

Principles and Practices in Resource Allocation to Schools under Conditions of Radical Decentralization

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About the Author

Dr. Brian J. Caldwell is a Professor of Education and Head, Department of Education Policy and Management at the University of Melbourne. He was appointed to a Personal Chair in 1993, the first such appointment in education at the University of Melbourne, which is Australia's leading research university. This appointment was largely in recognition of his scholarly work over two decades in the field of school-based management.

Dr. Caldwell served as Chair of the Education Committee on the School Global Budget in Victoria, making recommendations to the Minister for Education on how resources should be allocated to schools in this Australian state where 90 percent of the education budget is decentralized for local decision-making in the public system of 1,700 schools. He is

co-author with Jim Spinks of two books that have influenced policy and practice in school-based management in several nations, *The Self-Managing School* (1988) and *Leading the Self-Managing School* (1992). *Beyond the Self-Managing Schools* will be published in 1998. With Don Hayward, he proposes a new framework for the resourcing of public and private schools in *The Future of Schools: Lessons from the Reform of Public Education* (1997).

Dr. Caldwell obtained his Ph.D. at the University of Alberta, Canada with a dissertation on pioneering practice in school-based budgeting in the Edmonton Public School District in the mid-1970s. He is Fellow of the Australian College of Education and the Australian Council for Educational Administration.

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Introduction

Interest in site-based management has waxed and waned over the last three decades. Few school districts in the United States have proceeded to full implementation where most of the district's budget is decentralized to the site level for school decision-making. Where this has occurred or is contemplated, an issue facing the school board is to determine formulae to allocate resources to schools and to build a framework for accountability in the deployment of those resources. There is now substantial experience in several nations in addressing this issue. Apart from the pioneering case of the Edmonton Public School District in Alberta, Canada, there is nationwide experience in New Zealand, the United Kingdom, and in the state of Victoria in Australia, which is now the largest system of public schools anywhere to have decentralized as much as 90 percent of its school education budget.

The significance of this development in Australia cannot be stressed too highly in the context of developments elsewhere, including the USA: a public school system of 1,700 schools covering a diversity of settings, urban and rural, has decentralized 90 percent of its total school education budget, including staff. It is radical decentralization when viewed in this context.

The purpose of this paper is to outline principles and practices in resource allocation to schools under these conditions of radical decentralization, paying particular attention to what is unfolding in Victoria, where a comprehensive and coherent program of reform has been under way since late 1993. This paper lays the foundation for a detailed exposition of the funding mechanism and its data requirements provided by Peter Hill in another paper (Hill 1996).

Principles

The reform of schools in the public sector is proceeding apace in Australia and in comparable nations. The broad features are essentially the same, illustrated in figure 1 for the *Schools of the Future* program in Victoria: the creation of a system of self-managing schools within a curriculum and standards framework ('Curriculum' in figure 1). Consistent with efforts to restructure the public sector, there has been downsizing of central and regional agencies, with a small but powerful strategic core 'steering' the system. While personnel for the most part remain centrally employed, there is increasingly a capacity at the school level to select staff and determine the mix of professional, para-professional, and support arrangements ('People' in figure 1). Schools have their own budgets, in a process variously described as global budgeting or school-based budgeting, allowing discretion in deployment at the local level according to a mix of school and state priorities ('Resources' in figure 1), which in Victoria is embodied in a school charter that provides a framework for planning and accountability over a three-year period ('Accountability' in figure 1).

These features are most evident in Victoria, where reform since the election of the first Kennett Government in late 1992 is arguably the most sweeping in any system of state school education in Australia since the establishment of government schools in the late nineteenth century. More than 90 percent of recurrent expenditure is distributed to schools in a school global budget. In these and most other respects, the reforms in Victoria are most like what has occurred in Britain and, to a lesser extent, New Zealand. An exception, at least for the present, is associated with the distinction between self-managing and self-governing schools, with some schools in Britain taking advantage of the 'opt out' provision of the 1988

Education Reform Act, leaving their local education authorities to become 'grant-maintained schools.' However, with about 1,700 schools, Victoria has the distinction of being the largest system of public education anywhere in the world to have adopted the new arrangements and to have decentralized such a large part of the state budget for school education.

The forces shaping these developments are varied, as are the ideologies and rhetoric that have shaped public discourse. In a recent review, Caldwell (1994) examined developments in six nations (Australia, Canada, Hong Kong, New Zealand, United States, and the United Kingdom) and identified five themes: (1) efficiency and effectiveness in the delivery of public services, (2) ideology that embraces a faith in the market mechanism as a means of securing improved outcomes in the delivery of education, (3) equity in the allocation of scarce resources, (4) empowerment of the school community, and (5) research on school effectiveness and school improvement.

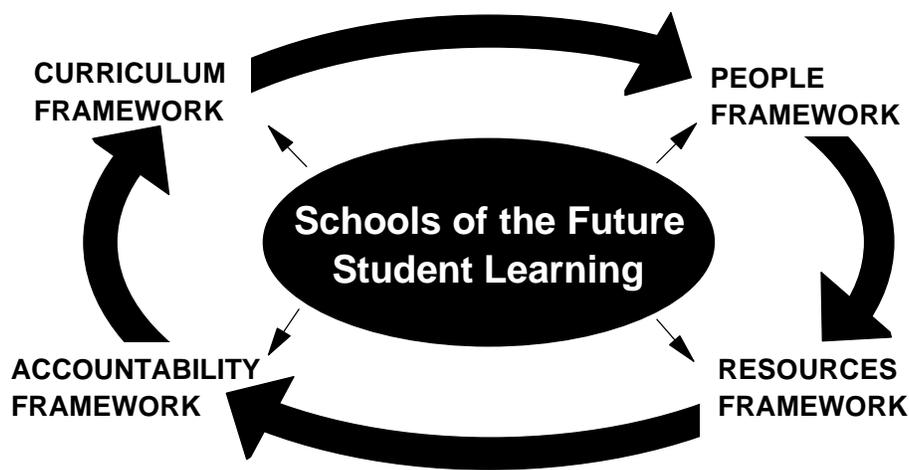
Analyzing Reform in a Framework of Values

Swanson and King (1991) provide a framework of values for the analysis of reform in school education:

Five values or objects of policy that have been historically prominent in shaping Western societies and are also particularly relevant to making decisions about the provision and consumption of educational services are liberty, equality, fraternity, efficiency, and economic growth. Each has experienced ascendance and descendance in priority with changing societal circumstances, but none has ever lost its relevance entirely. The current shift in priorities placed on these five values

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Figure 1.—Framework for reform in *Schools of the Future* in Victoria, Australia



SOURCE: Victoria, Department of Education.

underlies much of the controversy surrounding education today. (Swanson and King 1991, 22-23)

In Australia, education is constitutionally a state responsibility, traditionally provided through relatively centralized arrangements wherein an education department has made most of the important decisions affecting the allocation of resources. Staff were allocated to schools according to a simple formula based on size and level of schooling; supplies and equipment were allocated or requisitioned along similar lines. The value of equality meant allocating uniformly. The value of liberty meant little, for children had to attend the school nearest their home. An early challenge to these values was offered in a widely-read critique of Freeman Butts, visiting Australia from Columbia University, New York, in his critique of assumptions underlying education (Butts 1955). He challenged the ascendancy of equality as uniformity and the absence of liberty (choice) and fraternity (government control at the expense of community empowerment).

A shift in the balance of these values occurred in the 1970s, signalled in Australia in the report of the Interim Committee of the Australian Schools Commission (Karmel 1973):

The Commission favors less rather than more centralized control over the operation of schools. Responsibility should be devolved as far as possible upon the people involved in the actual task of schooling, in consultation with the parents of the pupils whom they teach and, at senior levels, with the students themselves. (Karmel 1973, 10)

Twenty years later, a successor body, the Schools Council of the National Board of Employment Education and Training, enunciated the same values, making them more explicit in respect to the self-managing school and the allocation of resources, in this instance concerning schooling for young adolescents:

School communities should be able to demonstrate sufficient flexibility to respond positively and swiftly to changing needs and circumstances. If the goal of the self-managing school is to be realized, then schools should have the capacity to modify their resourcing arrangements to increase learning opportunities for all young adolescents. (Schools Council 1993, 100)

An outcome of the Australian Schools Commission was a series of special purpose grants to states, many to be dispersed to schools on the basis of submissions prepared by staff and members of the community. The number of such grants increased rapidly, supplemented by others at the initiative of state governments. The value of equality as uniformity in resource allocation shifted to equity or fairness in relation to resourcing according to special educational needs. The de-zoning of school attendance that occurred in most states in subsequent years, and the empowerment of the community through structures such as school councils, raised the profile of liberty (choice).

Coherence in a movement toward the concept of a school global budget gathered momentum in Victoria in the early 1980s with the introduction of program budgeting, elevating a concern for efficiency, and the further empowerment of school councils to set policy and approve budgets, which amounted to about 5 percent of recurrent expenditure. These developments were stalled in the late 1980s by the opposition of teacher unions and parent organizations but were moved forward in dramatic fashion by the Kennett government in the early 1990s, by which time a dominant

value was efficiency, given the financial plight of Victoria, with a nationwide concern for economic growth a contributing factor to the building of curriculum and standards frameworks.

This shift in the balance of values in the 1970s was also evident in the United States when early approaches to self-management or school-based management made their appearance. Influential writers on school finance built a case on deficiencies of centralized allocation of resources to schools which were perceived to assume sustained growth, to increase educational inequalities, contribute to inefficiencies and stifle citizen participation and parental choice of school. (Garms, Guthrie, and Pierce 1978). Adoption in the United States in the intervening years has been fragmented at best, with complexity in governance arrangements and regulatory requirements

being significant constraints in a nation of 50 states and 15,000 public school districts. The mid-1970s reform in school-based budgeting in the Edmonton Public School District in Alberta, Canada, pioneered by long-serving superintendent Michael Strembitsky, remains the exemplar in North America.

Such fragmentation has not been evident in Britain where the governments of Margaret Thatcher and John Major have assembled the framework described at the

beginning of this paper, now implemented in England and Wales in more than 25,000 schools in over 100 local education authorities. There now appears to be a settlement along political lines on the major feature of the framework with parties vying in their promises of what proportion of a local education authority's school budget ought to be decentralized to schools. The current minimum of 85 percent is likely to rise to 90 percent, comparable to Victoria, or even to 95 percent in the change of government anticipated in the months ahead.¹ A leading British scholar on the

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¹ A Labor Government was elected on May 1, 1997 with a manifesto that assures the future of this approach to resource allocation.

economics and finance of school education, Rosalind Levacic, concludes that the values driving self-management, or local management as it is known in that country, are efficiency, effectiveness and choice (Levacic 1995, 19). She adds equity in setting criteria to judge the outcomes, nominating procedural equity ('consistent application of agreed rules') and distributive equity ('distribution of income and wealth and the means to obtaining these'), with the latter comprising horizontal equity ('every individual in like circumstances should receive the same treatment') and vertical equity ('individuals who have different needs should be treated in ways which compensate for these differences') (Levacic 1995, 30-32). According to Levacic, the bases for allocating resources to schools in a system of self-managing schools ought to reflect these criteria.

Principles Underpinning the School Global Budget in Victoria

Having determined that approximately 90 percent of the state's budget for schools would be allocated to schools through a mechanism known as the School Global Budget, the Kennett Government had to establish a basis for allocation. To assist in this task, a committee was set up to advise the Minister for Education. The recommendations in two reports (Education Committee 1994; Education Committee 1995) were accepted and implemented, with per-capita core funding supplemented by needs-based allocations for students at educational risk, students with disabilities and impairments, rurality and isolation, students with non-English-speaking backgrounds, and priority programs. Of particular interest are the principles that the committee adopted from the outset:

Having determined that approximately 90 percent of the state's budget for schools would be allocated to schools through a mechanism known as the School Global Budget, the Kennett Government had to establish a basis for allocation.

Pre-eminence of educational considerations

Determining what factors ought to be included in the construction of the School Global Budget and what ought to be their relative weighting are pre-eminently educational considerations.

Fairness

Schools with the same mix of learning needs should receive the same total of resources in the School Global Budget.

Transparency

The basis for allocations in the School Global Budget should be clear and readily understandable by all with an interest. The basis for the allocation of resources to each and every school should be made public.

Subsidiarity

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

schools are payment conduits.

Accountability

A school which receives resources because it has students with a certain mix of learning needs has the responsibility of providing programs to meet those needs, has the 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.

Strategic implementation

When new funding arrangements are indicated, they should be implemented progressively over several years to eliminate dramatic changes in the funding levels of schools from one year to another.

(Education Committee 1994, 1995)

The committee found that the size of the current differential in allocations to elementary and secondary schools in favor of the latter was not warranted if the first principle ('pre-eminence of educational considerations') was taken into account. Accordingly, it recommended that allocations reflect needs at different stages of schooling (P-4, 5-8, and 9-12) and continues its work that will lead to the submission of a final report in December 1996. In doing so, it is paying particular attention to research on school and classroom effectiveness, especially in the early elementary years for outcomes in literacy, and in the middle years, for issues associated with student alienation. It is likely that changes will be recommended in relativities for allocations at different levels of schooling. Having expressed a view that there is no justification for reducing levels of funding at the secondary level, it is evident that the principle of strategic implementation will be invoked and that efficiency will be a paramount consideration. This further work suggests that the principles of effectiveness and efficiency, implied in its work thus far, ought now to be made explicit, perhaps along the following lines:

Effectiveness

Relativities among allocations in the School Global Budget should reflect knowledge about school and classroom effectiveness.

Efficiency

Allocations in the School Global Budget should reflect knowledge about the most cost effective ways of achieving desired outcomes in schooling.

Adopting this view of efficiency acknowledges that efficiency is also affected by the state of knowledge on effectiveness and the rate of take up of this knowledge in schools. Hywel Thomas (1996), like Levacic, a leading British scholar on the economics and finance of education, contends that efficiency will be constrained by knowledge and the capacity to apply knowledge of what will yield a higher output and, for this and other reasons, suggests there are limits to efficiency in schools:

That this should be so turns primarily on the absence of a convincing or wholly adequate theory of learning—a prerequisite for specifying clear technical relationships as a predictive basis for the relationship between inputs and educational outcomes... There is the added difficulty that schools are multi-purpose organizations and the achievement of some goals are not always compatible with others. (Thomas 1996, 34-35)

...the elements of the framework that are shaping developments in Victoria are efficiency (and effectiveness), equity (both procedural and distributive), and liberty (choice).

He proposes that schools should seek to become more cost effective, an efficiency-related concept, engaging in cost-effectiveness analysis that 'compares alternative ways of achieving the same objective: the most cost effective will be the least costly of alternatives being compared, which is not necessarily the cheapest possible method of attaining the objective (Thomas 1996, 35).'

In general, the elements of the framework that are shaping developments in Victoria are efficiency (and effectiveness), equity (both procedural and distributive), and liberty (choice).

Practices

Applying these principles in Victoria is a complex process that has been under way since 1994. That it should be so complex and time-consuming is astonishing, given that the system of public education has been established for well over a century and that relatively sophisticated accounting and management information systems have been around for a decade or more. Particular attention is given here to two particular issues that have proved problematic in different settings. The first is how resources are allocated among elementary and secondary schools, given that perceived inequity has been a contentious matter. The second is how resources are allocated to meet the needs of students at educational risk, students with disabilities and impairments, or students from a non-English speaking background.

The best established practice in an international comparison is to be found in Edmonton, Alberta, Canada which in recent years has settled on a simple eight level approach to allocation of resources to schools, with relativities ranging from 1.00 for students in regular kindergarten, elementary, junior high, and senior high programs, to 6.34 for students who are hearing impaired, visually impaired, autistic, deaf and blind, or physically handicapped at the most severe level (these relativities are for 1993–94; there have been changes in recent years, including a higher relativity for senior high). Noteworthy is the equity in per student allocations for students at different levels of schooling, dating from historic collective agreements in the early 1970s that achieved parity in working conditions for teachers across the system, and simplicity of the approach, with most levels connected to different levels of resources for students with special learning needs.

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As noted at the outset, however, the Edmonton example, while long-standing, stable and successful, does not readily translate to much larger settings and greater diversity in student population. Approaches in Victoria (Australia) and England and Wales (Britain) are briefly summarized.

Australia (Victoria)

There are six elements in the approach to resource allocation in Victoria. Core funding accounts for about 90 percent of allocations to school global budgets, and this covers teaching and non-teaching staff costs, teaching and administrative support, salary-related and premises-related costs. The basis for allocation to schools has been strictly along elementary and secondary lines, the educational rationale for which has been challenged during the work of the Education Committee making recommendations to the Minister for Education. The Education Committee is currently working on a ‘stages of schooling’ approach, with three stages under consideration: Preparatory (Kindergarten) to Year 4, Years 5-8, and Years 9-12.

Four elements are concerned with special learning needs and are associated with efforts to develop school indices or classifications that take account of differences among students or schools. These four elements are titled special learning needs (students at educational risk), rurality and isolation, students with disabilities and impairments, and students from non-English speaking backgrounds. The most notable development in the last twelve months is in respect to the special learning needs element, with a shift away from a school index of need based on out-of-date census information that classified the school community rather than the characteristics of students, to a six-component index that includes measures of aboriginality, entitlement to special family financial support, family circumstances

(living with neither, one or two parents), language spoken at home, occupation of highest-earning breadwinner, and transience (mobility). The index of need now in place reflects actual student characteristics for those registered in the school in the year for which resources are to be allocated. Details of these developments are provided by Hill (1996).

Allocations for students with disabilities and impairments involve six levels in a classification of need. Students are classified in a school-based process of data collection involving teachers, parents, and specialists. The developmental process has revealed significant historical inequities in resource allocation, and the task now facing the Education Committee is establishing a fair and transparent approach that will be effective and efficient.

The sixth element in the allocation is for priority programs, essentially allocations that apply to particular school such as instrumental music that cannot be readily translated into a formula.

Britain

While there is no prescribed funding model in Britain, local education authorities must allocate at least 80 percent on the basis of student numbers, with no more than 5 percent for students with special educational needs. The so-called Age-Weighted Pupil Unit has been used almost universally, with most authorities now tying this closely to the Key Stages of Learning in the National Curriculum (infants up to age 7, juniors aged 7 to 11, pre-GCSE aged 11 to 14, preparation for GCSE, and equivalent vocational pathways aged 14 to 16). Disparities in funding between elementary and secondary are as much a concern as in Victoria. Efforts to develop a more educationally defensible approach to resource allocation, generally known as 'activity led funding,' have limitations for a range of

reasons, including complexity, prescriptiveness, and input orientation.

The three categories in the Victorian context of students at educational risk, students with disabilities and impairments, and students from a non-English speaking background, may be broadly matched to what are described in England as students with special educational needs (SEN). The chief indicator in England for 'at risk' students has been the number who are entitled to receive a free school meal, which for the most part is an indicator of socio-economic disadvantage. Some authorities incorporate measures of literacy and degrees of fluency in language. There is a clearly discernible effort to develop a more systematic approach to the identification of need, in much the same fashion as that underway in Victoria, with a so-called audit approach increasingly favored. This calls for data on the individual needs of students to be collected at the school level according to levels of need specified in a five-stage *Code of Practice*.

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The recently adopted *Code of Practice* is intended to cover the needs of about 20 percent of students in the school population who may be expected to have some special educational need during the course of their schooling. The *Code* specifies five stages for the identification and assessment of special education needs, with the first three carried out at the school level and

last two carried out at the authority level. Statements are issued for students with such needs, and these specify what programs and outcomes are expected, with appropriate accountability mechanisms at each point in the process.

Delegated budgets are only now being extended to special schools in England, with all to have global budgets by 1996-97. Special schools are currently funded on the basis of a specified number of 'places'

at a school, weighted for types of need. A feasibility study commissioned by the then Department of Education and Science (Touche Ross 1990) advocated three components in funding formulae for special schools in the future: a 'place' element, a pupil element, and a non-pupil element. This study recommended against categorization of individual students and called for high levels of transparency and flexibility in the use of funds, subject to accountability requirements as subsequently set out in the *Code of Practice*.

Outcomes

The most comprehensive research to date on the impact of these mechanisms has been done in Britain, where up to eight years' experience has been gained. Levacic (1995, 190) found that, of four criteria (effectiveness, efficiency, equity, and choice), 'cost-efficiency is the one for which there is most evidence that local management has achieved the aims set for it by government,' especially through the opportunity it provides for schools to purchase at a lower cost for a given quality or quantity than in the past, and by allowing resource mixes that were not possible or readily attainable under previous more centralized arrangements. She found evidence for effectiveness to be more tenuous, although the presumed link is through efficiency, making resources available to meet needs not able to be addressed previously.

In Britain, as elsewhere, there has been no research to determine the cause-and-effect relationship between self-management and discretionary use of resources and improved learning outcomes for students, although there is opinion to the effect that gains have been made. Bullock and Thomas (1994, 134-134) reported that an increasing number of principals believe there are benefits from local management for student learning. In responding to the statement that

'Children's learning is benefiting from LM,' the number of agreements among elementary principals increased from 30 percent in 1992 to 44 percent in 1992 to 47 percent in 1993. A similar pattern was evident among principals of secondary schools, increasing from 34 percent in 1991 to 46 percent in 1992 to 50 percent in 1993. Among both elementary and secondary principals, those in larger schools were more positive than those in smaller schools. For example, in 1993, among elementary principals, 41 percent of those in smaller schools agreed compared with 50 percent in larger schools; among secondary principals; 30 percent of those in smaller schools agreed compared to 80 percent of those in larger schools.

On other outcomes, while her research did not explicitly address these elements, Levacic cited the case study research of Ball (1993) and Bowe et al. (1994a, 1994b) in respect to distributive equity and choice:

... the indications are that socially disadvantaged parents are less able to avoid ineffective schools for their children. There is also ad hoc evidence that schools in socially deprived areas have suffered a loss of pupils to other schools... (Levacic 1995, 195)

Such effects raise the stakes in ensuring that all schools develop a capacity for school improvement, drawing on much sturdier 'theories of learning' derived from research on school and classroom effectiveness than have existed in the past. Also indicated is an approach to marketing that ensures all parents have information about schools that their children may attend.

The most sustained positive view in North America is presented in surveys of opinion in the Edmonton Public School District in Alberta, Canada, a city system of about 200 schools with 15 years

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experience. In the early stages, the focus of school-based management in Edmonton was the budget; hence its early designation as an initiative in school-based budgeting. All principals, teachers, students, system personnel and a representative sample of parents are surveyed annually. Brown's independent analysis of the evidence led him to observe that:

The Edmonton surveys reveal an increase in the form of satisfactions registered by large numbers of parents, students, and personnel working in schools and district office. These results appear stable, significant, and superior to those observed in general surveys conducted in the rest of Canada and United States. (Brown 1990, 247)

In Victoria, the Victorian Primary [Elementary] Principals Association, the Victorian Association of State Secondary Principals, the Department of Education, and the University of Melbourne have formed a consortium to monitor processes and outcomes over a five-year period to 1997. To date there have been 6 state-wide surveys of principals and 15 focused investigations by post-graduate research candidates at the University of Melbourne (Cooperative Research Project 1994, 1995a, 1995b, 1996, 1997). Benefits to date as reported by principals lie mainly in the area of planning and resource allocation, suggesting a contribution to cost-efficiency, but confidence that there will be an impact on outcomes for students is relatively high. In the most recent survey (Cooperative Research Project 1997), 85 percent of principals rated the realization of improved learning outcomes for students at 3 or higher on a 5 point scale (from 1 'low' to 5 'high'). A robust explanatory model has been derived from the data to show direct and indirect

effects of capacities nurtured by the reforms and perceived curriculum and learning outcomes.

The Decade Ahead

While there is much further developmental work and research to be undertaken in Victoria and elsewhere, nationally and internationally, it is clear that the broad framework described in this paper will stabilize and shape the management of public education, at least to the end of the decade.

One outcome of the reforms is likely to be increased economic awareness at the school level and, arguably, a contribution to theories of economics as applied to public education. While some academics and senior policy makers were familiar with the concepts, terms like efficiency and economics have

traditionally been anathema to those in schools. Indeed, it is astonishing that it is only now, in the late twentieth century, more than one hundred years after the formation of systems of public education, that the basis for allocating resources among schools has become transparent. In each setting, the concepts of efficiency, effectiveness and equity are likely to gain currency with the heightened focus on outcomes that arises from implementation of a curriculum and standards framework and accountability processes. It is likely that discourse on economics and education will start to converge after

decades of divergence.

Peter Drucker (1995) offers an insight that suggests that these developments in schools will contribute to theory in the economics of education. Drucker spells out the opportunities and the threats to school education in the 'knowledge society:'

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Paradoxically [in the knowledge society], this may not necessarily mean that the school as we know it will become more important. For in the knowledge society clearly more and more knowledge, and especially advanced knowledge, will be acquired well past the age of formal schooling, and increasingly, perhaps, in and through educational processes that do not center on the traditional school—for example, systematic continuing education offered at the place of employment. But at the same time, there is very little doubt that the performance of schools and the basic values of the schools will increasingly become of concern to society as a whole, rather than be considered ‘professional’ matters that can safely be left to the ‘educator.’ (Drucker 1995, 204-205)

He set six priority tasks for society in the 21st century, and three of these involve knowledge and education:

- We will have to think through *education*—its purpose, its value, its content. We will have to learn to define the *quality* of education and the *productivity* of education, to measure both and manage both (p. 236).
- We need systematic work on the *quality of knowledge* and the *productivity of knowledge*—neither even defined so far. On those two, the performance capacity, and perhaps even the survival of any organization in the knowledge society will increasingly come to depend (pp. 236-237).
- We need to develop an *economic theory* appropriate to the primacy of the world economy in which

knowledge has become the key economic resource and the dominant—and perhaps even the only—source of comparative advantage (p. 237).

Conclusion

These priority tasks in Drucker’s agenda for the twenty-first century place a high premium on the capacity to define, gather, and utilize information for education and schooling in the knowledge society. However, the groundwork has already been laid, and is especially evident in systems of education where there has been radical decentralization, as illustrated in Victoria, Australia, the largest anywhere in the public sector to have decentralized as much as 90 percent of resources in its school education budget, to be deployed at the local level within a comprehensive and coherent framework along the lines illustrated at the outset.

...Victoria, Australia, the largest anywhere in the public sector... decentralized as much as 90 percent of resources in its school education budget, to be deployed at the local level within a comprehensive and coherent framework...

Site-based management on this scale has forced the creation of resource allocation mechanisms that are defensible according to principles such as efficiency, effectiveness, fairness, transparency, subsidiarity, and accountability. When applied in allocations to meet special learning needs, data are complex and their collection and utilization a challenge from the outset. The development of a comprehensive computer-based management information system is

a prerequisite for success.

At the school level, these same principles ought to apply and, as at the system level, the achievement of efficiency and effectiveness is dependent on the level of knowledge about ‘what works’. The increasingly comprehensive knowledge base on school and classroom effectiveness and improvement must now shape practice at all levels. Given typical patterns of knowledge utilization, this provides a substantial agenda for professional development. Given that the

knowledge base is incomplete, each initiative in site-based management should have a research component to guide resource allocation and deployment in the manner illustrated in the development and refinement of the School Global Budget in Victoria (Hill 1996).

Under these circumstances, what is at first sight a technical reform in resource allocation is, in reality, a deeply complex transformation, underpinned by fundamental values, and driven by a rich array of data in every element of the management process at all levels of schooling. It is an exciting and challenging time for those with an interest in educational data.

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