



Research Insights

Who takes advantage of My School data?

An examination into the effects of My School release on school socioeconomic status (SES) composition.

Measuring changes in school choice by SES

In January 2010 the Rudd Government made school-level National Assessment Program – Literacy and Numeracy (NAPLAN) data nationally available for the first time via the My School website. The aim was to improve school accountability and transparency to inform parental choice, which would ultimately incentivise schools to lift their performance. However, such benefits are only realised if people use My School data to select schools. In practice this is unclear, and more worrying is the prospect that the main consequence was that it prompted high SES families in low-scoring schools to leave, with low SES families left behind. Increasing concentrations of disadvantaged kids in low-scoring schools can worsen inequity in education because of the role of peer effects in learning and because of the potential loss of good teachers if the learning environment becomes more challenging.

We estimate how the release of school-level NAPLAN test score data via the My School website impacted student SES composition of schools in Australia. To do this, we compiled NAPLAN test score and enrolment data for all primary and secondary schools from 2008 to 2015 from the Australian Curriculum, Assessment and Reporting Authority (ACARA). We then estimated changes in student composition across all schools for the period following My School's introduction (2011-15). Estimated differences in school compositional changes can occur for many reasons, but those related to differences in local school competition are attributed to My School. The idea being, schools that face higher levels of competition are more likely to be impacted because parents are better able to use My School to exercise school choice. We measure impacts separately for high and low-scoring schools across the public and private sectors.

Key Insights

1 In 2010, Australian schools were not highly segregated by SES

Prior to the introduction of My School in 2010, around 24% of students nationally would have had to change schools to get an even distribution between low and high SES within schools. Based on findings from international studies (Cutler 1999 and Massey and Denton 1993), these rates can be considered low. Segregation is low regardless of school type and whether the school is high or low-scoring.

The relatively low rate of segregation by SES throughout the schooling system may reflect relatively low residential segregation, flexibility of school choice, a centralised state funding model that is weighted towards low SES schools, and/or the large low-fee private (mainly Catholic) school sector, which provides accessible faith-based education. Given reductions in housing affordability nationally since this time, it is unclear whether this is still the case.

2 My School's release changed perceptions of public school quality

We find that when school-level NAPLAN scores became publicly available, the public schools that were revealed to be high-scoring in turn received more enrolments, mostly at the expense of private schools. The increase in high-scoring public school enrolments following My School (2011-15) is estimated to be 53 students (or 13%) per year higher on average for schools that face the highest 1% level of competition (having around 300 local school competitors), compared to schools that face the lowest 1% (having no or 1 competitor) (Figure 1). Low-performing private schools experience the biggest reduction in enrolments.

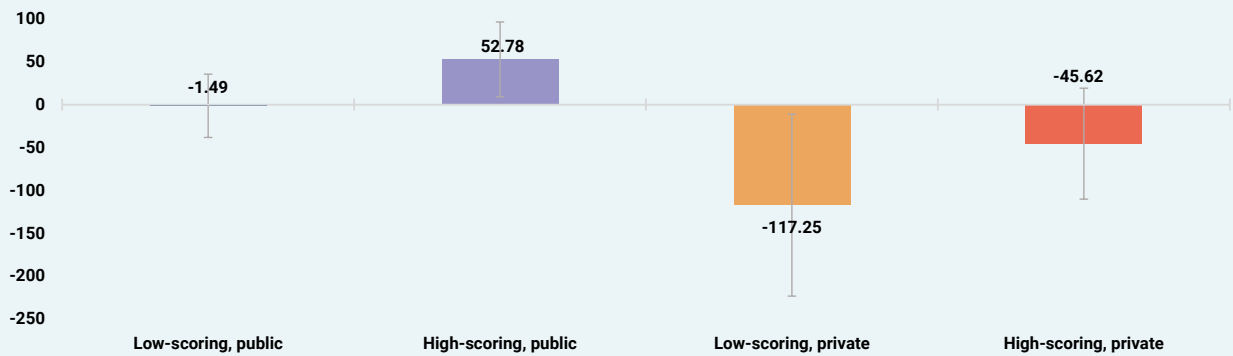
For these schools, the fall in enrolments following My School (2011-15) is estimated to be 117 students (or 35%) per year greater on average for schools that face the highest 1% level of competition, compared to schools that face the lowest 1% (Figure 1). These are the maximum impacts, but most schools experience smaller impacts, for example, for schools facing median level competition (having around 100 competitors), the impacts are around half compared to those that face the bottom 1%. These results suggest that in the absence of NAPLAN information, many people chose private over public schools under the belief that the extra cost means 'better quality'.

3 Low SES families use school-level NAPLAN data to find 'good' schools

In high-scoring public schools, there is increased enrolment from the bottom and top SES quartiles, with the increase in the bottom quartile greater than the top – 47 extra enrolments per year versus 26 for schools in the highest 1% level of competition, compared to schools that face the lowest 1% (Figure 2).

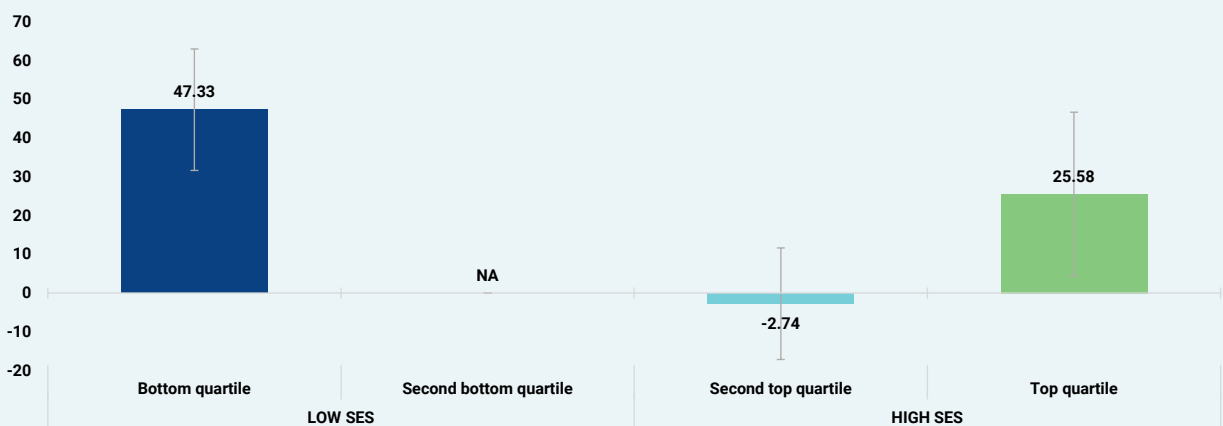
This strong response contradicts survey evidence that low SES families do not value academic achievement as much when choosing schools (Johnson and Shapiro 2003; Bosetti 2004; Roda and Wells 2013), but is consistent with the notion that those same families can benefit more from the information to support education choices.

Figure 1:
Estimated average annual change in post-My School enrolments (2011-15) for schools that face the highest 1% level of competition, compared those in the lowest 1%



Notes: Whether the school is high or low-scoring depends on whether their average NAPLAN score across all tested year levels in 2008 and 2009 is above or below the national average. School competition is measured as the weighted sum of schools that offer the same year levels (primary or secondary) within a 30-minute drive, with those 15 to 30 mins away weighted increasingly less. The error bars that straddle the tops of the bars are 90% confidence intervals. Those that include 0 (the x-axis) are not statistically different from 0 at 90% confidence. Results are generated separately for each school type using a difference-in-differences regression model with extensive controls for school regional differences and region-specific time trends.

Figure 2:
Estimated average annual change in post-My School enrolments (2011-15) for high-scoring public schools that face the highest 1% level of competition, compared to those in the lowest 1%



Notes: The enrolment changes by SES do not sum to total enrolment changes for high-scoring public schools in Figure 1 because analysis of the latter is restricted to a slightly smaller sample of schools without missing SES information. Whether the school is high or low-scoring depends on whether their average NAPLAN score across all tested year levels in 2008 and 2009 is above or below the national average. School competition is measured as the weighted sum of schools that offer the same year levels (primary or secondary) within a 30-minute drive, with those 15 to 30 mins away weighted increasingly less. The error bars that straddle the tops of the bars are 90% confidence intervals. Those that include 0 (the x-axis) are not statistically different from 0 at 90% confidence. Results are generated separately for each SES quartile and using a difference-in-differences regression model with extensive controls for school regional differences and region-specific time trends. NA is not available because results are not robust to DiD modelling assumptions.

4 Students in low-scoring public schools are trapped

We find no change in enrolments among low-scoring public schools. This is mainly because these schools are in rural and remote areas where there are few accessible high-scoring options locally.

Importantly, we find no evidence that high SES families flee these schools. This result underlines the limits of school choice outside inner-suburban areas.

5 My Schools had no impact on overall SES segregation in Australian schools

Overall, we estimate that the release of My School did not change the level of school SES segregation between 2011 and 2015. This is both because there was no enrolment change in low-scoring public schools (the largest of the four school types) and because both high and low SES families moved from private to high-scoring public schools.

The greater response from low SES families was not enough to change segregation levels in any significant way. We also find no significant change in the SES student composition in public or private schools by average NAPLAN scores.

Information matters for equity in education

We find no evidence that the introduction of My School has led to a greater concentration of low SES families in low-scoring schools. Instead, our results suggest that NAPLAN is meeting its intended purpose of helping parents to find good schools and dispel myths about the relative quality of public and private schools that persisted before NAPLAN.

However, whether this 'dose of accountability' has motivated private and low-scoring public schools to improve the quality of their education (a secondary purpose) is unclear. Even though low-scoring public schools are not impacted by a loss of students, it is still possible that the public scrutiny from My Schools may have initiated change. Future research is needed.

For policy makers, the response of low SES families to My School sends the message that they do care about their children's academic outcomes, but that they are often observed to make 'inferior choices' because they don't have the same access to information and networks as high SES families.

Before NAPLAN, finding information about student achievement in schools was difficult and time consuming for low SES families, especially for migrants who may not have the same networks, institutional knowledge, or time to investigate. The My School experience demonstrates that accessible, easy to digest and culturally sensitive information can help rectify this.

Further Information

Datasets:

We use school-level data from the Australian Curriculum and Assessment and Reporting Authority (ACARA) (<https://acara.edu.au/contact-us/acara-data-access>). All views expressed in this publication, or errors, are those of the authors and should not be attributed to ACARA, the Melbourne Institute: Applied Economics and Social Research, or the University of Melbourne.

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