These included the costs of: busing students, which is the responsibility of another government agency; providing an education welfare allowance to poor families to assist them with unavoidable costs of schooling such as uniforms and books; meeting the salary costs of replacement teachers

where there was an extended absence of the regular teacher; and the costs of providing school support services, such as speech therapists, psychologists, etc. who serve several schools.

This leaves a total of \$US1,572m, or 87 percent of total recurrent funds, for school education which was provided directly to individual schools as the School Global Budget. This, in turn, was subdivided into seven sub-components, of which by far the largest was referred to as ‘Core Funding,’ a per capita

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¹ The Board of Studies is a statutory body responsible for setting curriculum standards for students in government and non-government schools in all years of schooling and for assessment and certification of all students in years 11 and 12, the final two years of schooling.

Table 3.—Structure of the school global budget, Victoria: 1995–96 financial year		
Component	\$m	% total
<i>School-level expenditure</i>		
School global budget		
Core funding	1,314	72.5
Premises	98	5.4
Student disadvantage		
Disabilities and impairments	56	3.1
Special learning needs	22	1.2
English as a second language	25	1.4
Rurality and isolation	16	0.9
Priority programs	42	2.3
Total school global budget	1,572	86.7
Exclusions	146	8.0
Total school level expenditure	1,718	94.7
<i>Non-school-level expenditure</i>		
Administration	96	5.3
Total recurrent funding for government schools	1,814	100
SOURCE: Hill, unpublished tabulations.		

allocation covering school operating costs and the costs of all teaching, administrative, and non-teaching support staff. The second sub-component was a per school rather than a per capita allocation for such costs as cleaning, the maintenance of buildings and grounds, and utilities such as water, sewage, electricity, and gas. The remaining five sub-components were included primarily to meet the educational needs of various categories of disadvantaged students. In the following sections, further details are provided of the approach taken to developing formulae for each of the sub-components of the School Global Budget.

Core Funding

For the 1995–96 financial year, funding to cover salary and operating costs within schools was based on a single per capita rate for primary students and a single rate for secondary students. The rate for secondary school students was set at a rate that was approximately 43 percent higher for secondary students than for primary students. Following extensive investigation of the actual pattern of internal allocation of funds within schools and after consideration of research evidence regarding the educational needs of students in different stages of schooling,

proposals have been made to move, in 1998, to a system of per capita funding of the core based on different weights at each grade level, as indicated in figure 1.

The proposed weights have been set at levels which reduce the differential between funding levels for students in primary and secondary schools, particularly at the point of transition between the two levels of schooling.

For the first two grades (Preparatory and grade 1), it is proposed that per capita funding levels be at least 20 percent higher than in grades 3 and 4. This is to enable smaller class sizes in the Preparatory grade (Blachford and Mortimore 1994) and the implementation of a comprehensive literacy strategy, including one-to-one tutoring in grade 1 (Clay 1991, 1993; Clay and Watson 1982).

To obtain accurate estimates of program cost-effectiveness, an *Early Literacy Research Project* modelled broadly on Slavin and colleagues' *Success for All* program (Madden, Slavin, Karweit, Dolan and Wasik 1993; Slavin, Madden, Dolan, Wasik, Ross, and Smith 1994; Slavin, Madden, Karweit, Livermon, and Dolan 1990) has been mounted in a large sample of schools. Achievement levels of those in the intervention program are being compared with those of a matched sample of schools not in the intervention program.

During the middle years of schooling, namely the final two years of primary education and the first two or three years of secondary education, it is recognized that the traditional models of primary and secondary education provision typically fail to meet the educational and developmental needs of young adolescents (ACSA 1996; Carnegie Council 1989; Capelluti and Stokes 1991; Eyers 1993; Hargreaves and Earle 1990). While an examination of 'best

practice' approaches to middle schooling within the Australian context (Cumming and Fleming 1993; McKenzie and Taylor 1995) reveal no 'one best way,' they point to certain common elements, of which the most important as far as funding levels are concerned, involves interdisciplinary teams of teachers working with as few students as possible in as many subjects as possible. Accordingly, the proposed weights for grades 5 and 6 have been set at a higher level than those for grades 3 and 4 to enable common planning time for teachers in the final two years of the primary school. In addition, as noted earlier, the disparity in per capita funding for students in grade 7, (the first year of secondary school) as compared to grade 6 (the last year of primary school) has been greatly reduced. A steadily increasing gradient in the weights for grades 5 to 8 has nevertheless been built into the proposed set of weights, however, in recognition of

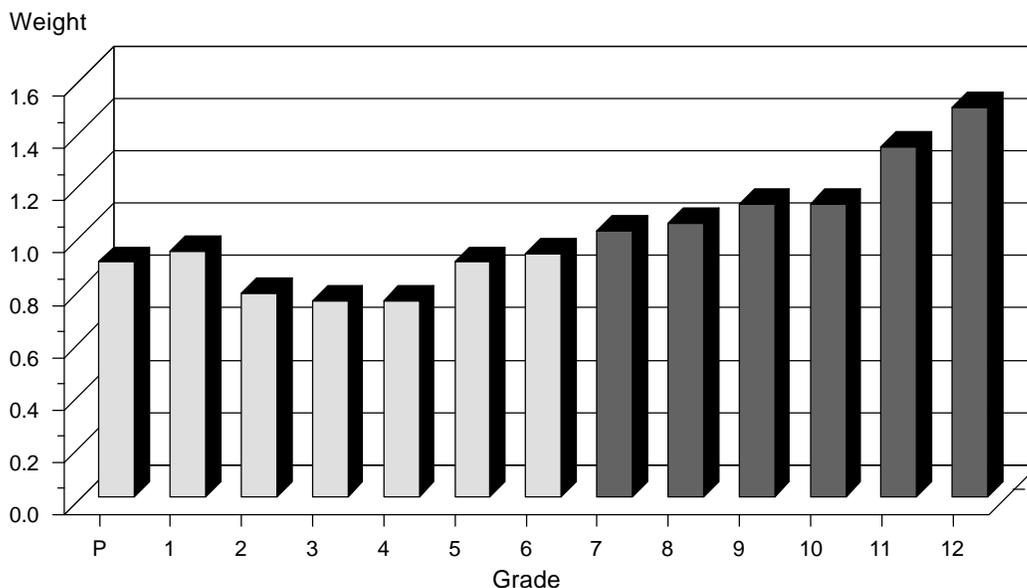
the increasing teacher assessment and preparation time involved, the increasing need for smaller class sizes and the additional operating costs in specialist areas such as science, during the middle years.

A significant feature of schooling for older adolescents and young adults in grades 9–12 is the provision of a range of curricular choices, allowing students to explore and develop specific areas in depth and to pursue personal interests and strengths. Schools in Victoria

typically provide a wide range of optional subjects in grade 9 and 10. In the final two years (grades 11 and 12), subject choice becomes even more significant as students select a relatively small number of subjects (typically six in grade 11 and five in grade 12) that they will study in depth. Choice and the availability of a full range of vocational pathways translate into significantly increased costs for schools. These costs arise from providing a comprehensive range of subjects despite relatively low enrollments in many and the need for relatively small class sizes in others.

During the middle years of schooling,...it is recognized that the traditional models of primary and secondary education provision typically fail to meet the educational and developmental needs of young adolescents...

Figure 1.—Proposed weights for the Core Funding component of the School Global Budget for regular schools



SOURCE: Hill, unpublished tabulations.

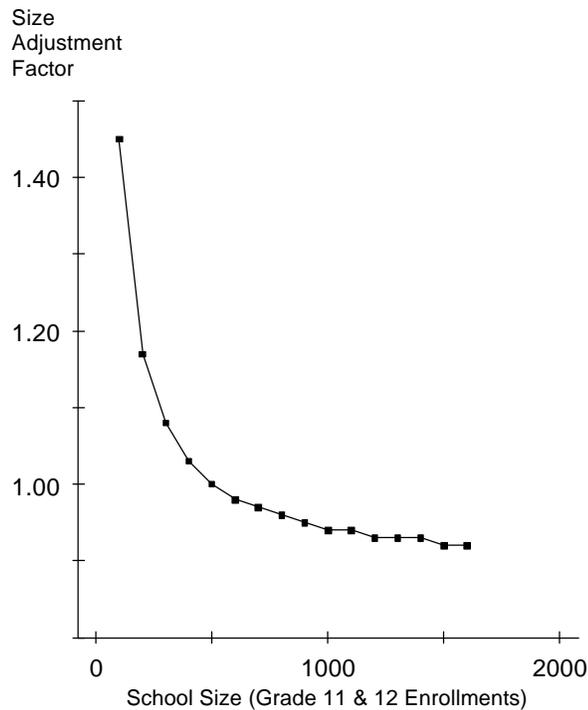
In addition, costs relating to tutoring, counseling, and remediation are higher than average during the later years of schooling, but increase significantly in grade 11 and yet again in grade 12 as demands increase for careers counseling, assistance with study skills, home support, monitoring progress and one-to-one or small group tutoring and guidance. Preparation and correction loads also increase dramatically as students prepare for their grade 12 examinations. Finally, the higher costs of materials and equipment are also factors which result in increased levels of expenditure in grades 11 and 12.

These factors are reflected in the proposed weights for grades 9–12 which have been set some 50 percent higher than those for grades 3 and 4 for students in grades 9 and 10, 80 percent higher for students in grade 11, and 100 percent higher for students in grade 12.

In addition to the weights shown in figure 1, it is proposed that there also be a size adjustment factor to reflect the additional costs of provision in schools with very small enrollments. This is particularly important in order to take into account small rural and isolated schools. At this stage, the appropriate size of this adjustment has been estimated for the final two years of schooling (grades 11 and 12) only. As indicated in figure 2, for a school with a grade 11 and 12 combined enrollment of 500 students, the size adjustment factor has been set at 1.0. The weights would be slightly less than 1.0 for schools with an enrollment of 1,000 students, but significantly greater than 1.0 for schools with an enrollment of 200 students.

To summarize, it is proposed that the formula for the Core Funding element of the School Global Budget contain two terms, a per capita amount weighted differentially according to the grade level of

Figure 2.—Size adjustment factor for grades 11 and 12 Core Funding



SOURCE: Hill, unpublished tabulations.

the student and a size adjustment factor to take into account economies of scale and additional costs of provision for schools in rural areas with small enrollments. This can be shown in the form of a general equation for calculating the entitlement of a given school for Core Funding, as follows:

$$\text{Core Funding} = f(\sum (w_j n_j X_j))$$

in which f is a size adjustment factor, w_j is the weight for grade j , n_j is the number of students in grade j and X_j is the overall per capita allocation in dollars.

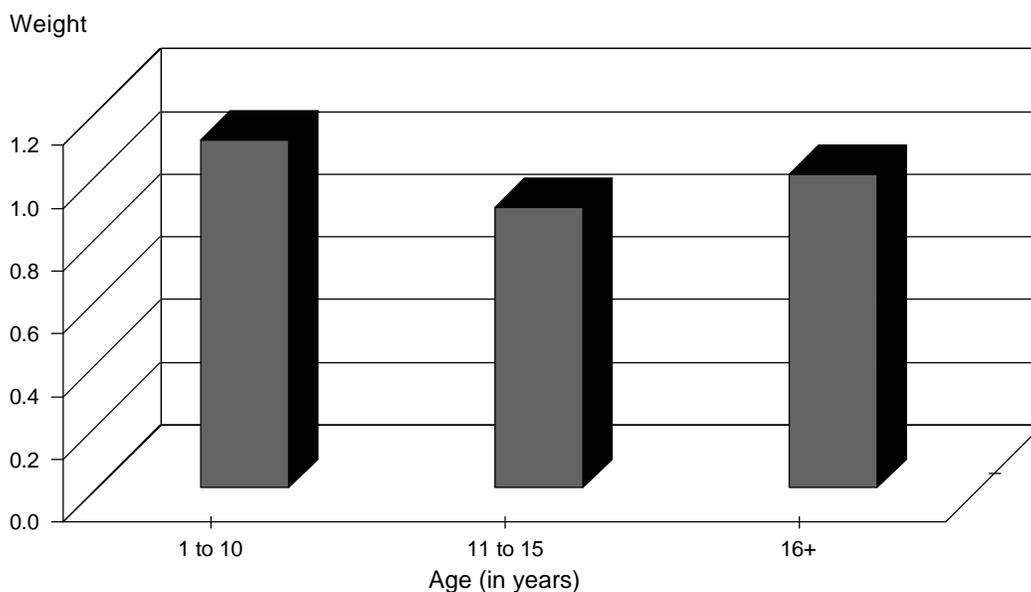
Figure 2 applies to regular schools. Considerable work has been undertaken on a comparable approach to the provision of Core Funding to special schools for students with disabilities and impairments

involving a simplified set of weights relating to different stages of schooling, shown in figure 3. Once again, a size adjustment factor will be necessary to accommodate schools with very small enrollments (less than 45 students).

Premises

The Premises component of the School Global Budget represents just over five percent of total expenditure on school education. It covers a number of site-related costs such as the cost of contract cleaning, utilities (e.g., heating, fuel, water, sewage, refuse, and garbage), maintenance of facilities and grounds, and minor works. For each of these components, there are separate formulae, with details of each school site contained on a central, computer-based School Assets Management System (SAMS).

Figure 3.—Proposed weights for the Core Funding component of the School Global Budget for special schools



SOURCE: Hill, unpublished tabulations.

The Premises component of the School Global Budget is a per school rather than a per student payment, although contract cleaning allocations are made on the basis of a formula that takes into account both the total area to be cleaned and the number of students occupying the premises. The formulae used are sensitive to the particular nature of each site. For example, the formula for maintenance and minor works distributes 50 percent of the available funds on the basis of the schools facilities entitlement area, 25 percent on the type of materials used in the construction of the school buildings, and 25 percent on the relative condition of those buildings.

Students with Disabilities and Impairments

Students with disabilities and impairments may attend a regular school or a special school. In 1996 there were 10,400 students (1.3 percent) of students receiving additional funding under this classification. The approach to funding students with disabilities and impairments has been to move towards additional

resources to such students following a detailed assessment using an *Educational Needs Questionnaire* which assigns individuals to one of six levels of funding as shown in table 4.

At this stage, the above approach to funding has been implemented in regular schools only, but consideration is now being given to extending the approach to special schools.

Students with Special Learning Needs

This component of the School Global Budget targets students at risk of not making satisfactory progress due to family or other personal circumstances. Jordan, Lyons and McDonough (1992) conclude that of the various ways of allocating funds for 'at-risk' students, the most efficacious method, in terms of stability, predictability, adequacy, efficiency, accountability, equity, responsiveness, and non-manipulability, is to make use of an index of need based on a composite of indicators. It was also

Table 4.—Funding levels for students with disabilities and impairments, 1996

Level 1	\$US2,370
Level 2	\$US5,505
Level 3	\$US8,662
Level 4	\$US11,820
Level 5	\$US14,955
Level 6	\$US18,112

SOURCE: Hill, unpublished tabulations.

considered necessary to use predictors of achievement rather than achievement measures themselves, since direct funding of low achieving schools could remove the incentive to strive for high achievement.

A survey of students in grades 1, 3, 5, 8, and 11 was undertaken in a sample of 83 schools to identify appropriate indicators that best predicted ‘at risk’ students. Teachers were asked to identify those students whose literacy/English performance was well below that expected for his/her grade level. In addition they were asked to provide information on more than 20 potential predictors of poor achievement in literacy/English. Usable data were obtained for 7,233 students.

Using both structural equation modelling and multi-level regression modelling, it was established that the following indicators best predict learning difficulties at school at both the primary and secondary level in the Victorian context. Each is amenable to audit:

- *Poverty* (X_1) - as measured by whether or not the student is in receipt of an education welfare payment (Educational Maintenance Allowance or AUSTUDY);
- *Occupation* (X_2) - whether the highest breadwinner is unemployed, or is in an unskilled, skilled, white collar, or professional occupation;

- *Language spoken at home* (X_3) - whether or not a language other than English is spoken at home;
- *Family* (X_4) - whether the student is living with neither parent, one parent, or both parents;
- *Aboriginality* (X_5) - whether or not the student identified himself or herself as a Koorie (Aboriginal) student; and
- *Transient* (X_6) - whether or not the student has changed schools recently.

It was found that the use of a unit-weighted index for each student using the above measures resulted in an almost identical index to one based on factor score regression weights, and so unit weights have been used, except that it has also been found necessary to use a 0.5 weight for *Language spoken at home*, to avoid this measure dominating the index. The formula for the index is:

$$\text{Special Learning Needs} = X_1 + X_2 + 0.5X_3 + X_4 + X_5 + X_6$$

An eligibility threshold is applied to this index so that funds are allocated only to the 30 percent of schools with the most ‘at risk’ students. In the first year of implementation, measures of *Occupation* and *Family* were not used, but it is intended that they will be employed for the 1997 school year. This has involved the establishment of systematic and secure

data collection procedures for all enrolled students in government schools in a form that can readily be verified and collated for the purposes of allocating funds.

English as a Second Language

This component of the School Global Budget is directed at schools with large numbers of recent arrivals to Australia who do not speak English and require English as a Second Language (ESL) teaching. It is also directed at children from refugee families who in addition to experiencing language problems are likely to have experienced psychological trauma and a highly dislocated education. Proposed weights for these students reflect both stage of schooling and recency of arrival, with the highest level of additional funding going to recently arrived students in the later years of schooling. These weights are shown graphically in figure 4.

Once again, it is proposed that a funding threshold apply to the English as a Second Language index so that funds are directed to those schools with the highest need.

Rurality and Isolation

The geography of Australia with its high concentration of population in the capital cities and its sparse rural populations means that issues of rurality and isolation are of considerable significance.

An important difference between rurality, isolation, and other factors taken into account in the School Global Budget is that it applies to the total population of certain schools rather than to individual students. A further key difference is that the rationale for additional funding for rurality and isolation is related not to educational disadvantage but rather to the additional costs of provision. This has been

established in a number of studies, particularly that reported in Tomlinson (1995). Thus, additional funding for the rurality and isolation component of the School Global Budget is provided in recognition of extra costs associated with curriculum provision, administration, and access student support services. In the Victorian context, rurality and isolation involves a number of distinct elements which have been used to construct an index for non-metropolitan schools comprising an equally weighted combination of:

- distance in kilometers from the Melbourne metropolitan area;
- distance from the nearest provincial center with more than 20,000 inhabitants; and
- distance from the nearest primary or secondary school, as appropriate, that is not eligible for funding as a rural or isolated school.

Funding for a given school is determined as follows:

$$\text{Location Index Funding} = \$375(\text{US}) + (\text{Location Index Score} \times \text{Student Enrollment} \times \$43(\text{US})).$$

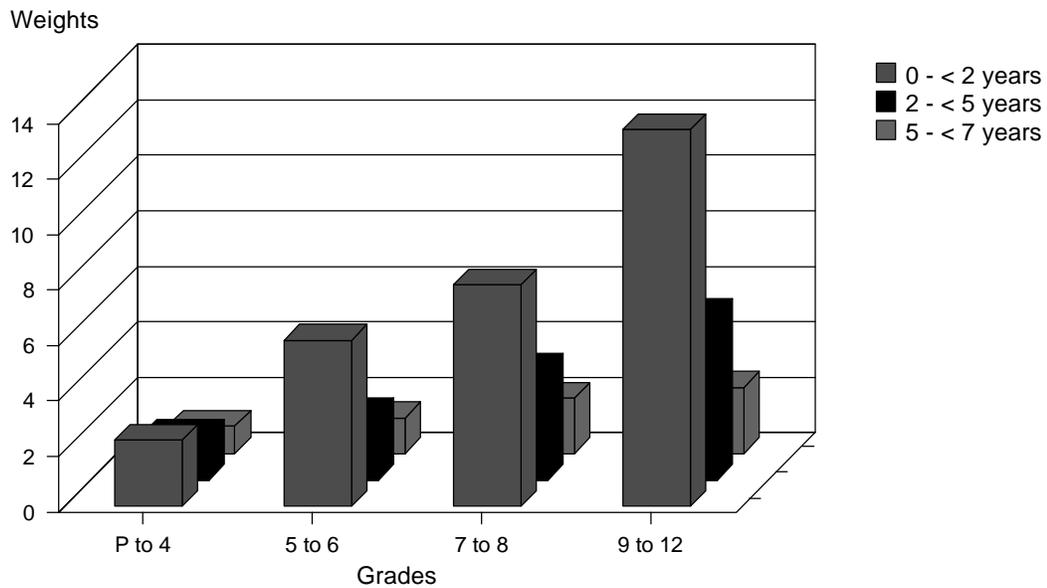
In addition to the location index, there is a separate Rural Size Adjustment Factor to take into account the additional costs associated with operating a small school in a rural area. This funding is available to primary schools with enrollments up to 200 students and for secondary schools with enrollments up to 500 students.

Priority Programs

This component of the School Global Budget, which accounts for around 2.3 percent of total funding for school education, includes funds for a

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Figure 4.—Proposed weights for the English as a Second Language component of the School Global Budget



SOURCE: Hill, unpublished tabulations.

number of state-wide initiatives and to enable schools to participate in specific purpose programs, including instrumental music programs, languages-other-than-English, programs for Aboriginal students, school restructure programs, etc. It also includes Teacher Professional Development Grant funds. It thus enables the government of the day to continue to fund strategic initiatives.

Discussion

The School Global Budget and associated funding arrangements being developed and introduced in Victoria, Australia, provide an important case study of the issues to be confronted in pursuing system-wide school reform and in ensuring as part of those reforms an equitable and cost effective approach to school financing for government schools. In this final section, some general reflections are made on the process of reforming school finances.

Perhaps the most significant point that can be made is that while recent developments have involved quite dramatic reforms, the Victorian developments build upon almost two decades of incremental change that has given schools increasing autonomy and accountability. For example, there is a long history of local school governance, with each school community electing a school council on which two-thirds of the members are non education system employees. School councils have responsibility for developing and approving the school's charter, approving the school's budget, managing finances, and reporting on the school's performance through the annual report. They now have significant additional responsibilities for a range of staffing decisions, including involvement in and final approval of the selection of the school principal.

This long history has not been one of smooth or easy change. Indeed, at all points along the way, change has been hotly contested and frequently

resisted. Many of the changes now being implemented were identified as desirable over a decade ago, but the political will and capacity to drive through a strong change agenda has been lacking. These same changes are able to be implemented at the present time because of the overwhelming electoral advantage enjoyed by the current government; an advantage that cannot last forever. This in turn raises the question as to whether the changes effected thus far are irreversible and whether some future government may want to centralize control again. The general view is that having given schools real control over local decision-making and resources it would be unlikely that any future government would see advantage in changing direction and re-centralizing unless strong evidence emerged of serious, unintended, negative consequences of the reforms.

In addition, there is also the general view that the system of school financing in Victoria, which had evolved over decades, had become excessively obscure and riddled with inequities and anomalies. The prospect of a fairer and more transparent system of funding has thus generated its own momentum for reform, even when it has been pointed out that the proposed changes may involve some pain for those schools that have fared relatively well under the old and less equitable funding arrangements. This leads to the second key observation, which is that fundamental reforms of school financing inevitably generate 'winners' and 'losers' and this places real limitations on the pace of change.

It is generally not possible to reduce significantly financial allocations to schools that in the past may have been 'over-funded' without generating an adverse political backlash. The alternative is to hold the funding levels of such schools constant until other schools have caught up, or to reduce funding to the appropriate level very gradually. This in turn implies that full implementation of new funding arrangements

may take many years to effect and involve messy interim arrangements.

A recent survey of the attitudes of a random sample of Victorian government school principals to the Schools of the Future program generally and including specific questions on their attitudes to the School Global Budget, indicates that principals are reasonably positive about the benefits associated with the recent reforms to school finances (Steering Committee 1996, 31-32). In response to a set of questions concerned with the extent to which the School Global Budget has built up capacity within the school, principals indicated that they believed there is now a greater capacity to build a relationship between curriculum programs and resource allocation, to allocate resources to identified needs of students, and to achieve priorities as set out in the school's charter.

On the other hand, in response to a further set of questions concerning the implementation of the School Global Budget reforms, principals indicated a more negative attitude to the time provided to adjust to the new approaches and levels of funding and to the degree of access to quality professional development for appropriate staff.

This suggests that while principals, along with most staff in schools, see merit in the reforms, they have found the pace of

reform hard to accommodate and perceive that they have not had the degree of support that they would ideally have liked. This is despite the fact that there has in fact been a massive program of professional development in place to assist principals and other staff adjust to the new arrangements. This leads to a third key observation, namely that it is almost impossible to over-estimate the amount of professional development, training, and support services needed to sustain real reform.

...principals...have found the pace of reform hard to accommodate and perceive that they have not had the degree of support that they would ideally have liked.

Early on in the piece when the reforms were first being implemented, a very large number of principals took the opportunity to accept the offer of a voluntary departure package and to retire earlier than would normally be the case. Those that remained and those that took the place of those departing have clearly found the changes challenging. In other words, change has occurred at a considerable cost to those involved in implementing the new arrangements. But in view of the harsh reality of short electoral cycles and the reduced ability of governments to apply additional resources to smooth over the rough edges of change, are there any real alternatives to the 'crash through' approach to genuine reform?

A fourth key observation is that despite the pace and extent of the reforms thus far, the process in Victoria still has a long way to go and many issues remain to be confronted. At this stage, because there are more teachers employed in government schools than are required under the new funding arrangements, there is little capacity for many schools to make use of the staffing flexibility that they would enjoy if there were not teachers in excess of requirements. This problem is the source of considerable dissatisfaction at the school level. On the other hand, those schools that are not carrying teachers in excess are beginning to use their newly acquired staffing flexibility and to make strategic decisions, including appointing staff on term contracts, trading in a number of highly paid teaching positions for a larger number of teacher aides, offering a very attractive position to recruit a person with special qualities, and so on. The experiences of these schools points to the desirability of moving as quickly as possible to ensuring that all schools receive full staffing flexibility as soon as possible. This may mean declaring redundant those teachers who are in excess of requirements, an action that has not been taken thus far by the system.

Other challenges to be faced in the future development of the School Global Budget include approaches to funding the introduction of new information technologies in schools.

A related challenge concerns the method of charging for teacher salaries. For teachers in promotional positions, schools are allocated funds and charged at actual salary costs ('actuals in, actuals out'). For the 70 percent of teachers not in promotional positions, schools are funded and charged at average salary costs ('averages in, averages out'). This introduces an element of inequity into funding arrangements since schools in more affluent and favored locations tend to have the more experienced teachers at the top of the salary scale. Were such schools funded on the basis of average salary costs but charged on the basis of actual expenditure on salaries (averages in, actuals out'), they would be obliged to change the mix of their staff and employ a greater proportion of beginning teachers. In the longer term, it is the view of the Education Committee that all schools should move to an 'averages in, actuals out' system of funding, since this is a fairer system and also one that promotes the efficient use of resources. It is acknowledged, however, that this is something that would need to be phased in gradually, perhaps by extending the 'averages in, actuals out' method to all new appointments of teaching staff made by schools, but by retaining the 'averages in, averages out' method for all existing staff.

Other challenges to be faced in the future development of the School Global Budget include approaches to funding the introduction of new information technologies in schools. It is evident that we are now experiencing an awesome social and economic revolution as the Information Age becomes an increasing reality and as the power of the new information technologies transforms the home, the school and the workplace, breaking down many of the barriers that have thus far allowed these to exist as separate worlds. For schools, the costs of buying computers, of installing fiber-optic cabling, of creating local area networks, of

linking to the world-wide web, and of providing the necessary training and support service for teaching staff, are massive. Furthermore, it is not clear which are ongoing costs and which are once-off costs, or which should be borne by the school, and which by parents or the community at large. None of these costs have been properly factored into school budgets, yet there is some urgency to resolve how this should be done.

The final key observation relates to the extent to which the reforms to school financing as reflected in the Victorian experience, translate into educational benefits for students. The answer to this question has two parts. First, it is unlikely that the reforms to date will have had a significant impact on student achievement, nor would one expect such a direct effect in the short term. Rather, it is more realistic to expect that the effect of the reforms may be to build up the *capacity* of schools to better target resources to student learning needs and school priorities. The evidence to date from principals is that this may already be happening.

The other part of the answer relates to the other aspects of the school reform agenda that is being pursued through the Schools of the Future program. These cluster around three broad areas of reform that compliment the reforms to school financing, namely reforms directed at setting high standards and clear expectations in the curriculum, a package of reforms aimed at improving the professional capacity, status and competence of teachers, and a further package of reforms designed to strengthen the accountability of schools for the way in which they use resources to improve student learning. Real improvements in educational outcomes are likely only when schools focus on change at the level of the classroom and this means that changes to school financing arrangements must be related to a total package of reforms aimed at improving the quality of teaching and learning. There are encouraging signs in Victorian schools that this focus on classroom teaching is also starting to emerge, but at this stage it would have to be said that these signs represent the very early days of the next wave of school reform.

End-Note

The following note relates to table 2:

(a) Expenditure on provision of buildings and grounds is included. It is estimated that this amounts to \$305 per student for Australia.

(b) Expenditure on super-annuation is excluded. It is estimated that this amounts to \$US384 per student for Australia.

The expenditure used to derive the per capita figures specifically excludes:

- expenditure on sessional preschools and Technical and Further Education;
- private expenditure i.e., funds raised by schools, school councils or community organizations;
- expenditure on super-annuation, payroll tax, provision for long-service leave, depreciation and sinking fund payments, interest on Commonwealth loans, staff accommodation (including all payments to housing authorities);
- expenditure on accruals, provisions, commitments and liabilities;
- direct payment of allowances by the Commonwealth to individual students and/or parents;
- salaries of staff and operating expenses of student hostels, including hostel subsidies;
- expenditure on children in residential care programs;
- all known and clearly identifiable expenditure by government school systems on non-government schools.

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