The international trend of shifting educational management responsibilities to the schools themselves has exerted a powerful influence on education over the past 20 years. Many reasons have been given for the emergence of the self-managing school, and an analysis of the most important reasons are examined here. The paper focuses on education in Australia and on the effects of recession. It argues that politicians have used fiscal crises to divert funds from public education to increase funding for nongovernment schools. The text explores the purpose of resource allocation; examines the research surrounding the education-production function model; details the impact of the class-size debate; discusses the role of education funding in Australia with the idea of determining if such funding is driven by efficiency or by ideology; and provides two case studies, in Victoria, Australia, and in Auckland, New Zealand, to illustrate parts of the argument. It is suggested that there has been a deliberate attempt to ensure that the most advantaged students in Australia will stay that way, as illustrated by the fact that when retention rates for government school approached those of nongovernment schools, government funding decreased. (Contains 43 references and 9 tables.) (RJM)
Does money make a difference?

A paper presented as part of the symposium
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Does money make a difference?
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INTRODUCTION

The international trend towards devolution of many of the decisions and responsibilities for managing schools to the school itself, with the end point being self-managing, or self-governing public schools, has been perhaps the most powerful influence changing the understanding of education over the past two decades. Early instances come in the 1970s from Dade County in Florida and the Edmonton School District in Canada where many of the features of self-managing schools seen today were pioneered. More recent examples include Grant Maintained (GM) and Locally Managed (LM) Schools in the United Kingdom, the charter school movement in the United States and Schools of Tomorrow in New Zealand, which was an adaptation of the Canadian model that developed a national system of self-managing schools.

The move towards more self-managing schools, complete with school councils, school charters, school global budgets, quality assurance, school reviews, and the like, are also now a feature of most, if not all, Australian school systems. One only has to look at the changes occurring in Western Australia (Better Schools, 1987), New South Wales (Schools Renewal, 1989), Victoria (Schools of the Future, 1993), Tasmania (Directions for Education, 1996) and Queensland (Leading Schools, 1997) to see the breadth of these moves, and the rhetoric associated with the changes. In all of the instances, the titles (or slogans) signify change, and always with the underlying theme of improvement.

However, not only have countries such as those listed above embarked on educational change, but many countries in Asia, such as Hong Kong, Thailand, Malaysia, China and Korea, among others, have moved towards more responsibilities at the school level. But there are clear differences between the policies of the west and the policies of the east, with nothing being more obvious than the issue of resources. Whereas western countries have almost invariably brought in their self-management policies at a time of unprecedented education budget cut-backs (see Fine, 1993: 696; Booi, 1992:3; Smyth, 1993: 8) both Thailand and Malaysia have predicted substantial budgetary increases in the short and long term and a massive commitment to education as a central component of economic development.

This distinction is best summed up by two comments. On the one hand, Smyth (1993: 8) suggested that the underlying issue in the west WAS cutting back the cost of public education.

One of the noticeable (indeed, even remarkable, or is it?) features of the move towards the self-managing school phenomenon around the world, is its occurrence in contexts of unprecedented education budget cut-backs. Whenever there is a break out of self-managing schools, the notion is used as a weapon by which to achieve the alleged ‘efficiencies’ and ‘downsizing’ of education.

On the other hand, the Minister of Education of Thailand (Rangsitpol, 1996: 3), at a recent UNESCO Conference on Re-Engineering Education, identified his government’s ‘policy to expand compulsory education from 6 years to 9 years and eventually 12 years.’ The self-managing school concept was to be introduced not with cuts, but a 22.5% increase in the
education budget from 1996 to 1997. The Asian economic crash may impact on the reality of this boost, but at least it was a stated goal. In almost every western society, the argument was made that the quality of education could be improved (and expected), even with substantial decreases in government financial support for schools.

Many reasons have been given for the emergence of the self-managing school, but perhaps the most comprehensive description has been provided by Brian Caldwell, a leading proponent of devolution, who argued:

Forces which have shaped current and emerging patterns of school management include a concern for efficiency in the management of public education, effects of the recession and financial crisis, complexity in the provision of education, empowerment of teachers and parents, the need for flexibility and responsiveness, the search for school effectiveness and school improvement, interest in choice and market forces in schooling, the politics of education, the establishment of new frameworks for industrial relations and the emergence of a national imperative.

Caldwell (1993: xiii)

Half a decade later, we are starting to be in a position to see which of these factors seems to have had priority. This paper will argue that 'the effects of the recession and the financial crisis' has been used as a smoke screen by politicians to divert funds from public education and, in Australia at least, this diversion has been accompanied by increasing funds heading towards non-government schools, led by the notion that schools, like most other public services in the 1990s, should become privatised, or at least, 'user-pays'. It will conclude that this is tantamount to an abdication, on the part of Australian governments, from their responsibility to provide a quality education for all their citizens.

THE PURPOSE OF RESOURCE ALLOCATION

It is important to understand that resource allocation has two central concerns, namely, efficiency and equity. In the first instance, it is critical that we have an efficient use of resources so that we get the best value for the money being allocated to education, particularly when there are so many others in the community demanding services that require government funding. In the second instance, it is important that the money be used in such a way as to give every student an equal chance of succeeding.

However, sometimes the notions of efficiency and equity can be in conflict with each other. Some would argue that the most efficient use of resources occurs when those most capable are allocated higher proportions of resources to ensure that they achieve their full potential. However, this would usually mean that those that are already the most advantaged in our society get additional resources to the detriment of those who have had various economic or social disadvantages to overcome. However, others would argue that an equitable allocation of funds would mean that those most disadvantaged should receive higher levels of funding to try and bring them up to the levels of those with family or social advantages.

A recent example that might be considered an example of the former of these positions was the Commonwealth Minister of Education's recent announcement that literacy funds would be tied to achievement. Thus the schools that were most successful in achieving literacy targets would get more funding at the expense of schools that were less capable.
The students who were unable to do well, for whatever reason would have fewer resources available to them to address the problem.

Peter Mortimore (1996: 18), in his concluding remarks at the *Schools of the Third Millennium* conference in Melbourne, made these cautionary statements:

Some of the lessons, [from school effectiveness and improvement research] however, are less obvious and turn on the overall educational goals of societies and on whether policy makers wish to give priority to the education of a small elite or to the majority, which will include the disadvantaged. If the priority is to sustain an elite, then it needs to be recognised that only in exceptional cases will disadvantaged students - sponsored by particularly effective schools - win through...However, if the aim is to improve the lot of the majority and to lift overall standards in that quantum leap, then ways need to be sought in which highly effective compensating mechanisms can be created.

...A policy of lifting overall standards, however, means ensuring that educational spending is fairly distributed and, in some cases, directed towards those schools which serve the most disadvantaged students instead of the seemingly inevitable situation whereby the most resources tend to end up at the call of the most advantaged.

It could be argued that in a devolved system, such as those being developed in Australia, the education authority and the school have responsibilities for both efficiency and equity, but that these will operate differently at each level. Perhaps the major concern at the authority level is to ensure equity across the system (which may mean differential distribution of funds to schools with different circumstances) and to monitor the efficiency of the resource allocation at the school (to check that the money has been spent in accordance with its charter or goals). On the other hand, perhaps the major concern at the school level is to ensure efficiency of resource allocation (so that appropriate funds go to the various curriculum and administrative programs) and to monitor equity within the school (by making sure that all students experience success in these programs).

THE EDUCATION PRODUCTION FUNCTION RESEARCH

In terms of total allocation of funds to schools, perhaps the most cited school effectiveness research is that concerned with the education production function model. Although there had been universal agreement on the need for improvement in student outcomes, there is far less agreement on how this would be achieved. The production function studies attempted to derive a model for the relationship between educational inputs and outcomes. School input characteristics such as teacher salary and qualifications, facilities, teacher-pupil ratio and per pupil expenditure, and pupil characteristics such as socioeconomic status and ability were compared with outcome measures such as achievement on standardised tests, patterns of educational futures and adult employment earnings.

Perhaps the most influential studies were those conducted by Eric Hanushek (1981, 1986, 1989, 1991). Some educators had argued that, to improve the outcomes of students, more money was required by the school system. Hanushek’s studies led to him concluding that there was little consistent relationship between educational expenditure and pupil achievement (Hanushek, 1986:1161). His argument is summed up by the statement ‘Enormous increases in the resources devoted to US schools have not yielded improvements in student performance’ (Hanushek, 1995: 60). This set of studies has
allowed many governments to argue the case that they could increase the quality of student outcomes and decrease the expenditure on education simultaneously.

Yet Hanushek's work has not been received with universal acclaim. Critics have attacked not only the methodology used to analyse the data, and the logic of his conclusions, but also the philosophy underpinning his argument. Molnar (1995: 58) makes the point:

Undeterred by their inability over the last decade to predict whether the stock market will go up or come down - a subject germane to their discipline - market economists have increasingly taken up the issue of school reform (for example, Hanushek et al. 1994, Moe and Chubb 1990). Armed with their crude models of human behavior, a childlike faith in economic 'laws' and a narrow ideology that bends and shapes all relationships into a form that suits their econo-centric logic, these economists now presume to tell us whether or not money matters in the education of our young.

A re-analysis of Hanushek's data (Hedges, Laine & Greenwald, 1994) suggested that the conclusions drawn by Hanushek were not as watertight as first thought. Hedges et al. used more sophisticated analysis mechanisms on Hanushek's data and concluded that there was 'strong support for at least some positive effects of resource inputs and little support for the existence of negative effects...the pattern of effects is most persuasive for global resource variables (PPE and teacher experience) the median effects are positive for most resource variables, with the clear exception of teacher education' (Hedges et al, 1994: 13).

In more recent exchanges through the journal Educational Leadership, Hanushek (1995: 60) argues that 'Economists view schooling as an investment. The time and money spent on an individual's education are reworded by better jobs, higher earnings, improved health, enhanced parenting skills, and so forth' yet wishes to align the funding of education to student performance. He argues the case for merit pay, for charter schools and magnet schools, without recognising the inherent contradiction in his argument, that things like improved health, enhanced parenting skills and even higher earnings and better jobs, are not necessarily linked with performance on a narrow range of academic tests, which are invariably the government means of identifying achievement. How many industrialists worked their way up from the shop floor, how many movie stars or sports stars left school early, how many excellent parents failed to achieve on standardised tests? Perhaps it is something other than that which is normally measured that makes people successful, no matter what their chosen field will be.

A number of responses to Hanushek's recent confirmation of his views came quickly. Greenwald et al (1996: 78) identified the changing realities for teachers:

- More than 20 percent of children today are living in poverty...
- Approximately 25 percent of all children live in single-parent households...
- The percentage of mothers in the workforce has doubled during the last generation

In Australia, data supports the view that such changes are multinational. In just the time it has taken children to travel from pre-school to their final year of high school (that is, since 1984), the only group of people who have improved their position financially are the top 20% of income earners. Tables 1 and 2, together, show us that average weekly household
income has increased by 58% over the period 1984 to 1997, but during this time a compact between government, unions and employers, called ‘The Accord’ effectively lowered the salaries of wage earners, while not controlling those of their bosses. The increase of 66% in mean weekly expenditure per household detailed in table 2 more accurately reflects the impact of inflation over that time.

Table 1: Mean household weekly income

<table>
<thead>
<tr>
<th>Mean Household weekly Income</th>
<th>Income 1984</th>
<th>Income 1997</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>lowest 20% of Households</td>
<td>$116</td>
<td>$152</td>
<td>31%</td>
</tr>
<tr>
<td>2nd lowest 20%</td>
<td>$238</td>
<td>$354</td>
<td>49%</td>
</tr>
<tr>
<td>3rd lowest 20%</td>
<td>$389</td>
<td>$592</td>
<td>52%</td>
</tr>
<tr>
<td>4th lowest 20%</td>
<td>$569</td>
<td>$909</td>
<td>60%</td>
</tr>
<tr>
<td>top 20% of households</td>
<td>$957</td>
<td>$1609</td>
<td>68%</td>
</tr>
<tr>
<td>Average across Australia</td>
<td>$454</td>
<td>$723</td>
<td>59%</td>
</tr>
</tbody>
</table>

Table 2: Mean household weekly expenditure

<table>
<thead>
<tr>
<th>Mean Household weekly Income and Expenditure</th>
<th>Expenditure 1984</th>
<th>Expenditure 1997</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>lowest 20% of Households</td>
<td>$164</td>
<td>$303</td>
<td>85%</td>
</tr>
<tr>
<td>2nd lowest 20%</td>
<td>$262</td>
<td>$426</td>
<td>63%</td>
</tr>
<tr>
<td>3rd lowest 20%</td>
<td>$347</td>
<td>$573</td>
<td>65%</td>
</tr>
<tr>
<td>4th lowest 20%</td>
<td>$428</td>
<td>$714</td>
<td>67%</td>
</tr>
<tr>
<td>top 20% of households</td>
<td>$607</td>
<td>$994</td>
<td>64%</td>
</tr>
<tr>
<td>Average across Australia</td>
<td>$362</td>
<td>$602</td>
<td>66%</td>
</tr>
</tbody>
</table>

The tables indicate that 80% of the Australian population are worse off than they were 15 years ago, but those at the bottom end of the spectrum are considerably worse off than they ever have been before. In the early 1980s Australia had a Prime Minister who declared ‘By the year 2000 no Australian child will be living in poverty’. By the late 1990s more than 30% of Australian children do, more than double the number than when his claim was made. Table 3 indicates the proportion of families now in low income homes that have dependent children.
Table 3: Dependent children in low income homes

<table>
<thead>
<tr>
<th>% of families with dependent children in the lowest 40% of income categories</th>
<th>Australia 1984</th>
<th>Australia 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>7%</td>
<td>17%</td>
</tr>
</tbody>
</table>

It is parents and teachers, not economists, who have to deal with this reality, and have to do it on a daily basis as the user-pays mentality kicks in. The difficulty with a user pays system is that the people who most need the service can’t afford to pay and those that can afford to pay don’t need the service. The user pays mentality leads to a further decline in public services because if the only people who require a service are those that cannot afford to use them, then the service itself becomes unviable and is likely to attract less government funding on the basis that no-one uses the service.

Bracey (1995: 65) also queried Hanushek’s analysis that the funding of education had increased substantially over the last 25 years. He provided some telling reasons why test scores may have stayed ‘flat’ during any period of increased funding (even though he argued they had not):

...from 1965, when average spending per pupil (in 1990 dollars) was $2,611 to 1990, when spending was $5,251 per pupil...nearly 30 percent of the increase went into special education, while school breakfast and lunch programs accounted for 10 percent, and transportation accounted for 5 percent. Three percent went for programs to prevent students from dropping out, nearly 30 percent of the increase went into creating smaller classes and another 21 percent went into salary increases - which means that salaries grew less than 1 percent a year.

Bracey (1995: 67)

As well as concerns with Hanushek’s findings, there is other evidence to suggest that the level of expenditure on education does have an effect on the numbers of students that remain in the system, how well they do, and their aspirations for the future, but that some economists use the statistics to ‘prove’ that it doesn’t. The report Debunking Myths About Public Schools (Association of Californian School Administrators, 1996) argued that there ‘is a direct cause and effect relationship between student achievement and the amount of money states spend per pupil.’ It argued that in lower spending states, few pupils see further education beyond school as an option, whereas higher spending states encourage more students to undertake the Scholastic Aptitude Test (SAT), which determines who will go onto the most prestigious colleges. As Bracey, 1995: 68) points out, those who wish to use the statistics in another way focus on mean SAT scores. The high spending states do not have better mean scores than the lower spending states, so the argument that increased funding levels do not equate with increased achievement levels is used. Yet, if one state has less than ten percent of its students sitting the test (ie the top ten percent) and the other state has most (up to ninety percent) of its students sitting the test, it would be expected that the state with the smaller number of people sitting would perform better, purely from a statistical point of view.

If we combine this perspective with additional information that is emerging from the Goals 2000 research, we can start to see a pattern that suggests that the level of resourcing is not as irrelevant as some politicians and economists might have us believe.
Tables 4 and 5 provide a comparison between the student outcomes in reading and mathematics at grade four level and the percentage of students undertaking the SAT tests (and their average score) for the states spending highest and lowest amounts of money per pupil.

**Table 4: Per pupil expenditure and student outcomes: Highest Spending US States**

<table>
<thead>
<tr>
<th>State</th>
<th>Per pupil school expenditure 1994-95</th>
<th>% of public school grade 4 students ‘proficient’ or ‘advanced’ in reading</th>
<th>% of public school grade 4 students ‘proficient’ or ‘advanced’ in mathematics</th>
<th>% of HS seniors taking 1995 SAT tests</th>
<th>Average SAT score for state</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jersey</td>
<td>$9889</td>
<td>29%</td>
<td>25%</td>
<td>47%</td>
<td>898</td>
</tr>
<tr>
<td>Connecticut</td>
<td>$8604</td>
<td>33%</td>
<td>25%</td>
<td>81%</td>
<td>908</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>$7348</td>
<td>27%</td>
<td>14%</td>
<td>70%</td>
<td>888</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>$6940</td>
<td>31%</td>
<td>24%</td>
<td>80%</td>
<td>907</td>
</tr>
<tr>
<td>Maryland</td>
<td>$6720</td>
<td>22%</td>
<td>19%</td>
<td>64%</td>
<td>909</td>
</tr>
</tbody>
</table>

The tables indicate that although there is not a clear trend related to student funding and proficiency in basic skills, or even between the levels of funding and SAT scores, there does appear to be a clear trend between student funding and their expectations. Certainly...
substantially more students in the higher spending states see themselves as going on to a quality tertiary education (as shown by the proportion of them sitting the SAT test). Again the issue is raised as to whether school effectiveness has a social justice component or not. If education is provided in such a way as to encourage most of the students undertaking it to aspire to higher education, then the higher spending US states would seem to be more effective.

They suggest that finance is not the only factor at play when considering how well students achieve, particularly at the junior ends of the school. Variations may occur for a variety of other reasons, including the mix of students within the system, the quality and support of the teaching staff, the priorities given to various curriculum areas by the system and the individual schools, and other social and welfare options available to students who are not doing well. One would need to analyse the demographics of each of the states to get a better picture. To argue that funding levels have no impact is tantamount to misrepresentation.

For instance, it is clear that the five highest spending states significantly outperform the five lowest spending states, with the exception of North Dakota. However the Goals 2000 Report shows that North Dakota also outperforms the other poorly funded states in terms of many factors that might support student learning. Students in North Dakota were generally better prepared for school (measured by the smaller proportion of babies born with low birth weight, higher proportion of mothers having access to prenatal care and higher proportion of children in preschool), there is a higher percentage of students completing a high school qualification, higher levels of parental involvement and better student behaviour. It might be argued that in this case, the general social system overcame some of the difficulties of low funding, but where the social system did not provide the same levels of support, as in the other states, children suffered.

McGaw (1994) argued that many of the recent restructuring activities accompanied by simultaneous cutbacks in education indicate a lack of faith in the impact of resources, as expressed by Hanushek. This may have resulted from the substantially increased dollars per student allocated to schools in the 1970s and 1980s without there being any systematic research to indicate the benefits of those increased resources. He suggested that the current policies of resource reductions 'are based, not on the evidence that there will be no negative effects, but on lack of evidence to the contrary' (McGaw, 1994:10). Later McGaw (1997: 6-7) went further:

...What the critics who first claimed that standards were falling now demand, in the face of evidence that they have not fallen, is that standards should be rising as a consequence of increased funding and in response to increasing social and economic demands on education.

The absence of any substantial evidence of improvement is soon enough interpreted as the presence of evidence of no improvement. The onus of proof is placed firmly on the education providers by the critics. Clare and Johnston (1993), for example, claim that there is a serious problem with literacy levels in schools. They do not so much seek to prove that there is a problem as to establish that no one has proved that there is not one. They support what now appears to be the conventional, public wisdom, that there were no benefits of this period of increased expenditure, a view reinforced by a long-established tendency of each generation to conclude that the next is doing less well in schooling, and in most other ways, than it and its predecessors did...

From the claim that the increased resources of the 1970s and 1980s produced no benefits, the conclusion is then reached that resource levels could now be reduced without detriment.
Yet it could be equally well argued that the substantial changes in our society, such as family breakdowns, changes in family finances, changing patterns of employment and increased availability of entertainment (TV, computer games) that are considered by some to be anti-educational; together with the impact of changes in education provision, including integrating children with special needs into regular classrooms, changed school management patterns and changed funding arrangements, could well have led to severely decreased performance by students. To have maintained tests results in the face of all this change, might be considered a miracle.

THE CLASS SIZE DEBATE

Perhaps the major outcome in any downsizing of funds to education is an increase in the student-teacher ratio. In Australia, between 70% and 80% of total education funding is spent on teacher salaries. With less funds to spend an inevitable result is an increase in class sizes. The class size debate is something that has been around in Australia for more than twenty years since the study by Glass and Smith (1978) used a meta-analysis to try and tease out the results of previously contradictory research results. Larkin and Keeves (1984: 77-81) reassessed later work by Glass et al (1982) and described a series of propositions that had an impact on the class size debate, including:

- classroom practices did not vary greatly with class size (but needed to)
- more able students were placed in larger classes (thus changing the relationship between class size and achievement)
- classroom processes that changed with class size influenced student attitude
- strong favourable attitudes enhanced achievement levels
- smaller classes are associated with more equal achievement outcomes

Evidence is now available from research such as Project STAR (Student Teacher Achievement Ratio study in Tennessee) that decreasing class sizes does have a significant effect on student learning, particularly when class size is reduced in the early years. Achilles (1996: 76), a principal investigator of Project STAR, responded to Hanushek's (1995: 61) claim that 'small classes at best make a discernible difference in kindergarten but not at later primary grades' by arguing that 'policy decisions must rely on substantial primary research, not on ideology, supposition, weak interpretations, or secondary reviews.' He argued that not only are there initial benefits, but that 'in 8th grade, students who had small classes in grades K-3 remain significantly ahead of those who were in regular classes' (Achilles, 1996:77).

This is corroborated by other research, such as that by the National Association of Head Teachers with the Centre for Teacher and School Development at the School of Education at the University of Nottingham which concluded the research evidence indicates that:

- small classes (eg, of around 15 pupils) can result in increased learning gains in the early years of schooling as measured by standardised literacy and numeracy tests;
• these effects are most marked with pupils in the very early years (KS1);

• the advantages gained from being taught in small classes in the early years of schooling persist as a lasting benefit into the later years;

• studies examining student attitudes, self-concept and motivation have found the most positive effects in small classes in the primary years;

• small classes can have a beneficial effect on the academic achievement of children from low income families and those learning English as a second language;

• small classes with regular one-to-one tutoring have been found to have an advantageous effect on SEN pupils' acquisition of literacy and numeracy skills;

• the benefits to be gained from reducing class sizes is unlikely to be marked unless teachers change their style of teaching to exploit the opportunities of smaller groups;

• planned reductions in class size should be accompanied by a review of teaching methods, classroom management and in-service training in order to capitalise on the opportunity to enhance student learning;

• large classes and the consequent overcrowding of classrooms are associated with lower student achievement measured by reading proficiency and mathematics competency tests.

(The National Association of Headteachers, 1996)

They also argued there was evidence which shows that rising class sizes and the overcrowding of classroom space have an adverse impact on:

• the morale, self-esteem and motivation of both pupils and their teachers and the quality of their lives in school;

• the capacity of schools as a result of the overcrowding of specialist teaching areas to deliver the National Curriculum;

• the classroom practice of teachers by causing them to restrict the range of teaching methods they deploy, and to narrow the curriculum they teach;

• the ability of schools to cater adequately for children with SEN as a result of a reduction in the non-contact time teachers need to develop pastoral relationships with their pupils, liaise with professional colleagues and hold meetings with parents;

• pupil behaviour in schools.

(The National Association of Headteachers, 1996)
A recent meta-analysis of the international literature (Mortimore, 1995) reviewed research on the relationship between class size and student outcomes from the United Kingdom, the United States and Canada and has recognised, as does Slavin in the USA, that the issue of class size, in itself, will not make a substantial difference to student achievement. In addition, the research so far has shown that the costs of reducing class sizes are high, in comparison to the improvements gained. Larkin and Keeves (1984:2) suggested that lowering the class size from 25 to 20 would produce an achievement gain of approximately 2 percentile points, but that staff salary costs would increase dramatically. Mortimore argued that the possibility of using the money on other programs, such as reading recovery or individual tuition were considered more likely to have ‘better pay-offs’. However, the balance of evidence did lead Mortimore to conclude ‘the evidence justifies, wherever possible, putting reception and Year 1 pupils in smaller classes, even if this means paying for this with larger classes for older pupils’ (Mortimore, 1995: 11).

What the research is suggesting is that a move to smaller classes can readily be justified on educational grounds, so that funding becomes the issue. The research on the relationship between class size and student outcomes is now sufficiently strong enough for education systems such as California (as one of 11 American states) to identify goals such as reducing the class sizes of junior level students to one teacher for every twenty students. School communities have responded to this goal (and the accompanying government funding of about 80% of the cost) so quickly that some school districts are approaching the achievement of this goal within two years of it being established.

EDUCATION FUNDING IN AUSTRALIA: COST-EFFECTIVENESS OR IDEOLOGY?

Australia is an interesting place to test out the argument that relates funding to achievement as it is a country that has one of the highest percentages of privately schooled students in the world. Further, and almost unique in western countries, students who attend private education facilities are funded liberally from the public purse.

The ideology of both Federal and State governments and their commitment to the privatisation concept have had a real impact on the funding of schools, particularly in Victoria. The election of conservative governments, both federally and in most states of Australia has seen a substantial separation between the support provided for government schools and that provided for non government schools. Recent decisions by both Commonwealth and state governments push the privatisation/choice issue further than ever before. Now, for every dollar spent on a government school child, an average of 71 cents is spent by government on a non-government school child. The Senate Inquiry into the Private and Commercial Funding of Government Schools, Not a Level Playing Field (Senate Employment, Education and Training References Committee, 1997: 24-25) argued that there was now evidence to suggest that the decline in government funding to government schools now meant that schools had to rely on privately raised funds for essential school services.

Non-government schools have always been supported to some extent by governments in Australia, but the level of support has escalated rapidly in the past two decades. Table 6 indicates the changes in government outlays to both government and non-government schools over a 20 year period.

The table indicates that whereas total government funding (from both Commonwealth and state governments) to government schools increased by 49.2 percent over twenty years, total government funding to non-government schools increased by 171 percent. During this period the proportion of students in non-government schools in Australia increased from 21.5% in 1974 of students to 28.5% in 1994. The increase in funding could
not be justified by the numbers alone. It should be pointed out that these increases have occurred during terms by both sides of the political spectrum.

We need to remember that in Australia, despite the fact that less than thirty percent of students attend non-government schools, seven of the last ten Prime Ministers came from that sector, and three came from government schools (and one of those was in the job for less than two months). More than fifty percent of current leaders of state political parties also came from non-government schooling. Over the past twenty years both Liberal (conservative) and Labor (union oriented) governments have seen the downsizing of government education at a time when there was increasing support for non-government schools.

Table 6: Mean Government funding of schools per pupil

<table>
<thead>
<tr>
<th></th>
<th>Government schools</th>
<th>Non-government schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>74/75 $</td>
<td>94/95 $</td>
</tr>
<tr>
<td>State Government funds</td>
<td>2478</td>
<td>3543</td>
</tr>
<tr>
<td>Commonwealth Government funds</td>
<td>238</td>
<td>510</td>
</tr>
<tr>
<td>Total</td>
<td>2716</td>
<td>4053</td>
</tr>
</tbody>
</table>

Table 7 indicates the changing proportions of government and private funding for non-government schools over the same period of time.

Table 7: Proportions of government and private funding of non-government schools per pupil

<table>
<thead>
<tr>
<th></th>
<th>Primary Schools</th>
<th>Secondary schools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Catholic Schools</strong></td>
<td>1974</td>
<td>1994</td>
</tr>
<tr>
<td>Private funds</td>
<td>51%</td>
<td>22%</td>
</tr>
<tr>
<td>Federal and State Government</td>
<td>48%</td>
<td>78%</td>
</tr>
<tr>
<td><strong>Independent Schools</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private funds</td>
<td>75%</td>
<td>46%</td>
</tr>
<tr>
<td>Federal and State Government</td>
<td>25%</td>
<td>54%</td>
</tr>
</tbody>
</table>

Table 7 clearly demonstrates the increasing support for non-government schools, in some cases high fee-paying independent schools, where a 13 year school career might cost the parent nearly $120,000 in school fees (Milburn, 1998: 6). The total differential in fees means that the non-government system is able to provide the best teachers, wonderful conditions and generally lower class sizes than can the best government schools. At a time when the total resources to education have been stalled, or severely pruned, the movement of resources from the government system where more than two out of three children are
provided with their education to the non-government system, where less than one third of the children are educated, is a clear indication of a government attempt to shift resources from the poorest in our communities to the richest.

At a time when governments take up the cry of Eric Hanushek, that money makes no difference, the retention rates, as shown in table 8, and the success rates of children in non-government schools clearly indicate the opposite is true. Just as the figures from the United States demonstrate, the students who go to schools where the most money, per pupil, is spent, see themselves as continuing their education. The figures also clearly demonstrate (particularly for 1991 where the retention rate indicates that more children finished school in a non-government school than started there) how parents who really value their children’s success, but don’t see the government system providing the best option for that success, will move their child into a non-government school for the later years of the child’s school career.

| Table 8: School retention rates for government, catholic and independent schools |
|---------------------------------|--------|--------|--------|
| Government Schools              | 38.9%  | 66.9%  | 67.2%  |
| Catholic Schools                | 45.6%  | 71.9%  | 75.3%  |
| Independent Schools             | 89.2%  | 100.8% | 95.6%  |
| All Australian Schools          | 34.8%  | 71.3%  | 72.2%  |

EDUCATION FUNDING IN VICTORIA

There is now evidence, nationally, that drops in government funding have been accompanied by a rapidly increasing need for schools to raise funds themselves. Parents are taking more and more responsibility for funding the education of their children, despite the continuing rhetoric that government education is free. A study of 640 low-income families conducted by the Smith Family in four Australian states, Queensland, South Australia, New South Wales and Victoria (Griffith, 1997: 38) found that secondary school parents paid in excess of $3000 per year to meet annual education expenses, including uniforms, excursions, fees, and the like.

Victoria is a useful case study to look at the impact of funding on education as it is possibly the state in Australia that has adopted the marketisation/privatisation perspective to its greatest extent. It has also been the state that has overseen the greatest changes in both management structures and drop in public funding in the country. Victoria has been the Australian state to suffer most from funding reductions to public education over the past few years. Whereas, on average across Australia, government expenditure on schools increased by around 9.4% from 1992-3 to 1995-6, schools in Victoria suffered a decline of about 5.2%. This trend suggests that the Victorian government accepted the Hanushek premise that student outcomes could be improved simultaneously with a drop in funding.

Table 9 indicates that the proportion of state funds expended on school education has dropped substantially more than the comparatively fewer students in schools might have
predicted. Whereas student numbers dropped by 13.1% as a proportion of the Victorian population between 1984 and 1994, the expenditure on education dropped by 20%, over 50% more than what the numbers might have suggested.

Table 9: School funding as a proportion of state expenditure

<table>
<thead>
<tr>
<th></th>
<th>1984</th>
<th>1994</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>primary and secondary school students as a percentage of total Victorian population</td>
<td>19.9%</td>
<td>17.3%</td>
<td>-13.1%</td>
</tr>
<tr>
<td>school expenditure as a percentage of total state expenditure</td>
<td>20.5%</td>
<td>16.1%</td>
<td>-20.0%</td>
</tr>
</tbody>
</table>

A study conducted by the Victorian Labor Party (Harland, 1997), which consolidated the non-salary income and expenditure of 237 Victorian schools, found that on average $388 per student was raised locally for direct school costs, through income streams such as fees, levies, charges for equipment and materials, supporting school camps and excursions and through a variety of fund raising activities. This represented about 34% of the non-teacher-salary component of the school’s income. This percentage of funds raised locally substantially agreed with the earlier findings of Townsend (1996), who also indicated that the raising of funds varied dramatically from school to school. His data indicated that the school most capable of raising funds locally predicted that it was able to raise more than $2613 per student compared to $46 per student for the one least capable.

Specific examples provide evidence of how the reliance on locally raised funds in public schools creates inequalities for children. In two small rural schools in different regions (97 and 93 students), one indicated that it could raise an average $316 per pupil per year locally and the second only $43. Since staffing allocations and other factors would provide approximately the same grant from the government, one school would have an additional $26,000 to spend on school projects. Similarly, in two larger suburban schools (564 and 588 students), one indicated that it could raise an average of $359 per pupil per year and the second $33. Again, if other factors were roughly equal, one school had $180,000 more to allocate per year than the other. The ability to purchase extra computers, library books, and the like, varied greatly from one school to the other.

The evidence suggests that the restructuring activity has allowed some schools to increase their capabilities when it comes to raising funds, but for others the struggle is becoming more and more difficult. It has always been the case that levels of local fundraising in government schools will differ because of the socio-economic area in which the school is located, but now that there are diminishing government funds, the reliance on locally raised funds to provide a quality program is much greater. If we assume the 1995 level of government funding as $4434 per pupil (identified by the Victorian Department of Education) and the average locally raised funds were $388 per pupil (identified in the Harland study), then around 8.75% of the total funding for Victorian public school education is now raised locally. This compares somewhat unfavourably with the United Kingdom, where Bullock and Thomas (1997: 78) reported ‘...the total amount added by parents and fund-raising activities remains small, however, HMI observing that the total represented less than one percent of the total budget share'.

16 15
The impact of funding reductions on Victorian government schools can be seen by the conflict between what is advertised by the government as being education ‘facts’ and the reality in schools. The government recently advertised that it was spending an average of $5280 per student on government school education and that student-teacher ratios were 15.2 and better than the national average. However, data about class sizes and government funding in primary schools, recently released by the Department, indicate a different picture. For the 1269 primary schools (not counting P-12), the average funding is $3655 per student and for the 527 schools in excess of 250 students, the average funding is $3534 per pupil, only 3 receive more than the $5280 per student, and these are the most disadvantaged, in terms of NESB and low income children. In these schools, whereas nearly 60% of schools have some classes above 30, less than 10% have any classes under 20. The student-teacher ratio also takes into account 348 schools where total enrolments are less than 100 and most classes are small. Eighty percent of these schools have classes less than 20 and only 3% of them have classes over 30.

At a time when early literacy and numeracy concerns take up much of primary school teachers’ time, and considering the evidence discussed above, the schools themselves are seriously underfunded. The government advertising should be seen for what it is: an attempt to convince the majority of Victorian adults (who have no child in a government school) that the government is spending adequate funds on public education, therefore any deficiencies in the system must be due to weaknesses at individual schools. The release of class size information for primary schools was accompanied by the statement that ‘the principals decide on how large classes should be’ in an attempt to deflect blame for classes over 30 onto schools and principals (who now have to choose between class sizes around 30, with specialist teachers, or lower class sizes with no specialists). In all of its official releases, which included the statement that primary schools are staffed on a minimum of one teacher to every 21 children, no mention was made of Department policy, which only provides one classroom for every 28 students.

The balance of evidence suggests that the vast majority of Victorian schools are struggling to raise sufficient funds to compensate for the decrease in government funding, thus creating increased pressures on principals and school councils to ensure that families pay fees, even if they are struggling to make ends meet. Expressed concerns about the level of resource allocation, identified by principals, teachers, parents and school councillors alike, have been met by the Department with what might be considered as stony silence. The response to concerns about the level of resources by the Cooperative Research Project, a consortium of the University of Melbourne, the two principal associations and the Department, in both 1996 and 1997 has been dismissed as ‘...the arguably unrealistic expectation that there would be more resources’. (Cooperative Research Project, 1996:8; 1997:8)

Perhaps we can make some comparisons between what is happening in Australia, and most particularly in Victoria, with the trend emerging in New Zealand, another country that has attempted the self-management of schools but has a longer history of the reform. On the one hand we see increasing expenses for New Zealand parents as government moves the cost of education from public funds to individual families: ‘Elementary school parents’ estimates given in the NZCER surveys of their spending on their children’s education show dramatic increases: from an average of $187 in 1991, $304 in 1993 to $491 in 1996....Government funding has not kept pace with rising costs’ (Wylie, 1997:3). On the other hand we also see that over the course of the self-management experiment, New Zealand has moved from being a nation with one of the best literacy rates to one that has the greatest gap between its advantaged and disadvantaged students.
Reading has been a source of national pride since 1970, when New Zealand students finished first in an international test...The 1991 survey by the International Association for the Evaluation of Educational Achievement found that many children - especially Maoris and other minorities did poorly. New Zealand had the largest gap between majority and minority children of any participating country.

(Colvin, 1997: 11)

Is this one outcome from the movement towards the privatisation of education? One of the features of school reform on an international basis is that, when a reform measure is introduced (almost regardless of the reform) not all schools are improved. If we focus our attention and resources on some schools, they will improve, but if we try to improve all schools at once, only some will succeed, as Hill and Crevola (1997: 2) point out:

Improving the quality of teaching and learning in schools is not an easy matter. There have been many attempts to raise standards by one means of another, but reformers have invariably found that it is difficult to improve learning in a sustained way across more than a handful of schools at any one time.

If the economic rationalists would have their way, they would have us believe that money makes no difference to the level of achievement. Bracey (1995: 67) takes this argument to its logical extent:

[Imagine] funding at zero dollars. Surely achievement would plummet. On the other hand, if we spent $35,000 per pupil - the average teacher’s salary today - we could hire a tutor for each child. In this case achievement would soar as tutoring has been found to increase achievement by two standard deviations over usual classroom instruction.

That brings us to the situation where some argue that there is a connection between funding and achievement, but that it is too expensive to contemplate. However, there is now enough demographic research to indicate that the dollars spent on education in the early years will save multiple dollars later in a person’s life. Hodgkinson (1990: 27) argued that in the United States, ‘we spend in general fifteen percent of our money on prevention programs and eighty five percent on rather ineffectual ‘cures' in all social service areas’. He argued that there was a link between a person’s educational background and their later situation with regard to health, family stability, crime, transport and housing. Extra dollars spent on education could save between six and eight dollars in government services provided later in life. He argued:

It is cheaper, easier and more effective to:

- Keep people from falling into poverty in the first place rather than to get them out later.
- Keep all kinds of families intact rather than arrange adoption and foster care facilities later.
- Keep students performing at grade level by ‘front loading’ resources toward those most at risk, rather than telling them at the end of third grade that they failed when no effort was made to provide the resources that could have meant success.
• Keep people out of prisons rather than trying to rehabilitate them later.

• Keep low income people in an expanding supply of affordable housing rather than increasing the number of homeless families, often with children and one or more full-time workers.

• Keep mass transit so that low income workers can continue to have jobs, housing and some freedom.

• Keep kids from getting sick (or hungry) rather than providing massive programs for curing (or feeding) them after the damage has been done.

(Hodkinson, 1990:27)

If we are to diagnose and intervene in children's problems and concerns, then there is a need for appropriately trained professionals at the school level, both to identify the problem and to be able to take the time necessary to alleviate the problem without taking the child away from school. This might take increased spending on education, but provides a benefit to society later on.

Finally, we then have the group that argue that smaller class sizes (resulting from increased funding) are only useful to those at the lower grades, especially for those that come from disadvantaged backgrounds) and will have no impact on those in later years of school. However, from New Zealand, we might have at least one example that demonstrates quite clearly that money (and class size) does make a difference, and that it doesn't matter if the people come from the poor end of town, or when we first get to work with them. Dilworth School in Auckland, is an example of what might occur if saving money was not the object. It caters only to poor children and enables selected children to have either a seven or nine year scholarship to an excellent education.

DILWORTH SCHOOL, AUCKLAND NEW ZEALAND

The Dilworth school was founded using funds from the Will of James Dilworth, who died in 1894. The principal of the school (Maclean, 1998a: 1) reports that the goal of the Trust that oversees the will is to raise and educate the sons of people in 'straitened circumstances'. Dilworth scholarships are for 5 (starting in year 7) or 7 (starting in year 5) years and selection is based on financial and family circumstances and the ability of a boarding school education to develop 'the potential of the whole person'. Academic ability is not a significant selection criterion. The school has an annual operating budget of $8M or about $15,500 for each of its 530 students (full time boarders). Each year the Trust is able to accommodate around 75 boys, from the 600-700 applicants. The Trust is now investigating the possibility of opening a girls’ school.

The school has maximum class sizes of 24 and its current student/teacher ratio is 12/1. The ethnic breakdown is European 84%, Maori 12% and Other 4%. This reflects New Zealand society, together with the Maori and Pacific Islander reluctance to 'give up' their sons to boarding school life. There is an extensive guidance and counselling service available to both the boys and their families. Most students stay until the end of year 12 and around 80% would go on to year 13. Of the leavers after year 12, all would go to further education or work - or both - and NO STUDENT leaves without something very specific to go to - even if the school has to find the job for him.

If the economic rationalists are right, or if those who argue that small class sizes are only effective in the early years are right, then increasing the level of funding to these
students would have little or no effect. However, the principal of the school reports (Maclean, 1998b: 1) "...our current year 12s were significantly below national averages when they entered the school five years ago. At the end of 1997 in the national Certificate Exams, as a group they were 12% ahead of the national average for their best four subjects."

The evidence that funding (and the good teaching, the broad curriculum and extracurricular program and pastoral care, all of which have been restricted in public schools by decreasing the funding base) goes beyond simple academic achievement. Dilworth graduates make the most of their good fortune. There are many successful old boys: 'barristers and solicitors, and a couple of judges, a Governor General (1980s) and a Prime Minister (early 1990s), four cabinet ministers, musicians, artists and plenty of managing directors of big companies' (Maclean 1998b: 2).

On all the stereotypes, these boys should have not succeeded. They came from the wrong end of town, their family background was less than supportive. They came into the system late in their school careers. Yet the combination of a substantial funding base, together with a powerful will to succeed by the school and its workers, led to what can only be considered as outstanding results. It is very difficult to argue a case from a single example, but this one seems powerful enough to make a point. The real problem is that it is unlikely that there are many Dilworth Schools, anywhere in the world to broaden the data base. Perhaps if there were, we would not even have to argue the case.

CONCLUSION

The evidence suggests is that there has been a deliberate attempt to ensure that the most advantaged in Australia will stay that way. As soon as the retention rates for Australian government schools approached those of non-government schools, government funds started to dry up, but only for public schools. Anil Bordia (1996), at a recent UNESCO Conference, argued 'The world has enough resources for human need, but not enough for human greed'. Galbraith (1992) argues we have lost the commitment to the common good. We no longer see beyond our own needs to the necessity of providing a basic standard of living for everyone. Many of the recent decisions related to the privatisation of education, which have moved this community service into the realm of 'user-pays', have already led to the demise of many government schools, and various programs within schools, with the possible endpoint being the demise of the government school system altogether.

Hughes (1996: 1) argued 'We may be tempted to ask why we should use a business concept in the reform of education. Business has not been uniformly successful, even in surviving. Of the top 100 firms on the business magazine Fortune list of 1970, one third had gone out of business by 1990.' Are we to accept the possibility that one third of our schools will not be in existence in twenty years time? What are the implications of this for communities and individual students? Western governments have been seduced by the market view of the world and have lost their prime focus, namely, to provide universal human services to whole populations. Townsend (1998:204) argued:

The rhetoric says that one could choose a school just as easily as one could choose a car. However, in the real world choice is limited to the people who have resources. The poor have as much chance of choosing to send their child to a high fee paying school (either government or non-government) as they have of choosing a Rolls Royce as their preferred method of transport. The truth is that some people will send their child to the nearest school and will
use public transport, or walk, not because they want to, but because they have neither the resources, nor the understanding, not to do so.

Just like purchasing a car, education costs money. What has happened in the last decade has been a move to shift the cost of public education onto the parents of the children of the future. The question hangs in the air: if money doesn’t make a difference why are governments in Australia giving extra money to one group of schools at the expense of the public school system?

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