Success in life is tied to parental education—tracking intergenerational school performance is key

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The notion of the "fair go" is meant to be central to Australia's national ethos.

It's not easy to define, but most of us would agree it means the chance to

reach your full potential, regardless of your background. This doesn't necessarily mean equality, but it does imply social mobility, where you can do better than your parents based on merit.

Education is a major driver of social mobility, with research showing educational attainment explains up to 30% of the transmission of economic advantage between parents and children.

But a Productivity Commission report published last month shows the education system is not doing well in correcting for the disadvantage students face in the classroom.

For example, Year 3 students whose parents did not finish secondary school are an average of 1.3 years behind in numeracy, compared with those whose parents have a bachelors' degree or higher. By the time these students reach Year 9 this gap widens to almost four years.

The Productivity Commission report was commissioned under the Morrison government to review the 2018 National School Reform Agreement between the federal and state governments to improve student outcomes. The deal came with A$319 billion in extra funding. But after five years, the report concludes, this has so far failed to make any difference in results.

Given the magnitude of the funding, this is troubling on its own. The broader implications for social mobility in Australia are even more concerning.

The commission's report highlights the need for better data on educational attainment and social mobility. This will enable better analysis of the links between the two—and ultimately more effective education policy.

If policymakers don't know what works, especially for students from disadvantaged backgrounds, they will spend money on the wrong things.

The importance of longitudinal data

As children from less educated families perform significantly worse than the children of the more educated, it is far less likely their relative economic situation in adulthood will exceed that of their parents.

Unraveling the links between education and social mobility requires longitudinal data—tracking the same individuals over decades.

The best example of longitudinal data in Australia is the Household, Income and Labor Dynamics in Australia (HILDA) survey, conducted by the Melbourne Institute at the University of Melbourne.

Since 2001, HILDA has tracked a nationally representative sample of about 18,000 Australians, asking them about things such as income, employment, health and well-being. By surveying the same people, researchers can use this data to understand influences on people's lives over time.

The Australian Taxation Office's ALife dataset, an anonymized sample of 10% of all Australian taxpayers also provides significant insight into intergenerational income mobility.

By following individuals over decades, researchers can observe and compare the labor market outcomes of parents with those of their children as they grow into adults.

For example, University of Technology Sydney researchers Tomas Kennedy and Peter Siminski have used HILDA and other survey data to conclude about two-thirds of Australians aged 30-34 have higher

incomes than their parents at the same age.

Australian National University researchers Nathan Deutscher and Bhashkar Mazumder have used ALife to conclude about 12% of Australians born into the bottom 20% of family income join the top 20% between the ages of 29 and 35. If a family's wealth at birth had no bearing on a child's wealth as an adult, that number would be 20%.

Deutscher has also used ALife to follow individuals over 25 years and calculate the effect of where they lived as a child on their income in adulthood. Where a child grows up has a causal impact on their adult outcomes. This typically matters most during the teenage years.

The question is how much of this relates to their school.

To answer this and other questions, researchers need more comprehensive longitudinal data that enables linking things such as child-care attendance, test scores, and school choice across time and with other data sources.

Unique student identifier

One important policy initiative of the National School Reform Agreement is the introduction of a "unique student identifier" (USI) to track individual student performance over time. This will enable data on educational outcomes to be more easily linked with other data held by state and federal governments, and provide researchers with a clearer picture of how educational outcomes shapes social, economic and health outcomes later life.

However, the Productivity Commission report notes the rollout of this initiative is well behind schedule.

The USI offers more than mere standardization. Once in place, researchers will also be better able to evaluate the impact of education policy interventions by conducting randomized control trials, similar to those used by in medicine to assess the efficacy of new drugs and treatments. Such trials are crucial for assessing whether a particular education policy reform, for instance a new teaching method, has a causal impact on learning outcomes.

To date, the dearth of randomized control trials in education policy has held back the Australian education evidence base.

As noted in the University of Newcastle's Teachers and Teaching Research Center's submission to the Productivity Commission, the use of randomized control trials in evaluating education policy is hampered by the expense of collecting data from students via surveys. Better data linkage can help solve this problem.

Building a more effective education system to support, maintain and improve social mobility requires the right tools. Without better integrated data and a more reliable education evidence base, taxpayers are far less likely to see a return on the billions being spent.

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