AUSTRALIAN COUNCIL FOR THE DEFENCE OF GOVERNMENT SCHOOLS PRESS RELEASE 842

THE AUSTRALIAN EGALITARIAN MYTH:

IN TATTERS

New Study Shows that the Social Composition of Schools Strongly Influences School Results

Thanks to the current stratified educational system in Australia, a child's chances of educational success, not to mention social and economic opportunities,. depends on their parent's bank balance and place of residence.

The 'equality of opportunity' rhetoric, not to mention the reality of Australian elites is in tatters. But the worrying thing is that even the rhetoric is under attack from the conservative educationalists who insist that genetic factors trump environmental influences. The billions provided by governments in the name of disadvantage, they argue, have been wasted. They do not mention, of course, that a lot of the billions did not, in fact, go to the disadvantaged.

Researchers and academics have produced evidence and attempted to influence policy, but in the final analysis, it gets down to basics: What are the effects of inequality on the educational opportunities, not to mention the social, health, and economic well-being of a nation?

The conservatives believe that inequality is a good, healthy thing. It encourages competition.

Progressives have wished to ameliorate disadvantage, but, the inability of post World War 2 social democrats to persuade the well-off that they cared not only about elite institutions for their own children but also about schools for the rest helps to explain why social-democratic parties like our Labor Party have also become parties of the education elite. They have become part of the "Brahmin" progressive elite.

In view of the failure to develop a just and transparent set of educational policies, promoting schools that are open to all children, schools that are free, secular and universal in curricula offerings, none of this is surprising.

RESEARCH FINDINGS FROM SAVE OUR SCHOOLS

According to Trevor Cobbold of Save Our Schools, there is extensive research evidence of the impact of family background on student results. Many studies from the United States, the United Kingdom, the OECD and Australia also show a school socio-economic composition (SEC) effect whereby students attending schools with a high concentration of students from poor families tend to have lower results than students from similar backgrounds attending schools with higher proportions of students from well-off backgrounds.

There is a "double jeopardy" effect for students from low socio-economic status (SES) families in that they tend to be disadvantaged because of their circumstances at home, but when they are also segregated into low SES schools they are likely to fare even worse. As a result, increasing social segregation between schools tends to lead to worse results for low SES students and widen the achievement gap between high SES and low SES students.

This school compositional effect has been questioned by conservative researchers. For example, the Australian researcher, Gary Marks, claims that it is a "statistical artefact". More broadly, Marks says that the impact of SES on student results is weak and that genetic factors are a much more substantial influence. He claims that low SES students have lower intelligence and that you cannot do much about SES. His studies are used by private school organisations such as Independent Schools Victoria and their advocates such as Kevin Donnelly to claim there is no case for additional funding for disadvantaged students and schools.

A new study by Australian academics FROM Murdoch University in Western Australia, published in the <u>British Journal of Sociology of Education</u> conclusively debunks Marks' claims that school composition has a negligible effect on student achievement. It shows that the statistical methods used by Marks are "very unlikely to detect significant SEC effects" [p. 10]. It says that the methods he uses actually remove variance in results attributable to school composition.

A significant issue is that one of the methods (called "residualised change models") used by the Marks and others to analyse the effect of SEC includes measures of prior achievement at both the student and school level to allow estimation of the effects of other variables. The problem with this approach is that it removes all the effect of factors such as school resources, the SES of students and schools, parental involvement and teaching practices that influence prior achievement. For example, the new study analysed the 2017 NAPLAN results and found that prior school level achievement explained 50-74% of the variance in SEC in Year 5 depending on the domain tested. As a result, this methodology used by Marks and others likely underestimates the effect of SEC on student results.

The study compared its own analysis with that of Marks and found that inclusion of both SEC and prior school achievement has much smaller SEC effects but there is a much higher SEC effect when school prior achievement is excluded. The study found that SEC explains 79-87% of the difference between schools in the growth in student achievement from Year 3 to Year 5. Thus, this method used by Marks vastly under-estimates the effect of SEC on school results.

Another method (called "fixed effects models") used by Marks and others to analyse the impact of SEC also found very small effects. However, this method removes stable

differences between students as it is directed at analysing the impact of changes in individual characteristics over time. The problem in using this method to analyse the effect of change in school composition is that school composition tends to change little over time. As a result, this approach finds very small effects of SEC on student achievement growth:

... the limitations of the fixed-effects methodology largely explain why such models found that changes in SEC had little effect on academic achievement growth. [p. 5]

The new study provides a detailed mathematical analysis of why these models find little effect of school composition on student achievement growth.

The study also notes that some research studies have found that measurement error may have led to false or exaggerated findings of school composition effects. Many previous studies of the impact of school composition on student achievement did not control for measurement error. However, there is a method called structural equation modelling that can exclude measurement error from variables. The study applied this approach to PISA 2015 data and found that school composition has a statistically significant effect on student achievement.

The study also compared the results from this method with those of methods used in previous studies. Interestingly, it found a significantly larger effect of school composition in some countries when controls for measurement error are used. As a result:

Our findings suggest that it is not reasonable to reject prior compositional research that has not controlled for measurement error... [p. 10]

The findings of the study confirm that school composition has a significant effect on student achievement. It shows that this effect remains significant and can be even larger when measurement error is accounted for.

These findings have major implications for education policy in Australia. According to My School, nearly 20% of schools in Australia are highly disadvantaged with 50% or more of their students from low SES families. Some 94% of these highly disadvantaged schools are public schools.

Yet, data from the OECD's Programme for International Student Assessment (PISA) in 2018 show that Australia continues to allocate more and better quality teacher and physical resources to <a href="https://high.ncbi.nlm.

There were 3 Replies to Trevor Cobbold's article quoted above "New Study Shows that the Social Composition of Schools Strongly Influences School Results"

1. **Kevin Donnelly** a well known Conservative commentator ssaid: :

Hi Trevor – Kevin Donnelly here. My argument has consistently been that the impact of a student's SES on educational outcomes is not as large as many in Australia argue. And 'yes' I often refer to the research by Gary Marks but I also refer to others, see https://theconversation.com/social-class-affects-school-achievement-less-than-you-think-23973 for one example. The reality is that the \$billions spent over the last 20 to 30 years to address disadvantage has failed to lift standards – proving that over emphasising SES as a factor is a waste of time and money.

2. **Lisa** said:

May 14, 2020 at 12:28 am

Our family would be classified as being in a high SES/ICSEA group and most of our family & friends send their kids to top private & selective schools. However, we allowed our kids to choose their own school and they all attended our local primary & high schools which serve a mixed SES population (official ICSEA value of 1008 which is middle of the range). Our eldest completed high school at 16 with top band marks in all seven subjects -Adv Eng, Maths Ext 1 & 2, Physics, Chem, Bio & Ec. She received offers to study at all of her first choice med schools in each state. Our son has achieved several perfect scores in NAPLAN numeracy & scored 98 in HSC Adv Maths last year at 14 in Yr 9. He placed third nationally in the AIMO and accepted invitations to both AMT School of Excellence & AMT Selection School. He is also a state level athlete in several running & field events.

The following are what I believe have enabled them to succeed

- I) Parents who value academia and are able to afford 'essential' resources. For example, many families at our school cannot afford to buy books and rely on loans from the school, which has only a limited number of copies of required reading materials. So classes take turns with each set of books, rotating each term. This means that by the end of year exams, students often have not had access to some relevant materials for several months. By spending a relatively paltry sum compared to private school fees, we ensure that our kids have access to educational resources they require (we have also made donations to enable purchases of class sets of books).
- II) Several excellent teachers at their school, including a few who have previously taught at selective schools, are able to identify and support gifted students. The Maths Head Teacher sourced an online maths program which enables students to work at their own pace (even finishing the Yr 10 curriculum in Yr 7) but at \$72 per student, most families could not afford to subscribe, so she sourced a different program which costs \$12 per student.
- III) Digital media which allows self directed learners to look up almost anything on the internet.

IV) Time saved by not having to commute to a distant private or selective school (saving one hour per trip adds up to 2400hrs over six years of high school which is a very significant amount, noting some students have even longer commutes).

Therefore, whilst my kids have thrived at our local schools, under current funding arrangements, some students there undeniably suffer due to socioeconomic disadvantage.

3. **JEAN ELY** said:

May 14, 2020 at 10:26 am

The 'Needs' policies of the last 60 years have all failed because

- 1) the wealthy in Australia do not wish to pay taxes for the education of other people's children;
- 2) the terms of reference of both Karmel and Gonski meant that they had to be 'sector blind' and that the wealthy had to be ameliorated before any crumbs could come down to the poor.
- 3) The State school interest were bought out with a few millions in the 1970s while the Catholic system rorted the system. The religious schools have, certainly since 1973 'selected' children and diverted government funds given for the poor to either new 'Needy" schools or schools for their elite. If anyone objected to this in the period 1973-2010 they were labelled 'sectarian'. But the numbers are now on the MySchool website. Even Turnbull has recently exposed their hypocrisy.

The situation has been exacerbated by the neoliberal orthodoxy which has put education into the market place, not of ideas, but into a strange financial market place laid up in heaven since the 1980s.

The interesting statistics are those being developed by the WID World Inequality Data website. Those for Australia are limited but some comparisons can be made with the other western democracies as well as China and Russia. The inequities in Australian education, particularly since the 1980s can be seen as part of a broader, worldwide pattern.

And, if you read Picketty's latest tome, *Capitalism and Ideology*, you can also see how ideology has played a crucial part.

Religious schools and their production of those born to rule go back into a previous time, a time when clerics, nobles and the third estate- those whom Menzies referred to as woodchoppers – ran European countries. They are an anomaly in our Australian democracy. Or are they?

What kind of a society will our children inherit?

JEAN ELY

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