

**Education Research Brief**

# **Private Schools Are No Better Than Public Schools**

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[Christopher Pyne's agenda to make government schools more like private schools](#) has come under challenge before it has even got off the ground. His claims that it will lead to better education outcomes are contradicted by two new Australian research studies and two new US studies.

One of the Australian studies shows that the Catholic school performance has declined since 1980 relative to government schools. It says that the advantage that Catholic schools once held over government schools has virtually disappeared and attendance at Catholic schools may now lead to lower completion rates in secondary school and university.

The other study shows that the decline in Australia's performance in international tests over the last decade is primarily due to falling results in private schools, the falls being similar in both Independent and Catholic schools.

A large national study of US schools shows that higher test scores of private schools is because their students largely come from more privileged backgrounds. After controlling for student background factors, the study shows that gains in student achievement at public schools are at least as large, and often larger, than those at private schools.

The second US study shows that the higher average test scores among Catholic school students from kindergarten to grade 8 are driven by systematic differences in students' background across school sector rather than by the greater effectiveness of Catholic schools. It also shows that attendance and behaviour in Catholic schools is no better than in public schools when student background characteristics are taken into account.

The new studies confirm earlier ones that show there is little difference in student results between public and private schools when family background is taken into account.

The findings of these studies send a simple message for parents who send their children to private schools – if you think you are getting some advantage in education outcomes from sending your child to a private school rather than a government school, think again.

### **Australia's declining school results are due to declining private school results**

Australia's average reading, mathematics and science results in the OECD's Programme for International Student Assessments (PISA) were higher than the OECD averages for 2000 and 2009. However, there was a fall in reading and mathematics scores between 2000 and 2009 of 13 and 19 points respectively, the latter decline amounting to about half a year's learning.

A study by the Melbourne Institute for Applied Economic and Social Research [Ryan, in press) has investigated a range of student and school factors that may have contributed to the declines. Student characteristics included the educational and occupational background of their parents, gender, whether born overseas, language background, and the grade students were in when they undertook the PISA tests.

The study found that changes in student characteristics during this period would have been expected to lead to increased test scores rather than a decline. It therefore concluded that the results can "be treated as being consistent with a decline in the performance of Australian schools".

The study analysed a range of school factors including the state and sector of schools, school size, their location in cities or regional areas, whether they are single-sex schools, and the average characteristics of their student body such as the average occupational SES of parents, and the distribution of students across grade levels. It found that the falls in school performance were concentrated among private schools and not associated with any other characteristics of schools. It states:

The main finding of note is that Catholic and Independent tended to be more efficient in converting students with given scores into high literacy scores than did public schools in 2003, but these differentials disappeared in the following two cohorts, so schools in these sectors were worse performers in the later cohorts.

And:

At the school level, the declines in performance of schools have not been associated with many of their observed characteristics, other than that the declines appear to have been concentrated among private schools. Where private schools once generated better outcomes than public schools, given the compositions of their student bodies, this was not the case after 2003.

The study noted that the decline in performance in Independent and Catholic schools occurred despite substantial increases in government funding over the period. These funding increases greatly exceeded those for government schools whose results appear not to have fallen. This suggests that private schools have used their funding increases much more ineffectively than government schools, raising the question of what benefit the nation's taxpayers have received from this expenditure.

The findings of the study also contradict claims that the decline in PISA results is attributed largely to a reduction in the proportion of students performing at the highest proficiency levels. It has been argued that the number of high achievers is shrinking because resources are being diverted to weaker students.

However, results have declined for both high and low achieving students. For example, the decline in reading performance for students at the 5<sup>th</sup> and 10<sup>th</sup> percentiles between 2003 and 2009 was 9.5 and 10.6 points respectively compared to 5.1 and 6.1 at the 90<sup>th</sup> and 95<sup>th</sup> percentiles. The decline in mathematics for students at the 5<sup>th</sup> and 10<sup>th</sup> percentiles was 7.7 and 6.1 points compared to 10.8 at both the 90<sup>th</sup> and 95<sup>th</sup> percentiles.

In general, the decline in reading between 2003 and 2009 appears to have been slightly higher in the bottom half of the achievement distribution than it was in the top half, while the reverse is apparent for the decline in mathematics, where the decline appears lower in the bottom half of the distribution than it was in the top half.

The declines were also similar across different socio-economic status (SES) backgrounds. For example, the average reading score for students in the lowest SES quintile (20%) declined by 13 points between 2003 and 2009 compared to a decline of 11 points for students in the highest SES quintile. The average mathematics score for students in the lowest quintile declined by 8 points compared to 12 points for students in the top quintile.

### **Catholic schools in Australia have lost any academic advantage over government schools**

A new study also shows that Catholic school performance results have declined relative to that of government schools since 1980 [Cardak & Vecci 2013]. The advantage that Catholic

schools once held over government schools has virtually disappeared and attendance at Catholic schools may now lead to lower completion rates in secondary school and university.

The paper updates previous studies of the comparative performance of Catholic and public schools in Australia in the 1980s and 1990s which found a significant advantage by Catholic schools over public schools of 12 to 18%. It provides new estimates of the effect of Catholic school attendance on high school completion and university commencement and completion for Australian students compared to public schools.

The new study concludes that the previous advantage held by Catholic schools “has decreased markedly relative to the effects found in earlier studies” and that “the Catholic school effect on the outcome variables studied appears to be much lower than previously believed”.

It found that the effects of attending Catholic schools compared to public schools ranged between -4.76% and 5.42% for high school completion, -3.47% and 6.23% for university commencement and -4.79% and 7.04% for university completion. These results imply that the Catholic school effect is at best slightly positive but could be zero or even negative. But, whatever the precise outcome, it is clear that there was a substantial improvement in public school outcomes relative to Catholic schools over the period 1980 to 2001.

The study is based on a nationally representative sample of Year 9 students in the 1998 Longitudinal Survey of Australian Youth which includes data on the school and post-school outcomes through to 2008. It also includes a range of student and family background data which allowed the study to take account of differences in average educational attainment and socio-economic status of families attending Catholic and government schools as well as educational aspirations and motivation of students.

The actual effect of Catholic school attendance depends in part also on whether there are selection biases in Catholic school enrolments that may contribute to the effect of Catholic school attendance on education outcomes. The study says that a major concern is that the positive effects of Catholic school attendance reported above could be biased because students are not randomly enrolled in these schools. Instead, it is likely that either parents or schools or both may be systematically selecting students into Catholic schools which may enhance their education outcomes.

The study notes that there are several possible sources of selection bias in Catholic school enrolments. It may occur because parents value the religious aspects of Catholic education, perceive that Catholic schools offer stricter discipline or want a lower cost private school alternative than offered by many independent schools. Another possibility is that Catholic schools themselves use formal or informal selection criteria to exclude some students.

However, there is no data available on these factors to allow analysis of their impact on comparative school outcomes. As the study states, the implication is that the effect of such (unobservable) characteristics on educational outcomes will be incorrectly attributed to Catholic school attendance.

The study uses several statistical techniques to try and correct for possible selection bias. The results show that the small positive Catholic school effect on school and university outcomes compared to government schools could actually be zero or negative. One approach shows that

even a small selection bias could explain much of the positive Catholic school attendance effect on school and university outcome measures. According to the study, the positive effect of Catholic school attendance on outcomes largely depends on there being no selection bias, which is highly unlikely.

The analysis shows that a strong selection bias in Catholic enrolments would mean that secondary school completion and university commencement and completion rates for Catholic school students are 15 to 18% lower than for government school students. However, it considers that a strong selection bias is unlikely.

The study concludes that its findings are relevant to current policy debates. It notes that the decline in the Catholic school performance over the period 1980–2000 coincided with a large increase in funding. This raises questions, it says, about how well these increased resources have been used.

### **Private schools in the US have no better results than public schools**

Two new US studies have also undercut the belief that private schools do better than public schools.

A new book, *The Public School Advantage*, offers powerful evidence that public schools in fact outperform private ones [Lubienski & Lubienski 2013]. Drawing on two recent, large-scale, and nationally representative data bases, the authors show that any benefit seen in private school performance now is more than explained by the demographic background of students. Private schools have higher scores because their students largely come from more privileged backgrounds that offer greater educational support.

After controlling for student background factors, the authors show that gains in student achievement at public schools are at least as large, and often larger, than those at private schools. For example, the study found that the raw scores in 4<sup>th</sup> grade mathematics showed an advantage of 9.6% for Catholic schools over public schools. However, after taking account of location and student background, this positive advantage disappeared and became negative at -7.2%, that is, the advantage was reversed in favour of public schools.

Indeed, demographic differences more than explain any apparent edge in the raw scores of private school students, and by the time they reach middle school, public school students score ahead of their demographically similar, private school peers, with differences ranging from a few weeks to a full grade level, depending on the type of private school.

The study is one of the most comprehensive studies ever done comparing public and private school performance in mathematics, and draws on data on mathematics test results for over 300,000 elementary and middle school students in 15,108 public, charter, and private schools.

The study also shows that the very mechanism that market-based reformers champion – school autonomy – may be the crucial factor that prevents private schools from performing better. It says that private schools often used to maintain outdated strategies that may align with parental preferences but are not particularly effective for educating students.

For example, private school students are more likely than their public school counterparts to sit in rows, complete math worksheets and believe that mathematics is “mostly memorizing facts”. In contrast, public schools have moved beyond traditional, repetitive exercises, and

more often ask students to solve complex, real-world problems and to learn geometry, data analysis, and early algebra ideas, in addition to basic arithmetic.

This difference can partly be explained by the fact that public school teachers in the US are more likely to be certified and to receive ongoing training in the field, keeping them current on research-based instructional standards and resources supported by professional entities. Private school teachers are rarely impelled to receive such training. And despite much criticism, teacher certification and up-to-date instructional practices are actually positive correlates of achievement, and the fact that these are more prevalent in public schools helps explain the public school advantage.

The authors say that in competitive conditions schools may try to play to popular demands instead of embracing professional expertise. Parents may not choose schools primarily on the basis of academic effectiveness. School uniforms, the demographics of a school, and sports programs are easier to observe, and parents often consider these, along with religious values, to be more important than the quality of academic instruction. In an environment in which schools are pitted against each other, families may be influenced by marketing images over academic substance, just as fast food marketing successfully focuses on fun and not nutrition.

Another new US study analyses the effects of Catholic primary schooling on student outcomes such as reading and mathematics test scores, grade retention, and behaviour between kindergarten and 8<sup>th</sup> grade [Elder & Jepsen 2014]. It finds that while average test scores among Catholic school students are substantially higher than among public school students throughout this grade range, the differences are driven by systematic differences in students' background across school sector rather than by the greater effectiveness of Catholic schools.

The study adjusted the raw scores for several student characteristics including race, ethnicity, family structure, parental marital status, education, income, employment, and location. As a result, the performance advantage held by Catholic schools on the raw scores diminished substantially to show a negative effect of Catholic school attendance.

The actual Catholic schooling effect was negative in the case of 8<sup>th</sup> grade mathematics and 5<sup>th</sup> grade reading and mathematics, and was very slightly positive for 8<sup>th</sup> grade reading. In the case of 8<sup>th</sup> grade mathematics the Catholic school advantage of 7.17% on the raw schools diminished to -5.96% after student characteristics were taken into account. For 8<sup>th</sup> grade reading, the advantage declined from 13.55% to 0.93%; for 5<sup>th</sup> grade reading it declined from 11.73% to -1.98% and for 5<sup>th</sup> grade mathematics it declined from 5.98% to -7.53%.

On the basis of these estimates, the study concluded that Catholic primary schooling significantly lowers mathematics achievement in both 5<sup>th</sup> and 8<sup>th</sup> grades. Although there is no strong evidence for a negative Catholic primary school effect on reading scores, there is little evidence for a positive effect.

Further additional statistical analysis suggests that the negative impact of Catholic school attendance could be significantly under-estimated because of possible unobservable biases in Catholic school enrolments that could enhance the Catholic school effect. Under certain conditions, Catholic school attendance could have a large negative effect on reading and mathematics in comparison with public schools.

The study also analyses the impact of Catholic schooling on other school outcomes such as attendance, grade repetition and suspension. It finds little evidence of a positive Catholic school effect on these outcomes once student characteristics are taken into account.

The study concludes that Catholic schools do not boost test scores in comparison to public schools. It finds no “discernible beneficial effects of Catholic primary schooling” on reading and mathematics. Indeed, the results point to a substantial negative effect of Catholic schools on mathematics achievement in comparison to public schools.

As with the other new US study, it suggests that one possible explanation for the poor performance by Catholic schools compared to public schools is lower teacher quality in Catholic schools. Salaries of Catholic school teachers in the US are significantly lower than for public school teachers. It says it is quite conceivable that Catholic schools face difficulties in attracting high-quality teachers. Another potential explanation for lower Catholic school achievement is superior curriculum design in public schools.

### **Making public schools more like private schools is no answer**

These new studies add to much existing evidence showing that private schools do not achieve better results than public schools once student background characteristics are taken into account.

The OECD’s 2009 Programme for International Student assessment (PISA) study found that, after accounting for the socio-economic and demographic profiles of students and schools, students in OECD countries who attend private schools have similar performance to public school students [OECD 2010]. The national report on Australia also found no difference in the results of the two school sectors [Thomson et.al. 2010].

The Netherlands has the largest private school sector of any country in the world with just over 70% of secondary school students attending government funded private schools. If private schools produce higher education outcomes than public schools as the advocates of the privatisation of education claim, then The Netherlands is the country where this should be happening. But, apparently this is not the case.

A comprehensive study found no difference between the achievement of secondary school students in public and private schools. It analysed the results from the OECD’s Programme for International Student Assessment in 2006 and 2009 for reading, mathematics and science. It concluded that “there is no statistically significant difference between the achievement of public- and private school students; once they are matched on observable characteristics” [p.28].

All this evidence suggests that the Coalition Government’s strategy of making public schools more like private schools in order to improve national education outcomes is doomed to failure. It may even make lead to a further decline in outcomes. The Government needs to re-think.

### **References**

Buly A. Cardak & Joe Vecchi 2013. Catholic school effectiveness in Australia: A reassessment using selection on observed and unobserved variables, [\*Economics of Education Review\* 37: 34–45.](#)

Ilja Cornelisz 2012, A reexamination of private school effectiveness: the Netherlands. [National Centre for the Study of Privatisation in Education](#), Teachers College, Columbia University, New York.

Tom Elder & Christopher Jepsen 2014. Are Catholic primary schools more effective than public primary schools? [Journal of Urban Economics](#), 80, March, 28–38.

Christopher A. & Sarah Theule Lubienski 2013. [The Public School Advantage](#), University of Chicago Press, Chicago.

Liam Mannix 2013. Making public schools more like private schools: Pyne's vision. [InDaily](#), 9 May, p.2.

OECD 2010. PISA 2009 Results: [What Makes a School Successful \(Volume IV\)](#), Paris.

Chris Ryan (in press). What is behind the decline in student achievement in Australia? [Economics of Education Review](#).

Sue Thomson; Lisa De Bortoli; Marina Nicholas; Kylie Hillman & Sarah Buckley 2010. [Challenges for Australian Education: Results from PISA 2009](#), Australian Council for Educational Research, Melbourne.