Building education systems for equity and inclusion

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A Policy Problem

Designing robust education systems that can deliver equitable and inclusive schooling at scale while withstanding internal tensions for differentiation and external pressures for standardisation has been an enduring issue for government and systems.

Proposed solution

Choice + Autonomy + Accountability
A tentative empirical model

\[ EIEA = SC_{g \text{sea}} + SA_{f \text{se}e} + PA_{ao \text{si}} \]

- Where \( EIEA \) is equitable and inclusive education in Australia, \( SC \) is school choice across geolocation \( g \) and socio-educational (dis)advantage \( sea \), \( SA \) is school autonomy and particularly over fiscal \( f \), staffing \( s \), and educational \( e \) matters, and \( PA \) is public accountability linked to academic outcomes \( ao \) and social impact \( si \).
The evidence base

Figure 1. Australia’s (——) performance in PISA reading, mathematics, and science against OECD average (---) 2000-2018

Figure 2. Average NAPLAN score (Australia), Year 3, 5, 7 & 9, 2008-2021
Figure 3. Difference from Major Cities mean score on NAPLAN (Reading, Writing & Numeracy) Year 3, 5, 7 & 9 by geolocation, 2021
<table>
<thead>
<tr>
<th>Year</th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
<th>WA</th>
<th>SA</th>
<th>Tas</th>
<th>ACT</th>
<th>NT</th>
<th>AUST</th>
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<td>4.4</td>
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<td>31.6</td>
<td>27.6</td>
<td>31.9</td>
<td>28.6</td>
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<td>42.0</td>
<td>13.4</td>
<td>47.5</td>
<td>30.6</td>
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<td>31.4</td>
<td>28.7</td>
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<td>20.3</td>
<td>4.9</td>
<td>29.5</td>
<td>12.9</td>
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Table 1. Percentage of students enrolled with low (bottom quartile) Socio-Educational Advantage Government v Non-Government school, state / territory level, 2013-2020.
Hypotheses

• $H_1$: The abolishment of the New Schools Policy (1996) led to a shock in provision through unprecedented expansion of non-government schools and enrolments nationally.

• $H_2$: School autonomy reforms (post-2008) have changed the role of school principal to allow greater focus on improving outcomes.

• $H_3$: Accountability reforms (post-2008) have improved data infrastructure to better focus on improving teaching and learning.
The provision of schools

Figure 5. Number of schools (government v non-government), actual (—) and predicted (—) (including upper and lower confidence bounds), 1956-2021

3.22 per cent variance

308 schools
Panel 1: Government schools

Panel 2: Non-government schools

Figure 5. Percentage change in the number of government or non-government schools by state / territory, 1996-2021
NT (4.72)
Qld (6.35)
ACT (5.78)
NSW (2.32)
Vic (3.22)
SA (5.95)
Tas (4.24)
Choice by geolocation
Choice by socio-educational (dis)advantage

SES is not necessarily negatively correlated with school choice.

HOWEVER

SES scales (including SEIFA, IRSD, ICSEA etc) are all designed to include ‘education’. Therefore, analysis by these categories will evidence disadvantage based on education. See: endogeneity
Enrolment by sector

Figure 8. Distribution of enrolments as percentage of market share for non-government schools (actual and predicted, including upper and lower confidence bounds), 1956-2021

116,705 students

2.90 per cent variance
Figure 6. Percentage change in enrolment, government v non-government schools by state/territory, 1996-2021
Enrolment by geolocation

Table X. Variance (percentage and absolute) in enrolment by sector and geolocation, 2008-2021

<table>
<thead>
<tr>
<th>Geolocation</th>
<th>Sector</th>
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<tr>
<td></td>
<td>Government</td>
<td>Catholic</td>
<td>Independent</td>
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<tr>
<td>Major Cities</td>
<td>+1.13 (33,126)</td>
<td>-1.61 (47,197)</td>
<td>+0.49 (14,364)</td>
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<tr>
<td>Inner Regional</td>
<td>-3.67 (26,527)</td>
<td>+0.97 (7,611)</td>
<td>+2.70 (19,561)</td>
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<tr>
<td>Outer Regional</td>
<td>-3.06 (9,656)</td>
<td>+0.92 (2,903)</td>
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<tr>
<td>Remote</td>
<td>-1.33 (601)</td>
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<td>+1.46 (660)</td>
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<tr>
<td>Very Remote</td>
<td>-0.05 (15)</td>
<td>-1.08 (317)</td>
<td>+1.13 (332)</td>
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<tr>
<td>TOTAL</td>
<td>-3,673</td>
<td>-37,659</td>
<td>+41,593</td>
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</table>
School autonomy

11% of time on teaching and learning tasks

Sch leaders report 57-60+ hrs per week

60% of TCH and P consider leaving

Increased accountability and reduced supports
(expansion of administrative role coupled with decreases in systemic supports and school-to-school collaboration)

Localised school management
Context-sensitive decision-making
Principal instructional leadership
Quality of teaching
Outcomes of school

No demonstrable improved outcomes
Alignment with accountability issues remain

Widening disparity gap
(enduring issues of socio-economic and geographic division in society coupled with declining outcomes)
Accountability

School-based education attracted over $70 billion of public funding last financial year

National Reporting on Schooling data
MySchool website
Systemic dashboards
Annual School Reports

Existing data infrastructure focuses on academic outcomes not other forms of value / impact creation

Despite accreditation requirements, there is no oversight on judgements on the quality of teaching

Significant research indicates families choose school based on absolute not value-add measures

Conflation of equality (input variable) compared with equity (an output variable)
And so ...

- School **choice** has not improved outcomes and when coupled with the unique architecture of Australian education, led to many spill over effects in the distribution of students and schools.

- School **autonomy** has not led to significant differentiation in provision and instead amplified administrative work at the school-level compromising outcomes.

- Narrow and cascading **accountability** requirements have not improved outcomes and taken educators away from high impact activities.