School Autonomy Fails to Increase Student Achievement and Undermines Collaboration between Schools

A Submission to the Australian Senate Education Committee Inquiry on Teaching and Learning

Save Our Schools

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Summary

This submission focuses on the terms of reference for the inquiry relating to the structure and governance of school administration and its impact on teaching and learning.

Save Our Schools believes that the claims made about positive effects of greater school autonomy on student achievement are greatly exaggerated and ignore the weight of evidence from research studies that it has little to no effect on student results and can lead to greater inequality and social segregation.

In particular, greater school autonomy, together with other factors such as the publication of school results and school league tables, undermines collaboration between schools and the spread of best practice in teaching and learning. The incentives created by greater school autonomy for schools to look to themselves tend to inhibit the achievement of the stated goals of the program.

Evidence presented by governments in support of their claim that greater school autonomy increases student achievement is generally very weak, highly selective and misleading. The most recent research evidence on the success of school autonomy in budgeting and staffing in improving student achievement is far from compelling. Some studies show positive effects, but the mass of evidence from recent research studies in several countries is that it has little impact on student achievement (a detailed review of this evidence is provided in Attachments A & C to this submission). The summary results are:

- New Zealand – no overall improvement;
- Charter schools in the United States – mixed evidence; some better, some worse and some with no change. The major national studies show no overall improvement;
- Free schools in Sweden – mixed evidence;
- Foundation schools in England – no improvement;
- Academies in England – mixed evidence.

OECD research has found that in the vast majority of countries participating in PISA 2009, including in Australia, there was no significant difference between student achievement in schools with a high degree of autonomy in hiring teachers and over the school budget and in schools with lower autonomy.

Greater school autonomy in England, New Zealand and the United States does not appear to have lead to more innovation in teaching and curriculum. It has undermined collaboration and the spread of best practice in teaching and learning between schools as each school becomes an isolated silo competing with others for market position.

Increased school autonomy in New Zealand, the United States, Sweden and England has led to greater social segregation between schools and, in some cases, greater inequality in resourcing and school outcomes.

Australian governments should support greater collaboration and networks between schools to counter the incentives created by school autonomy for schools to see themselves, and operate, in isolation from other schools. Save Our Schools recommends that the Federal Government negotiate a new partnership agreement with state and territory governments to provide funding support for more collaboration between schools to share best practice in teaching and learning. The National Partnership on Empowering Local Schools should be complemented by a National Partnership on Supporting Collaboration between Schools.

Submission

This submission addresses part (b) of the terms of reference to the Senate Education Committee Inquiry on Teaching and Learning, namely, "the structure and governance of school administration - local and central - and its impact on teaching and learning".

Save Our Schools believes that the claims made about positive effects of greater school autonomy on student achievement are greatly exaggerated and ignore the weight of evidence from research studies that it has little to no effect on student results and can lead to greater inequality and social segregation. A particular concern is that greater school autonomy, together with other factors such as the publication of school results and school league tables, undermines collaboration between schools and the spread of best practice in teaching and learning. The incentives created by greater school autonomy for schools to look to themselves tend to inhibit the achievement of the stated goals of the program.

School autonomy is generally referred to as the extent of school-based decision making and is contrasted with central office and regional decision making. The extent of school autonomy can be considered in relation to:

- Staff recruitment
- School budget/finance
- Curriculum and teaching
- Governance/local community participation in decision-making

Increasing school autonomy is a major policy priority of all Australian governments. Recent policy initiatives focus mainly on increased power for principals in the recruitment of staff and in budgetary decisions about centrally provided funding. There is very little focus on greater school autonomy in relation to curriculum; indeed, it could be said that the introduction of the national curriculum is a move to greater centralisation. Similarly, little attention is being given to increasing parent and teacher participation in decision-making at the school level. The move to greater school autonomy is essentially about more principal autonomy in decision-making, rather than increased community participation in policy decision-making at the school level.

It is claimed by the Federal and other Australian governments that greater school (principal) autonomy in budgeting and staffing will increase student achievement. However, the evidence presented by governments in support of this claim is generally very weak, highly selective and misleading. In particular, government ministers and officials frequently resort to citing one or two studies supporting their case and fail to take account of the overall research evidence.

The most recent research evidence on the success of school autonomy in budgeting and staffing in improving student achievement is far from compelling. Some studies show positive effects, but the mass of evidence from the major research studies is that it has little impact on student achievement (a detailed review of this evidence is provided in Attachment A to this submission).

New Zealand, for example, has the most decentralized school system in the western world. It is unique in that government schools are stand-alone schools with control over budgets and staffing. Yet, the head of research at the NZ Council for Educational Research, Dr. Cathy Wylie, says that there has not been any significant gains in student achievement, new

approaches to learning, or greater equality of educational opportunity since this radical path was taken in 1989.

In a new book called *Vital Connections* published in November last year, Dr. Wylie says that the past 23 years have demonstrated the limitations of making each school a separate island [a review of the book is provided as Attachment B to this submission). New Zealand created a system of fragmented schools which emphasised the "self" part of self-management, of putting one's own school first and not being part of an overall national system. Dr. Wylie says that this competition often diverted school leaders and trustees from a focus on learning, and added obstacles to improvement for schools that found themselves at the bottom of the local competition market.

She says that promising educational advances were ignored as schools focused on administering property and finances. Managing property and finance were the central focus of principals and boards of trustees under self-management and dominated school life. The primary role of the principal became a business manager rather than an education leader.

There has been no improvement in overall education outcomes as a result of the introduction of school autonomy. Large gaps in student achievement between rich and poor remain. In low income schools, secondary qualifications rates actually fell. Dr. Wylie concludes that New Zealand now has a substantial body of robust analysis that shows that it needs to rethink the self-managing model in order to create a more dynamic learning system.

Charter schools in the United States are another form of school autonomy. They are independent public schools. The weight of evidence from the most sophisticated studies of charter schools is that there is no difference in results between charter schools and traditional public schools (see Attachments A & C). Indeed, some studies show that charter schools do worse. Nor is there any evidence of more teaching or curriculum innovation in charter schools.

Then there are "free schools" in Sweden which are privately-operated schools that receive the same level of government funding as municipal schools. They have been operating since 1992 and many are run by for-profit companies. The research evidence on these schools is mixed – some showing better performance by free schools and some showing better performance by municipal public schools (see Attachment A).

Academies and foundation schools in England are publicly-funded schools that have greater freedom over how to allocate their budgets and over staffing than more traditionally-governed state schools. The expectation is that these schools will use their greater freedom and independence to lead and manage more effectively and more innovatively so that student outcomes improve.

Research evidence on foundation schools shows no increase in student achievement while some studies of academies show improvement and others no improvement (see Attachment A). A major review of academies published in January 2013 by the Academies Commission made the following observation about the impact of academies on student results:

...the evidence considered by the Commission does not suggest that improvement across all academies has been strong enough to transform the life chances of children from the poorest families. There have been some stunning successes among individual sponsored academies and academy chains, and these have raised

expectations of what can be achieved even in the most deprived areas. But it is increasingly clear that academy status alone is not a panacea for improvement. [Academies Commission 2013, p.4]

It concluded that "greater independence and freedom are not sufficient in themselves to secure improvement" [p 41].

Another source of evidence on school autonomy is the OECD's Programme for International Student Assessment (PISA) for 15 year-old students. The OECD's own analysis of the results from PISA 2009 found that in the vast majority of participating countries, including Australia, there was no significant difference in student achievement between schools with a high degree of autonomy in hiring teachers and over the school budget and schools with lower autonomy [OECD 2010, Table IV.2.4c, p. 169].

The OECD study concluded emphatically that "...greater responsibility in managing resources appears to be unrelated to a school system's overall student performance" [p. 41] and that "...school autonomy in resource allocation is not related to performance at the system level" [Note7, p. 86].

The national report on Australia's PISA results also shows virtually no statistical difference in student results between NSW, with lower autonomy for government schools, and Victoria which has a higher degree of autonomy [Thompson et. al. 2010, p. 274]. Moreover, achievement by 15 year-olds in private schools in Australia, which generally have a higher degree of school autonomy than government schools, is no higher than in the more centralized government school system when the different socio-economic composition of the sectors is taken into account. In particular, exclusive private schools, which are largely autonomous, do no better than their high socio-economic status government school counterparts which have considerably less autonomy.

The only evidence that the Federal Minister cites is cross-country evidence from PISA that the combination of greater school autonomy and the publication of individual school results leads to higher student achievement. However, the impact is trivial, amounting to only 2.6 points on the PISA scale where one year's learning is equivalent to 35-40 points [OECD 2010, p. 42]. That is, it amounts to less than 10 per cent of the average increase in student achievement over one year.

Some cross-country studies of earlier PISA results show a positive impact on student achievement [for example, Hanushek & Woessmann 2007; Hanushek et.al. 2011]. However, there are potential pitfalls associated with these studies because it is extremely difficult to disentangle various national policy, institutional and cultural factors influencing education outcomes from the impact of school autonomy [Hanushek et.al. 2011: 3, 5]. The authors state that "imperfect measurement of specific institutions lead us to be cautious in the interpretation" of the results [24-25].

Other researchers have noted that the findings of cross-country studies are likely to be affected by a host of unmeasured country-specific factors which could influence the magnitude and even the direction of an observed relationship between achievement and school-based characteristics, such as the extent of school autonomy [Hamilton 2010: 10; see also Attachment D]. For these reasons, many researchers prefer to focus on longitudinal analysis of specific countries or regions and these studies tend to show that greater school autonomy has little to no effect on student results.

Other evidence for school autonomy is even less compelling. For example, a McKinsey Corporation report often cited by education officials is little more than a collection of opinions and anecdotes [Mourshed et. al 2010]. The report has been strongly criticised for its lack of consideration of research studies [Coffield 2012]

A recent World Bank review of research studies says that there is no convincing evidence of the effects of school autonomy in Australia, New Zealand and the UK reforms on student achievement [Bruns et. al. 2011, p. 11]. The review focuses on studies of school autonomy in developing countries and notes that there are few rigorous studies available and that the evidence on impact on student test scores is mixed [pp. 12, 103, 106, 131].

The Federal Department of Education recently published the first report in its so-called independent evaluation of the Government's school autonomy program [Caldwell 2012] (a review of the evaluation report is provided as Attachment D to this submission). The report purports to be a literature review of academic research on school autonomy. However, it relies heavily on dated research, much of which is also ambiguous about the impact of school autonomy. It ignores the latest PISA study on school autonomy as well as a large number of recent studies from several countries which show little impact on student achievement.

The Federal Minister for Education also claims that a school autonomy pilot project in NSW schools showed improvements in school results. In making this claim, the Minister relies on anecdotal statements by principals without any statistical backing. The evaluation report on the project clearly states that no statistical evidence of increased student results exists [NSW Department of Education and Communities 2011, pp. 8, 10].

There can be little wonder than many principals in the pilot project were supportive. The 47 schools received $20 million in additional funding to participate in the project over the two years, that is, an average of $425,000 per school. A further $3.4 million was provided in central office support for the project. The $20 million enabled the appointment of 289 additional part- and full-time staff (principals, deputy-principals, teachers, support and administrative staff) in the 47 schools, an average of over 6 additional staff per school.

This additional funding was much higher than what is being provided through the Federal Government's Empowering Local Schools program under which schools will get start up grants of $45,000-$50,000. If indeed there was any improvement in student achievement in the schools participating in the NSW project it may have had more to do with the increased funding and extra staff.

Thus, the evidence that school autonomy leads to increased student achievement is nowhere near as compelling as the Federal Government and other Australian governments claim. The weight of evidence from around the world and in Australia suggests that school autonomy does not lead to better school results. At best, the evidence is mixed as the Productivity Commission concluded in its recent report on the schools workforce [Productivity Commission 2012, p. 246].

Apart from the lack of compelling evidence that increased school autonomy leads to increased student achievement, there is also little evidence that it leads to more innovation in teaching and curriculum. Certainly, the long experience with school autonomy in New Zealand and with charter schools in the United States shows no increase in innovation in

teaching and learning (see Attachment A). The recent report of the Academies Commission found that academy schools have brought little innovation in curriculum and teaching

However, there is extensive research evidence that increased school autonomy leads to greater social segregation between schools (see Attachment A). Studies show that this has occurred in New Zealand, the United States, Sweden and England. In some cases, it has also led greater inequality in resourcing and school outcomes.

For example, the recent report on academy schools in England received substantial evidence that many academies use their increased freedom to engage in selective admissions - that is, selecting students deemed to have abilities and/or with dispositions beneficial to the school and excluding those deemed not to have them. It said that such practices "may entrench rather than mitigate social inequalities" [p.63]. It found evidence of significantly higher rates of exclusion within academies than in traditional state schools of students with special needs, students eligible for free meals and students from some Black and ethnic minority groups.

The widespread failure of school autonomy to deliver better student outcomes and reduce learning gaps reflects a failure of ideology. Greater school autonomy is designed to extend the role of the market in education. The idea is that giving schools greater powers of budgeting and staffing will enable them to compete more effectively and that competition will drive improvements in student results. However, numerous studies in many countries show that it has failed in this project and, instead, has exacerbated social segregation and inequality in school outcomes.

The essence of this failure lies in seeing competition as the (cheap) alternative to devoting adequate resources – funding, teachers and facilities – to lifting the performance of low achieving students. It also reflects a failure to understand the importance of partnerships and collaboration in education between system and schools, and between schools, to improving teaching and learning.

School autonomy, together with other so-called reforms such as the publication of school results and school league tables, encourages schools to see themselves as isolated silos rather than as part of a system working together to achieve particular education goals. It undermines collaboration between schools.

This is the strong conclusion of recent analyses of the experience with school autonomy in New Zealand and England.

In her book on the New Zealand experience, Dr. Wylie says that the lack of connections between schools under school autonomy "made and still makes it difficult to harness and use all the knowledge and actions needed to keep developing the quality of New Zealand education [p.114]. She recommends fundamental changes to the system to build greater collaboration. She argues that stronger connections and better support across the system are vital, not only to make gains in student achievement for all but to get much better value for the education dollar. Schools need the opportunity to learn from their peers in other schools. She recommends a return to more central and regional support for schools. Her proposals include a national network of 20 education authorities throughout the country, with responsibility for schools in their region and charged with ensuring schools and teachers are supported and challenged and can learn from each other.

Increasing collaboration between schools is also a key recommendation of the recent Academies Commission report. It called for a better balance between independence and inter-dependence:

> The Commission believes that a fully academised system is best seen as a community of schools, each independent but working best if connected to the rest of the system. These schools would work with one another to accelerate school improvement, in particular the quality of teaching and its impact on learning and the achievements of children and young people. Collaboration across this national community of schools should enable a balance to be struck between independence and interdependence, with the clear aim of serving children and young people well. [p.5]

The report said that a more systematic approach to supporting collaboration between schools is needed. It recommended a more intensive drive to develop professional connections, collaborative activity and learning, both within and across schools, to generate fundamental change across the school system [p.6]. It said that the Office for Standards in Education (Ofsted) should support a school-led, collaborative approach to systemic improvement and that the UK Department of Education should trial a number of school-led excellence networks designed to develop capacity and ensure support for all schools that need it [p.10].

It is unlikely that Australian governments will step back from their programs to increase greater school autonomy, despite the lack of evidence to support them. However, they should acknowledge the threat that these programs pose to continuing collaboration between schools and the sharing of good practice in teaching and learning. At the very least, governments should also introduce programs that support greater collaboration and build networks between schools to counter the incentives created by school autonomy for schools to see themselves, and operate, in isolation from other schools.

Save Our Schools recommends that the Federal Government should negotiate a new partnership agreement with state and territory governments to provide funding to support greater collaboration between schools to share best practice in teaching and learning. The National Partnership on Empowering Local Schools should be complemented by a National Partnership on Supporting Collaboration between Schools.

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(Additional references are provided in the attachments to this submission)

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Attachment A

SAVE OUR SCHOOLS

Education Research Brief

School Autonomy is Not the Success Claimed

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Key Points

1. A range of forms of school autonomy have been implemented around the world in recent decades. They include stand-alone government schools in New Zealand, charter schools in the United States, publicly-funded private 'free schools' in Sweden and foundation schools and academies in England. All involve greater control for principals over budgeting and staffing and some include greater control over curriculum and assessment.

2. The evidence that greater school autonomy leads to improved student results is not compelling. Some studies show strong positive effects, but the mass of evidence from recent research studies in several countries is that it has little impact on student achievement. The summary results are:
   - New Zealand – no overall improvement;
   - Charter schools – mixed evidence; some better, some worse and some with no change. The major national studies show no overall improvement;
   - Free schools – mixed evidence;
   - Foundation schools – no improvement;
   - Academies – mixed evidence.

3. OECD research has found that in the vast majority of countries participating in PISA 2009, including in Australia, there was no significant difference between student achievement in schools with a high degree of autonomy in hiring teachers and over the school budget and in schools with lower autonomy.

4. Some sophisticated cross-country studies using PISA data have found significant positive effects of school autonomy on student achievement while others have not. However, it is more difficult to attribute causation in such studies because of the variety of educational, institutional and social/cultural factors affecting education outcomes in different countries which cannot be fully accounted for in the statistical analysis employed by these types of studies.

5. The evidence cited by the Federal Government and other Australian governments that greater school autonomy in budgeting and staffing increases student achievement is very weak, highly selective and misleading.

6. Greater school autonomy in New Zealand and the United States does not appear to have lead to more innovation in teaching and curriculum.

7. Increased school autonomy in New Zealand, the United States, Sweden and England has led to greater social segregation between schools and, in some cases, greater inequality in resourcing and school outcomes.

8. These results suggest that the Federal Government's $500 million school autonomy program to be implemented over the next 7 years is unlikely to deliver improved student results. The funding would be more effectively spent on implementing the recommendations of the Gonski review to directly target increased funding to reducing the effects of disadvantage in education.

Introduction

The Federal Government has struck several agreements in recent months for the implementation of its school autonomy program called Empowering Local Schools [DEEWR]. It is providing $69 million over the next two years to about 1000 government and non-government schools across Australia to implement greater school autonomy. It has committed $475 million over the next seven years to the program.

Principals will have greater control over their school budgets, staffing mix and the hiring of staff to a much greater extent than at present. Schools will receive start-up grants of $40,000 to $50,000 to assist in managing their increased responsibilities. Each school will also receive $3,500 for training of principals in their new responsibilities.

Agreements have been negotiated with the ACT, NSW, South Australian and Tasmanian governments for government, Catholic and Independent schools and with Catholic and Independent school authorities in Queensland and Western Australia. An agreement has also been struck with the Victorian Government which already has the most devolved school management system in Australia. The Western Australian Government has recently established its own program of independent public schools. The Queensland Government also intends to introduce independent public schools.

The extent of increased school autonomy under these agreements varies between jurisdictions. For example, in NSW principals will have control over 70 per cent of their budgets while in the ACT principals will have full control over their staffing budget. NSW principals will have greater decision-making responsibilities for purchasing and maintenance which principals in several other states already have.

The case for greater school autonomy is that it will increase student outcomes. The Federal Minister for Education, Peter Garrett, says:

> We are doing it because we know it works. Evidence from overseas and pilot programs here in NSW have confirmed that when principals feel empowered and the local community is more involved, student attendance and results often improve. [Joint Media Release, 16 May 2012]
>
> Evidence both here and internationally has also found that greater school autonomy is strongly linked with improved student results, behaviour and attendance. [Joint Media Release, 26 April 2012]
>
> We know from international experience that schools with more autonomy tend to show improved results and this has been replicated in the NSW trial. [Media Release, 4 November 2011]

Despite the Minister's claims, the most recent research evidence on the success of school autonomy in budgeting and staffing in improving student achievement is far from compelling. The evidence comes from New Zealand's 20-year experiment with decentralized schools, charter schools in the United States, 'free' schools in Sweden, academies and foundation schools in England, and studies based on results from the OECD's Programme for International Students Assessments (PISA).

New Zealand

New Zealand has had the most decentralized school system in the western world since 1989 when it was introduced as the Tomorrow's Schools program. The New Zealand school system is unique in that government schools are stand alone schools. Yet, the head researcher at the NZ Council for Educational Research, Cathy Wylie, says that there have not been any

significant gains in student achievement and that there have been some significant costs with school autonomy.

> We remain unique in having stand-alone schools that operate on their own, without being part of a school district, or a local authority. And we cannot point to any great system-wide gains in student performance or learning, new approaches to learning, or greater equality of educational opportunity that have clearly arisen from taking the radical path. [Wylie 2009: 4]

It is also notable that one of the costs of school autonomy was that the hours principals worked soared.

> The hours our principals spend on administration remain the highest in international comparisons; and while many principals have relished much about their decision making, the price has been a growing sense that this has come at the cost of their ability to focus on educational leadership. [Wylie 2009: 12]

The picture Wylie presents of the state of New Zealand education after 20 years of school autonomy is not encouraging:

> We do not think about ways in which we can enlarge a sense of responsibility to the system as a whole, beyond one's own school. We do not ask principals to work together on thorny local issues....We do not ensure that enrolment schemes are equitable, and do not exacerbate social segregation; we do not think and plan systematically about how to provide educational opportunities equitably within local areas. Few schools are sharing resources; we are still often trying, and failing, to provide the variety or depth of curriculum paths that are needed. Relations between schools continue to have a competitive undertow which too often results in resources allocated to the "bright and shiny" rather than useful change to teaching and learning. [Wylie 2009: 21]

In another paper, Wylie stated that school autonomy in New Zealand has made it much harder to tackle systemic issues such as disparities in education achievement and in school capacity and capability [Wylie 2007]. It seems, she said, that "school self-management was an end in itself, the main point of New Zealand education, rather than student learning" [3] and "....it is also clear now that on its own, it is unlikely to make much difference to the quality of education [23].

Eminent professor of education, John Hattie, says that by empowering 2800 schools to be "mini-markets", much wastage has occurred [Hattie 2009a]. Further, he says it could well have exacerbated disparity of achievement:

> It is true that New Zealand has one of the greatest spread of outcomes between the brightest and the struggling. It is possible that this could well have been maintained, or even enhanced, by Tomorrow's Schools, which has resulted in schools pitting themselves against each other in competition for resources (especially students), and has led to many succeeding and too many failing. [Hattie 2009b: 123]

Wylie also concludes that New Zealand schools have become more stratified:

> The system was more stratified: enrolments increased in the high socio-economic decile schools, and fell in the lowest socioeconomic decile schools, making it harder for those who served the most educationally needy students....No progress had been made in reducing the number of low achievers, or closing the gaps between students related to differences in their home resources. [Wylie 2010: 18]

Charter schools

Another form of school autonomy is charter schools in the United States. The large majority of charter schools are able to hire and dismiss staff, determine staff working conditions, determine their own curriculum and teaching methods, and control their budgets.

After 20 years of charter schools it can be said that they have not been a marked success. The weight of evidence from the most sophisticated studies of charter schools in the United States is that they are not more successful than traditional public schools in terms of student achievement [Cobbold 2012; Di Carlo 2011]. For example, the most extensive study to date was published by the Centre for Research on Education Outcomes at Stanford University [CREDO 2009]. It found that the gains in maths results for nearly half of all charter schools (46%) were no different from those in comparable traditional public schools while over one third (37%) of charter schools had significantly worse results. Only 17% of charter schools had significantly higher maths results than students in comparable traditional public schools.

A large study of middle school charters commissioned by the US Department of Education's Institute for Education Sciences also found no difference in student achievement between charter schools and traditional public schools [Gleason et.al. 2010].

This has been the conclusion also of several meta-analyses of studies of charter schools. The most recent meta-analysis was published late last year by the US Centre for Reinventing Public Education [Betts & Tang 2011; see also Betts & Atkinson 2012]. It included 25 studies of charter school performance and found "compelling evidence that charters under-perform traditional public schools in some locations, grades, and subjects, and out-perform traditional public schools in other locations, grades, and subjects" [1].

An earlier meta-analysis which synthesized the evidence across 47 studies concluded that charter schools perform similarly to traditional public schools [Miron et.al. 2008]. Overall, 19 studies had positive findings, 12 studies had mixed findings, and 16 had negative findings. The mean impact rating for charter schools was indistinguishable from zero.

While the latest evidence from US national studies generally shows that charter schools do not achieve any better results than traditional schools, some recent sophisticated studies of charter schools in Boston and New York City have found gains by charter schools compared to traditional public schools [Abdulkadiroglu et.al. 2009, Hoxby et.al. 2009; CREDO 2010]. However, the gains are over-stated in two of these studies. The Boston study only included high achieving charter schools and these comprise only 7 out of 29 charter schools in the city at the time [Jennings 2009]. The Hoxby New York study contained methodological problems which when corrected resulted in much lower gains [Reardon 2009]. The size of the gains by charter schools in the CREDO study was relatively small.

Numerous studies have now been done on the impact of charter schools on student achievement in many states, cities and school districts across the US. Charter schools in some locations have done better than traditional public schools, in others they have done worse and in others no better. The overview of a recent special issue of the journal *Economics of Education Review* on the charter school experience concluded:

> ... the existing literature is inconclusive about the aggregate effect charter schools have on student achievement. Some studies in some locations find charters outperform traditional public schools, some find they are no different than the traditional ones, and some find they perform worse. [Toma & Zimmer 2012: 209]

As Research Professor of Education at New York University, Diane Ravitch, recently said:

> The results are in: Some charters get high test scores, some get low scores, most are no different in test scores from public schools. The wonder is that there are so many low-performing and mediocre

> charters when they have everything the reform movement demands: no unions, no tenure, no seniority, performance pay, and plenty of uncertified or alternatively certified teachers. [Ravitch 2012]

Nor is there evidence of more teaching and curriculum innovation in charter schools. Another recent paper in the *Economics of Education Review* [Preston et.al. 2012] found that charter schools are not more innovative than traditional public schools. It confirmed the findings of several earlier studies [for example, Lubienski 2003].

Studies also show that charter schools tend to segregate students by race and class. For example, a recent study found that charter schools are more racially isolated than traditional public schools in virtually every state and large metropolitan area in the US [Frankenberg et.al. 2011]. The study analysed the relationship between charter schools and segregation across 40 US states, the District of Columbia, and several dozen metropolitan areas with large enrolments of charter school students. In some regions, white students are overrepresented in charter schools while in other charter schools Black and Hispanic students have little exposure to white students. It also found that while data about the extent to which charter schools serve low-income and English Language Learners is incomplete, it does suggest that a large proportion of charter schools do not enrol these students.

A study of charter schools operated by education management organisations found that they were strongly segregated by race and income compared with the public school district in which the charter school was located [Miron et.al. 2010]. They also enrolled lower proportions of disability students and English language learners. While charter schools have rapidly grown, the strong pattern of segregation found in 2001 was virtually unchanged through to 2007.

Sweden's free schools

Another source of evidence on school autonomy comes from the experience with so-called "free schools" in Sweden, which are being introduced in England under the Conservative and Liberal Democrat government coalition. Free schools are privately-operated schools which receive the same level of government funding as municipal schools in Sweden. They have been operating since 1992 and many are run by for-profit companies.

The evidence from studies of free schools in Sweden is also mixed – some show better performance by free schools and some show better performance by municipal schools. However, the studies of free schools are plagued by methodological and data problems. A recent review of the Swedish studies by Rebecca Allen from the Institute of Education at the University of London found that the benefits were small, largely concentrated on children from highly educated families and do not persist through to the end of school. It concluded:

> The econometric evidence on the impact of the reforms suggests that, so far, Swedish pupils do not appear to be harmed by the competition from private schools, but the new schools have not yet transformed educational attainment in Sweden. [Allen 2010a: 7]

The most recent Swedish study shows a small positive impact of competition from free schools on student achievement, but that it is not sustained over the longer term [Bohlmark & Lindahl 2008]. It found that a higher share of free school enrolments was associated with a small improvement student achievement in grade 9. However, there was no impact on results at the upper secondary level, university attainment or years of schooling. Thus, the initial positive effect was not "large enough to lead to lasting positive effects" [23]. An earlier paper by the same authors also found that children from highly educated families gain mostly from

education in free schools, and the impact on children from low income families and immigrants was close to zero [Bohlmark & Lindahl 2007].

The weight of evidence also indicates that free schools have contributed to increasing social segregation in Swedish schools [Wiborg 2011].

England's foundation schools and academies

There are several different types of autonomous schools in the English education system, including academies and foundation schools. Academies and foundation schools are publicly-funded schools that have greater freedom over how to allocate their budgets and over staffing than more traditionally-governed state schools, now called community schools. Academies are managed by outside sponsors from business, religious and community groups and were initially established in disadvantaged areas, although now, under the UK coalition government, any school can convert to an academy. These schools also have greater control over their enrolments.

The evidence on the impact of these types of schools on student achievement is mixed.

A paper to be published in the academic journal *Education Economics* found no difference in the examination results of students attending foundation schools and local authority controlled schools once differences in student background were taken into account [Allen 2012]. The author states that "there is little evidence that a policy of school autonomy produces more effective secondary schools in the longer run" and that "there is no genuine difference in the effectiveness of authority controlled and autonomous schools" [14].

A recent study of academy schools published by the Centre for the Economics of Education at the London School of Economics found a significant positive impact on student achievement [Machin & Vernoit 2011]. It found that the results were strongest for the schools that have been academies for longer and for those who experienced the largest increase in their school autonomy. The authors of this study concluded that "...the results paint a (relatively) positive picture of the academy schools that were introduced by the Labour government of 1997 to 2010" [3-4].

In contrast to this study, another recent study published in the *Journal of Education Policy* found no clear evidence of a positive impact on student achievement by academies:

> Of course, some schools are gaining higher scores since Academisation, but others are gaining lower scores. Using the most recent results available there is no clear evidence that Academies produce better results than local authority schools with equivalent intakes. The Academies programme therefore presents an opportunity cost for no apparent gain. [Gorard 2009: 101]

There is also evidence that increased school autonomy in England has led to greater social segregation in schools.

> ...there is some evidence that giving schools autonomy over their own admissions may produce more socially segregated schooling unless there are constraints to control how these admissions policies are devised and implemented. [Allen 2010b]

Consistent with this finding, another recent study published by the Centre for the Economics of Education found that academies have raised the average quality of their intake by reducing admissions of lower achieving students and increased stratification and worsened education inequality in the school system. It concluded:

> ....school renewal of this kind appears to have resulted in a more 'exclusive' pupil profile within Academies and reduced entry into these schools of pupils that may have otherwise lowered the general academic performance of the school. In this respect education inequalities and schooling stratification along the lines of ability and social background have increased as a result of the compositional changes that Academy schools have made. [Wilson 2012: 67]

PISA studies

The claim that giving schools greater responsibility for budgets and hiring teachers will improve student achievement is repudiated by the latest results from the OECD's Programme for International Student Assessment (PISA). The findings on school autonomy and student achievement are contained in a report published by the OECD titled *PISA 2009 Results: What Makes a School Successful? – Resources, Policies and Practices (Volume IV)* [OECD 2010].

The study reports results from two types of analysis. One set of results is for cross-country correlation analysis of education outcomes in reading and school autonomy in resource allocation (budgets and staffing) and curriculum and assessment. The other set of results are for the education systems of individual countries and are obtained from multi-level regression analysis in which a variety of school characteristics are considered jointly to establish their relationship with student performance. Both analyses take account of differences in the socio-economic background of students and schools.

The cross-country correlation analysis found that education systems that provide schools with greater autonomy in selecting teachers and for school budgets do not achieve higher results in reading. The study concluded emphatically that "...greater responsibility in managing resources appears to be unrelated to a school system's overall student performance" [p.41] and that "...school autonomy in resource allocation is not related to performance at the system level" [Note 7, p. 86]. In contrast, greater responsibility for curriculum and assessment was found to be positively related to student achievement.

The within-country analysis shows that in the vast majority of countries participating in PISA there was no statistically significant difference between student achievement in schools with a high degree of autonomy in hiring teachers and over the school budget and in schools with lower autonomy over these decisions [OECD 2010, Table IV.2.4c, p. 169].

In only four countries (Chile, Greece, Korea and Peru) out of 64 do schools that have greater autonomy in allocating resources also achieve higher scores in reading after accounting for the socio-economic background of students and schools and for other factors related to school autonomy and competition between schools. In contrast, schools which have greater autonomy in allocating resources show lower scores in five countries.

The national study on Australia's 2009 PISA results reports a very small positive correlation between student achievement and school autonomy in budgeting and staffing [Thompson et.al. 2010, Table 7.31, p. 274]. However, multi-level regression analyses of the results in different countries show no significant relationship between the two for Australia [OECD 2010, Table IV.2.4c, p. 169]. That is, greater school autonomy in hiring teachers and for school budgets does not appear to lead to higher student achievement in Australia.

The national report on Australia's PISA results also shows virtually no difference in the correlation estimate for NSW, with lower autonomy for government schools, and Victoria which has a higher degree of autonomy. Moreover, there was no significant relationship

between student performance and school autonomy in budgeting and staffing in any school sector – government, Catholic or Independent.

The report also shows that achievement by 15 year-olds in Independent schools, which generally have a higher degree of school autonomy than government schools, is no higher than in the more centralized government school systems when the different socio-economic composition of the sectors is taken into account:

> Once differences in students' socioeconomic background were taken into account there were no longer any statistically significant differences in the average reading, mathematical and scientific literacy scores of students from the different school sectors. [Thompson et.al. 2010: ix]

Other research based on NAPLAN results shows that high fee/high socio-economic status (SES) private schools across Australia, which are mostly fully autonomous schools, do no better than their high SES government school counterparts which have considerably less autonomy [Cobbold 2011].

In support of its claims, the Federal Government cites statistical analysis by the OECD which shows that combining school autonomy with the publication of individual school results increases student achievement [OECD 2010: 42]. However, the impact is trivial. Students in higher autonomy schools achieve only 2.6 points higher on the PISA scale than those in an average autonomy school. To put this in perspective, increased learning over the school year amounts to an average of about 35-40 points on the PISA scale. This is hardly compelling evidence.

Some other cross-country studies using PISA data show a positive impact on student achievement. For example, a study recently published by the National Bureau of Economic Research in the US analysed data from the four PISA studies conducted since 2000 [Hanushek et.al. 2011]. It found that local school autonomy has an important impact on student achievement, but this impact varies systematically across countries, depending on the level of economic and educational development. School autonomy affects student achievement negatively in developing and low-performing countries, but positively in developed and high-performing countries. In contrast to other studies, it found no indication that autonomy differentially affects students with well-off and disadvantaged backgrounds.

Prior studies by two of the co-authors of this study using cross-country PISA data have also found positive effects of school autonomy [for example, Hanushek & Woessmann 2007]. However, as their most recent study points out, there are potential pitfalls associated with these studies because it is extremely difficult to disentangle various national policy, institutional and cultural factors influencing education outcomes from the impact of school autonomy [Hanushek et.al. 2011: 3, 5]. The findings of these types of studies are likely to be affected by a host of unmeasured country-specific factors which could influence the magnitude and even the direction of an observed relationship between achievement and school-based characteristics, such as the extent of school autonomy [Hamilton 2010: 10]. It is also difficult to account for differences in the extent and type of school autonomy and in other characteristics of schools between countries. For these reasons, many researchers prefer to focus on longitudinal analysis of specific countries or regions.

The recent study attempts to overcome problems associated with cross-country studies by including controls for systematic, time-invariant cultural and institutional differences at the country level. However, as the study itself concedes, the measures used for these country

controls are very broad. For example, it uses GDP per capita as an indicator of social and economic institutions of countries. While this may broadly allow distinctions between developing, middle and developed countries, it is unlikely to be useful in distinguishing cultural and institutional differences between, say, developed countries and their interaction with school characteristics and different features of school autonomy. In particular, it has the potential disadvantage of ignoring specific educational institutions which differ between countries. The authors state that "imperfect measurement of specific institutions lead us to be cautious in the interpretation" of the results [24-25].

Thus, while school autonomy is shown to have positive effects on student achievement in developed countries generally, interactions between cultural, institutional and educational and features of school autonomy in different developed countries may lead to different effects. In other words, it does not tell us much about the effects of differences in school autonomy between developed countries with varying cultural, institutional and educational features.

Moreover, the positive impact attributed to school autonomy may reflect other education policy measures not included in the analysis. The country-level measures of other features of the school system adopted by the study include competition, funding sources, school size, and teacher education. However, if some countries devote considerable effort to other education policies such as extra time in class to reading and mathematics or to improving the results of lower achieving students, the resultant increase in achievement could be wrongly attributed to school autonomy.

The multi-level regression analyses for individual countries by the OECD are likely to prove more reliable estimates of the impact of school autonomy than cross-country studies, even those that attempt to account for the interaction of various cultural and institutional features with school autonomy and other school characteristics. The analysis of the 2009 PISA results strongly indicate that school autonomy for budgets and staffing does not have any significant impact on student achievement in OECD countries in general and in Australia in particular.

Other evidence

Other evidence cited by government officials in support of school autonomy includes a recent report by McKinsey Corporation [Mourshed et.al. 2010]. However, this report does not provide any statistical analysis of the relationship between school autonomy and student achievement. It fails to distinguish the impact of different factors contributing to education achievement in the various countries considered, and amounts to little more than a collection of opinions and anecdotes. The report has been heavily criticised for its lack of consideration of research studies [Coffield 2012]

The World Bank has recently published reviews of the experience with school autonomy in around the world [Barrera-Osorio et.al. 2009; Bruns et.al. 2011]. The reviews note that there are very few rigorous studies of the impact of school autonomy on student achievement and that the available evidence is mixed. The reviews largely cover studies of school autonomy in developing countries.

A review of the research evidence published in the *Handbook of Research in Education Finance and Policy* found that the outcomes from school autonomy are "mixed", "generally small", "not greatly encouraging" and "have disappointed" [Plank & Smith 2008]. The review concluded:

> Placing schools at the centre of the policy frame, freeing them from bureaucracy and exhorting them to do better has not by itself generated many of the systemic improvements, innovation, or productivity gains that policy makers hoped for. [410]
>
> Two decades of experience and research provide compelling evidence that simply setting schools free and holding them accountable for results is not in itself sufficient to conjure the attributes of effectiveness into being. Detaching schools from the bureaucratic structures within which they are embedded may enable the most privileged or resourceful schools to strike out in new and positive directions, but the rewards of enhanced autonomy for less advantaged schools are uncertain at best. [414-415]

The recent report of the Productivity Commission on the schools workforce concluded that the evidence is mixed [Productivity Commission 2012: 246]. Despite the Commission keeping faith with school autonomy in the report, the most it could say is that school autonomy "can potentially lead to improved outcomes" [245]. The report also said that school autonomy could exacerbate inequalities [44].

The Federal Minister for Education also claims that a school autonomy pilot project in 47 NSW schools showed improvements in school results [Garrett 2011]. However, the final report on the project does not provide any statistical evidence of increased student results [Department of Education and Communities 2012]. The report makes it clear that no such evidence exists:

> The issue of the impact of pilot initiatives on student results is difficult, if not impossible, to quantify in so short a timeframe.....The period of the pilot (2010 and 2011) is too short to draw clear robust links between greater local decision making and widespread improved student outcomes. [8, 10]

Conclusions

The evidence that school autonomy leads to increased student achievement is nowhere near as compelling as the Federal Government, and other Australian governments, claim. The research evidence from around the world and in Australia on the impact of various forms of school autonomy on student achievement generally suggests that school autonomy does not lead to better school results.

There is no evidence of increased student achievement from over 20 years of school autonomy in New Zealand. Over 20 years experience with charter schools in the United States shows that some charter schools do better than traditional public schools, some do no better and some do worse. The major studies show that charter schools do no better than traditional schools. The evidence on the impact of free schools in Sweden is mixed. Foundation schools in England have not improved student achievement while the evidence on the impact of academies is mixed.

The OECD analysis of the 2009 PISA results strongly indicate that school autonomy for budgets and staffing does not have any significant impact on student achievement in OECD countries in general and in Australia in particular. A few recent studies of school autonomy in budgeting and staffing using robust methodology and data suggest positive effects on student achievement. However, the mass of evidence across several forms of school autonomy suggests very little or no impact. The most positive statement that can be made is that the evidence is mixed as the Productivity Commission recently concluded.

In addition, there is little evidence to suggest that increased school autonomy leads to more innovation in teaching and curriculum. Certainly, the long experience with school autonomy

in New Zealand and with charter schools in the United States shows no increase in innovation in teaching and learning.

However, several studies indicate that school autonomy leads to greater social segregation between schools and greater inequality in resourcing and student outcomes. Increased social segregation in schooling is associated with greater school autonomy in New Zealand, the United States, Sweden and England.

In the light of all this, the question has to be asked as to why governments are spending so much time and money on increasing school autonomy when, at best, the benefits in terms of student achievement are small. The fact is that the Gillard Government has placed its faith in extending the market in education – publishing school results was just the beginning of its agenda. Greater school autonomy is designed to extend the role of the market in education. The idea is that giving schools greater powers over budgeting and staffing will enable them to compete more effectively and that competition will drive improvements in student results.

Once again, the ALP Government is implementing a component of the agenda for market-based education begun by Dr. David Kemp as education minister in the Howard Government. Greater autonomy for schools was a fundamental policy tenet of Dr. Kemp. For example:

> I would argue that the way forward, to ensure that government schools can compete effectively, is to give them greater autonomy from bureaucratic control and more freedom to exercise this leadership…. I want to be sure that these funds are going to schools which are autonomous and effective and this funding is not being used to support schools which are non-competitive and ineffective…. [Kemp 1997]

Kemp's successor, Brendan Nelson, said that we should "follow the lead of independent schools by giving principals in government schools in Australia the power and responsibility for delivering quality education for their communities" [Nelson 2003]. This is exactly what the current federal minister is doing, despite the lack of evidence that it works.

The lack of evidence to support the Government's faith in school autonomy parallels the lack of evidence that markets in education deliver better results. For example, a recent review of academic research studies published by the OECD found that the introduction of market reforms in education had little positive effects on student achievement, generated little innovation in education and brought greater likelihood of increased segregation by race and class [Waslander et.al. 2010]. Another recent review of the US experience with choice and competition in education concluded that their effect on student achievement is "underwhelming" and that "the evidence of the effects of competition on the school system remains inconclusive [Loeb et.al 2011: 158].

The widespread failure of school autonomy and of choice and competition in education to deliver better student outcomes and reduce learning gaps reflects a failure of ideology. The essence of this failure lies in seeing competition as the (cheap) alternative to devoting adequate resources – funding, teachers and facilities – to lifting the performance of low achieving students. It also reflects a failure to understand the importance of partnerships and collaboration in education between system and schools and between schools to improving teaching and learning.

The current government focus on increasing school autonomy is therefore completely ill-conceived and misplaced. There is no compelling evidence that it will improve student

results. Moreover, it diverts energy and resources which would be better spent on the most pressing challenge facing Australian education today as documented in the recent Gonksi review of school funding – reducing the massive achievement gap between rich and poor. The $500 million in funding devoted to this ill-founded program should be transferred to addressing the problems of disadvantage identified in the Gonski report. It would be a good down-payment on the Gonski recommendation for an increase of $5 billion in education funding.

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Attachment B

School Autonomy Brought a Lost Decade in NZ Education

School autonomy was responsible for a "lost decade" in education according to one of New Zealand's leading education researchers. In a new book published last week on New Zealand's system of self-managing schools, Dr. Cathy Wylie of the New Zealand Council of Educational Research says that promising educational advances were ignored as schools focused on administering property and finances.

The book, titled *Vital Connections*, reviews the history of New Zealand's *Tomorrow's Schools* program introduced in 1989 to make schools fully self-managing. It concludes that the model is flawed and cannot meet the demands now being placed on the education system. It says that New Zealand needs more than self-managing schools; schools need more central support.

Tomorrow's Schools gave New Zealand one of the most decentralized school systems in the developed world. It reduced the NZ Education Department to a much smaller ministry, abolished regional education boards and made schools responsible for their own decision-making. Schools had to make do with their allocated budgets. It was a real live experiment in school autonomy which failed to deliver its promises.

Dr. Wylie says that the past 23 years have demonstrated the limitations of making each school a separate island. *Tomorrow's Schools* created a system of fragmented schools which emphasised the "self" part of self-management, of putting one's own school first and not being part of an overall national system.

"We now have a substantial body of robust analysis that shows we need to rethink the self-managing model in order to create a more dynamic learning system." [NZCER Media Release, 3 December 2012]

The first ten years of *Tomorrow's Schools* was a "lost decade". Managing property and finance dominated school life under self-management. They were the central focus of principals and boards of trustees. The primary role of the principal became a business manager rather than an education leader. There is a telling anecdote in the book by one principal on how student learning became secondary as principals became business managers:

> We got distracted by the new sexy stuff: finance, property, staffing. Somewhere about 1992 or 1993, maybe even 1994, over the summer holidays, we were having a family barbeque. And my brother in law with no experience in education at all said to me, 'How is this *Tomorrow's Schools* going?' And I said, 'It's great', 'cause I loved it, I used to find the old system restrictive and I found the new one liberating. I said, 'I'm appointing staff, I'm moving budgets around, I've got property projects on the go, I'm busy as. It's the best thing that's ever happened.'
> 'Oh that's good,' he said. 'Are the teachers teaching any better, or, more importantly, are the kids learning any better?' I said without even thinking, 'I don't know, I haven't got a clue, I'm too busy running the place.' That answer rattled around in my

> head, and as I was going home I said to my wife, 'I should know, and I don't because we're doing this other stuff.' And I think we were all like that, or most of us. [p.98]

Tomorrow's Schools relied on competition between self-managing schools to improve student results. In this environment, the primary concern of schools was to increase or maintain their own student numbers in order to survive. Self-management meant putting one's own school first. Dr. Wylie says that this competition often diverted school leaders and trustees from a focus on learning, and added obstacles to improvement for schools that found themselves at the bottom of the local competition market.

It was a case of "fragmented freedom" as self-management was "sown on uneven ground". Larger schools with greater resources that had no difficulty finding and keeping good-quality teaching and support staff and were located in areas with steady or growing student population were favoured by self-management. Competition gave these schools the "upper hand".

> Some schools were more adept at marketing themselves than others, through placing stories and photographs of student success or completed school amenities in local newspapers and presenting a smart facade to passers-by. [p.108]

Many schools adopted selective enrolment policies. Families often found that they could not enrol their children in their local neighbourhood school. Some schools used the additional property and operational funding gained from taking students from what had been other schools' zones before *Tomorrow's Schools* to build up large schools with attractive resources. Schools serving low-income communities that were near schools with a higher socio-economic intake that could offer better-resourced facilities (such as computers, sports grounds, music) suffered, particularly at the secondary level. There was also 'white flight' in some areas, with evidence of increased ethnic polarisation.

Self-management was "problematic" for schools in low income or rural areas, small schools and those serving Maori students. These schools struggled to maintain enrolments, attract and retain quality staff and offer a full curriculum.

> Constant staff changes, and staff starting with less experience, made it more difficult for many of these schools to build and sustain strong school cultures and systems that shared knowledge among teachers, and that provided the learning organisations schools need to be if they are to make a positive difference to student learning. There were some notable exceptions, but an education system needs to produce more than exceptions if it is to produce overall improvements in learning and achievement. [p.121]

Dr. Wylie also says that while *Tomorrow's Schools* allowed schools to take more initiative and given them a strong sense of their community, it has delivered uneven and inadequate educational gains for learners. She says it "left too much to chance" in education. As a result, there has been no improvement in overall education outcomes. Large gaps in student achievement between rich and poor remain. In low income schools, secondary qualifications rates actually fell. Her conclusion is a damning indictment:

> The New Zealand experience with school competition has not resulted in gains in student learning for the system as a whole. This absence of gains is consistent with the

> cumulative international research evidence that competition between schools has, at very best in a few contexts, only limited and uneven positive effects. Competition is not reliable as a systemic means to improve education. [p. 108]

She also says that *Tomorrow's Schools* has been wasteful, with too much reinventing of the wheel and few channels for sharing good ideas and practice between schools. Collaboration between schools in the same district to support each other to improve declined.

She also says that governments failed to provide sufficient funding for schools to manage their increased responsibilities. "It's actually not a cheaper model. School self-management costs more, not less" [Dominion Post, 4 December 2012].

After the first ten years, the NZ Department of Education could no longer ignore the growing problems and financial difficulties of many schools. But it was a case of "muddling through" and this has gone on ever since. For example, at one stage the Department encouraged schools to work together in clusters to compete for additional funding, but these clusters soon dissolved once the funding ceased. In any case, schools in competition with each other were not likely to form clusters together.

The basic problem was that central office support for schools was perceived as undermining school autonomy. The priority was to adhere to the principle of self-management and this meant that any connections with schools had to be framed as indirect or temporary. As Dr. Wylie says:

> ...it is separation of the government agencies and schools, the absence of the middle ground and shared responsibility, that made and still makes it difficult to harness and use all the knowledge and actions needed to keep developing the quality of New Zealand education. [p.114]

Dr. Wylie recommends fundamental changes to the system. She argues that stronger connections and better support across the system are vital, not only to make gains in student achievement for all but to get much better value for the education dollar. Schools need the opportunity to learn from their peers in other schools.

"Our current system lacks the national and local infrastructure of connections to share and keep building effective teaching practices so that all our schools can do what we ask of them." [NZCER Media Release, 3 December 2012]

She says that what is needed is to integrate the key strengths of what was lost with *Tomorrow's* Schools. This means more support at the local level, more connections to share and build knowledge and more coherence between the different layers of the schooling system.

She recommends a return to more central and regional support for schools. Her proposals include a national network of 20 education authorities throughout the country, with responsibility for schools in their region and charged with ensuring schools and teachers are supported and challenged and can learn from each other.

The lessons from New Zealand's long history with extensive school autonomy are being ignored in Australia. Governments are pressing ahead with greater school autonomy without

regard to the evidence that it has little impact on student achievement, and leads to greater social segregation between schools. All education ministers should have *Vital Connections* on their Christmas reading list.

Attachment C

SAVE OUR SCHOOLS

Education Research Brief

Charter Schools are not a Good Advertisement for School Autonomy

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March 2012

http://www.saveourschools.com.au

Summary

Charter schools are an experiment in school autonomy in the United States. After 20 years we can say that the experiment has not been a marked success. The weight of research evidence from meta-analyses, literature reviews, national and regional studies shows that charter schools have not delivered better results than other public schools.

1. Charter schools are an experiment in school autonomy

Charter schools are independent public schools in the United States. They are publicly funded but operate free from many of the laws and regulations that govern traditional public schools. In exchange for that freedom, they are bound to the terms of a contract or "charter" that lays out a school's mission, academic goals, and accountability procedures.

The degree of autonomy for charter schools varies considerably between states. They are not permitted to levy fees but can obtain funding from private sources and many receive funding from philanthropic and other non-profit organizations. The large majority of charter schools are able to hire and dismiss staff, determine staff working conditions and the school schedule, determine their own curriculum and teaching methods, and control their budgets. The most common remaining restriction concerns requirements for teacher certification.

There are an estimated 5,600 charter schools in operation, serving approximately two million students in over 40 states and Washington DC. They constitute a small part of the US public education system, enrolling about three per cent of all students. However, they are a very significant component because turning traditional schools into charter schools and opening new charter schools is a key feature of US education policy. It is an idea that has been taken up in other countries such as Sweden, England and, to a lesser degree, Australia.

The autonomy given to charter schools was seen as a way to provide greater educational choice and innovation within the public school system and increase student achievement. There is much controversy over their success. Some studies show that they do no better than traditional public schools in terms of student achievement. Others show better results and still others show worse results. Other studies point to a range of other effects such as increasing social segregation of students.

Part of the controversy arises from different research methods used to measure the effects of charter schools and the range of factors influencing student results which are taken into account. Isolating the impact of charter schools from other factors involves sophisticated research methods and highly technical statistical modelling. Different methods have their own advantages and disadvantages which may lead to different results which are difficult for a lay-person to interpret and understand.

2. The impact of charter schools on student achievement

The first place to start in assessing the evidence about charter schools are professional 'meta-analyses' and literature reviews of studies employing sophisticated statistical techniques to account for a range of factors which influence student achievement. These reviews exclude studies which do not employ rigorous research methodologies, of which there are many.

Despite the fact that charter schools have been operating for over 20 years in some parts of the US, there are still surprisingly few rigorous studies that specifically study the impact of

charter schools at the elementary level. There are also few high school studies. The large majority of rigorous studies of the impact of charter schools are at the middle school level. This in itself suggests a limitation in the available evidence.

Meta-analyses

Meta-analyses attempt to synthesise the results of several studies. The latest meta-analysis was published late last year by the US Center for Reinventing Public Education [Betts & Tang 2011; see also Betts & Atkinson 2012]. It included 25 studies of charter school performance and found "compelling evidence that charters under-perform traditional public schools in some locations, grades, and subjects, and out-perform traditional public schools in other locations, grades, and subjects" [p.1].

It concluded that there was no difference between charter and regular public schools in middle school reading and high school reading and mathematics. There were statistically discernible positive impacts of charter schools in elementary school mathematics and reading and in middle school mathematics. However, the effect sizes were very small. The largest effect found would move a student with median test scores — ranking at the 50th percentile — to around the 52nd percentile after one year at the charter school. Other positive effects were even smaller. A number of studies combine elementary and middle schools together and overall they find no significant effect of attending a charter school on reading or mathematics achievement.

The positive results for charter schools largely come from studies involving relatively few students. Three out of ten studies of elementary schools found negative results from charter schools and two of these studies involved large numbers of students. The number of students in these two studies was 1.6 million and 1.7 million, while the average number in the remaining studies was only 22,000. Most of the estimates finding positive results in middle schools are also from studies of relatively few students. The three studies of high schools which found positive results were also the three smallest studies.

The meta-analysis excluded the many studies of individual charter schools belonging to the Knowledge is Power Program (KIPP) schools. KIPP schools comprise only a very small proportion of charter schools. There are only about 100 KIPP schools in the US, but the studies of these schools account for about 75% of all studies of charter middle schools. A separate meta-analysis was done on these studies. It found largely positive and large effects of these schools in reading and mathematics.

KIPP schools have particular characteristics which may account for their results [Baker & Ferris 2011; Miron et. al. 2011]. They operate a much longer school day and school year than traditional public schools. Typically the school day lasts from 7:30am until 5:00pm weekdays and includes mandatory Saturday school every alternate week. They receive substantial additional funding from private sources, especially from large philanthropic organisations. KIPP schools also have much lower proportions of students with disabilities and English language learners than other public schools.

Charter school results by racial group are unimpressive. The impact of charter schools on white students is almost universally negative. The main exception is high school reading achievement, for which attending a charter school is associated with a positive and significant effect size. The impact on black and Hispanic students is mostly insignificant. The exceptions for Hispanic students are a negative effect on reading tests in middle school studies and a

positive effect for high school mathematics. The results for low income students, special education students, and English language learners are positive, but small and statistically insignificant.

The meta-analysis arrived at the following conclusion:

> The overall tenor of our results is that charter schools are in some cases outperforming traditional public schools in terms of students' reading and math achievement, and in other cases performing similarly or worse. [p.55]

An earlier meta-analysis which synthesized the evidence across 47 studies came to the same conclusion [Miron et.al. 2008]. Overall, 19 studies had positive findings, 12 studies had mixed findings, and 16 had negative findings. The mean impact rating for charter schools was indistinguishable from zero. The overall conclusion of this meta-analysis was that charter schools perform similarly to traditional public schools [23].

Literature reviews

Literature reviews of charter school studies have also concluded that charter schools do not perform any better than traditional public schools. A review of major studies of charter schools published in the *Handbook of Research in Education Finance and Policy* concluded:

> Research to date provides little evidence that the benefits envisioned in the original conception of charter schools – organizational and educational innovation, improved student achievement and efficiency – have materialized…Convincing evaluation of student achievement effects are now in from five different states. In none of these states have charter schools, on average, had large or unequivocally positive effects on student achievement. [Bifulco & Bulkley 2008: 440].

A review published by the Federal Reserve Bank of Chicago found that the weight of the evidence does not suggest that charter schools are more effective than traditional public schools [Rouse & Barrow 2008]. A recent review concluded that "the vast majority of charter schools get no better and no worse test-based results than comparable regular public schools" [Di Carlo 2011: 9]. Earlier reviews came to the same conclusion [Carnoy et.al. 2005; Hill et.al. 2006].

National studies

The other main source of evidence on charter school outcomes is large sophisticated national studies.

The largest, most rigorous and comprehensive study of student achievement in charter schools in the United States to date found that charter school results were worse than or no better than those of traditional public schools [CREDO 2009]. The study analysed the results of charter schools in 15 states and the District of Columbia and compared them with those of demographically matched students in nearby public schools. It found that the gains in maths results for nearly half of all charter schools (46%) were no different from those in comparable traditional public schools while over one third (37%) of charter schools had significantly worse results. Only 17% of charter schools had significantly higher maths results than students in comparable traditional public schools.

The study also analysed the aggregate impact of charter schools on student performance using a nationally pooled data set covering 70% of all charter school students. On average, the learning growth of charter school students was lower than their traditional public school peers, although the absolute differences were quite small. The gains in reading for charter

school students were only slightly below that of traditional public school students while the gains in maths were significantly less for charter school students.

The study concluded:

> ...this study reveals in unmistakable terms that, in the aggregate, charter students are not faring as well as their TPS counterparts. Further, tremendous variation in academic quality among charters is the norm, not the exception. The problem of quality is the most pressing issue that charter schools and their supporters face. [CREDO 2009: 6]

A large study of middle school charters commissioned by the US Department of Education's Institute for Education Sciences also found no difference in student achievement between charter schools and traditional public schools [Gleason et.al. 2010]. It compared the outcomes of 2,330 students in 15 states who applied to charter schools and were randomly assigned by lotteries to be admitted or not admitted to the schools. On average, the charter schools were neither more nor less successful than traditional public schools in improving mathematics or reading test scores, attendance, grade promotion, or student conduct within or outside of school.

Similar findings were made in another study of charter schools across eight US states by the RAND Corporation [Zimmer et.al. 2009; see also Zimmer et.al. 2012]. It found that student achievement in charter schools was either lower than or does not differ substantially from those of traditional public schools. It further found that competition from charter schools does not increase student achievement in nearby traditional public schools.

Earlier sophisticated national studies came to the same conclusion. A study commissioned by the US Education Department covering 150 charter schools and 6,764 public non-charter schools found that average results in reading and mathematics in charter schools were lower than those for traditional public schools [Braun et.al. 2006]. Another study using national test results in mathematics found that traditional public schools achieved significantly higher results in grade 4 while charter schools achieved slightly higher, but statistically insignificant, in grade 8 [Lubienski & Lubienski 2006].

Regional studies

While the latest evidence from national studies generally shows that charter schools do not achieve any better results than traditional schools, some recent sophisticated studies of charter schools in Boston and New York City have found gains by charter schools compared to traditional public schools [Abdulkadiroglu et.al. 2009, Hoxby et.al. 2009; CREDO 2010].

However, the gains are over-stated in two of these studies. The Boston study only included high achieving charter schools, which comprised only 7 out of 29 charter schools in the city [Jennings 2009]. The Hoxby New York study contained methodological problems which when corrected resulted in much lower gains [Reardon 2009]. The size of the gains by charter schools in the CREDO study is relatively small.

Numerous studies have now been done on the impact of charter schools on student achievement in many states, cities and school districts across the US. Charter schools in some locations have done better than traditional public schools, in others they have done worse and in others no better.

3. Conclusion

Thus, the general weight of evidence is that charter schools are no more successful than traditional public schools in terms of student achievement. The overview of a recent special issue of the journal *Economics of Education Review* on the charter school experience concluded:

> ... the existing literature is inconclusive about the aggregate effect charter schools have on student achievement. Some studies in some locations find charters outperform traditional public schools, some find they are no different than the traditional ones, and some find they perform worse. [Toma & Zimmer 2012: 209]

As another reviewer has said: "There is no test-based evidence for supporting either form of governance solely for its own sake" [Di Carlo 2011: 4]. The charter school experience suggests that school autonomy is not a magic bullet for increasing student achievement.

Attachment D

'Independent' Review of Research on the Impact of School Autonomy is a 'Dud'

The Federal Department of Education recently published the first report in its so-called independent evaluation of the Government's school autonomy program. The report purports to be a literature review of academic research on school autonomy, but it is a 'dud' of a review.

The review was done by Professor Brian Caldwell as part of the evaluation to be carried out by the Australian Council of Educational Research. Professor Caldwell is a long-standing advocate of school autonomy so the review is hardly an independent review and it shows. It relies heavily on somewhat dated research, much of which is also ambiguous about the impact of school autonomy.

Professor Caldwell says that the weight of evidence since the turn of the century shows a positive impact on learning from school autonomy and that the view that school autonomy has no impact on student learning is a myth [p. 33]. However, the only evidence he cites is two studies using the PISA 2003 results, an OECD study of the 2006 results, a recent World Bank study and a 1998 study by Caldwell himself and others on increased school autonomy in Victoria in the mid-1990s.

Caldwell ignores the latest PISA study on school autonomy and ignores a large number of recent studies from several countries. The weight of evidence from these studies is that school autonomy in staffing and budgeting has little to no effect on student outcomes.

The 2009 PISA study reports results from two types of analysis. One set of results is from a cross-country correlation analysis of education outcomes in reading and school autonomy in resource allocation (budgets and staffing) and curriculum and assessment. The other set is from multi-level regression analyses of the relationship between student performance and school and student characteristics within each participating country. Both analyses take account of differences in the socio-economic background of students and schools.

The cross-country correlation analysis found that education systems that provide schools with greater autonomy in selecting teachers and for school budgets do not achieve higher results in reading. The study concluded that "...greater responsibility in managing resources appears to be unrelated to a school system's overall student performance" [p.41] and that "...school autonomy in resource allocation is not related to performance at the system level" [Note 7, p. 86]. In contrast, greater responsibility for curriculum and assessment was found to be positively related to student achievement.

The within-country analysis shows that in the vast majority of countries participating in PISA, including Australia, there was no statistically significant difference between student achievement in schools with a high degree of autonomy in hiring teachers and over the school budget and in schools with lower autonomy over these decisions [Table IV.2.4c, p. 169]. A positive relationship was found in only four of the 65 countries participating in PISA 2009.

Cross-country correlation analysis of the PISA 2009 data shows that the combination of greater school autonomy and the publication of individual school results is associated with

higher student achievement. However, the impact is trivial - amounting to only 2.6 points on the PISA scale where one year's learning is equivalent to 35-40 points.

The national report on Australia's PISA 2009 results also shows virtually no difference in the correlation between school autonomy and student achievement in NSW, with the lowest degree of autonomy of any jurisdiction, and Victoria which has a high degree of autonomy [p. 274]. Moreover, it found no significant relationship between student performance and school autonomy in budgeting and staffing in any school sector – government, Catholic or Independent – even though government schools overall have significantly less autonomy than Independent schools.

New Zealand has the most decentralized school system in the OECD with schools exercising full control over budgets and staffing. The head of research at the NZ Council for Educational Research says that there has not been any significant gains in overall student achievement, new approaches to learning, or greater equality of educational opportunity since this radical path was taken in 1989. Nor has there been any progress in reducing the number of low achievers or closing the gaps between students from rich and poor families.

Charter schools in the United States are independent schools with public funding and have operated for over 20 years. The most sophisticated studies of charter schools show that some do better than traditional public schools, some do no better and some do worse. The major national studies show that charter schools do no better than traditional schools.

The 'gold standard' national study on charter schools published by the Centre for Research on Education Outcomes at Stanford University in 2009 found that the gains in maths results for nearly half of all charter schools (46%) were no different from those in comparable traditional public schools while over one third (37%) of charter schools had significantly worse results. Only 17% of charter schools had significantly higher maths results than students in comparable traditional public schools.

Another national study published by the Centre found that only 19% of charter schools performed better in reading and mathematics than competing traditional public schools in their local area.

The overview of a recent special issue of the journal *Economics of Education Review* on the charter school experience concluded:

> ... the existing literature is inconclusive about the aggregate effect charter schools have on student achievement. Some studies in some locations find charters outperform traditional public schools, some find they are no different than the traditional ones, and some find they perform worse. [p. 209]

The evidence from studies of school autonomy in other countries is mixed. Studies of the impact of free schools in Sweden show mixed results. Foundation schools in England have not improved student achievement while the evidence on academies is mixed.

Caldwell ignores all this evidence. Instead, he cites studies using the 2006 and 2003 PISA results.

The 2006 study used a cross-country multi-level regression analysis of the relationship between student performance and a range of school factors including school autonomy, which takes account of the socio-economic background of students. It shows no significant association between student performance in science and the extent of autonomy individual schools have over educational content, staffing and budgeting. However, it does show a strong association at the country level between student performance and school autonomy in educational content and budgeting, that is, education systems that give more autonomy for schools in these areas achieve higher results. This difference between the school and system level results is not explored in the study.

This 2006 PISA study was extensively criticised in a technical review by a RAND Corporation statistician, Laura Hamilton, at a high level international conference of technical experts sponsored by the US National Centre for Education Statistics in 2009.

Hamilton said that the study "...could lead readers to make conclusions that are not warranted based on the data and analyses used" [p. 7]. In particular, multi-level regression analysis based on cross-country data "...do not support the kinds of causal inferences that most readers would like to make" because "a host of unmeasured factors could influence the magnitude and even the direction of an observed relationship between achievement and a school or system characteristic [p. 10]. Further:

> The fact that PISA does not gather longitudinal achievement data for individual students makes it especially difficult to parse out important confounders. The possibility of unmeasured influences exists at the individual student, school, and country levels, which complicates the interpretation of relationships. [p. 11]

Hamilton also says that linking achievement in the PISA tests with school and system characteristics, such as school autonomy, is hindered by the fact that the tests measure cumulative knowledge and skill development that occurs over many years.

> We would expect a specific characteristic of the school or system measured at one point in time to exert a limited influence on students' test scores which reflect knowledge and skills gained over many years and across school-based and outside-of-school contexts. [p. 14]

These and other criticisms of the PISA cross-country regression analysis "...raise doubts about the extent to which PISA can be used to support causal inferences about education policies and practices" [p. 17].

Indeed, they may have been a factor in the decision of the PISA panel to use a simple cross-country correlation analysis for the 2009 study. It notes that there is little more to be gained in using the sophisticated cross-country modelling used in the 2006 study [p. 30]. The other difference between the two studies is that the more recent one analyses the relationships between student performance and student and school characteristics within each country, using two-level regression models (student and school levels). While within-country regression analysis does not overcome the criticisms made by Hamilton, it does remove one major source of unobserved and confounding factors, namely those occurring between countries.

It should be noted that the above criticisms also apply to the cross-country analyses of the PISA 2003 results cited by Caldwell. The other studies he cites are no more convincing.

A World Bank review of research studies says that there is no convincing evidence of the effects of school autonomy in Australia, New Zealand and the UK reforms on student achievement [p. 11]. The review focuses on studies of school autonomy in developing countries and notes that there are few rigorous studies available and that the evidence on impact on student test scores is mixed [pp. 12, 103, 106, 131].

The other study cited is one by Caldwell and colleagues at the University of Melbourne which explored the links between school autonomy and learning in Victoria over five years from 1994 to 1998 following the Schools of the Future school autonomy program introduced by the Kennett Government. As Caldwell acknowledges, the study concluded that "...decentralization of decision-making in planning and resource allocation does not, of and in itself, result in improved learning for students" [p. 14].

Overall, the review is demonstrably inadequate. It ignores a large number of recent studies on school autonomy in several countries and it ignores the latest PISA study of the relationship between student achievement and school autonomy. The weight of evidence from these studies is that greater school autonomy has little impact on student results. Even the few and somewhat dated studies cited in the review indicate that the evidence is mixed.