



SUMMARY NOTE

Research Partnerships

Peer Effects and Achievement in Victorian Schools

This research analysed the effect of a child's peers at school on their achievement using Victorian government school National Assessment Program – Literacy and Numeracy (NAPLAN) data.

Key Findings and Conclusions

- The paper found positive and significant peer effects across all NAPLAN domains (reading, writing, numeracy, spelling, grammar and punctuation) in Years 3 and 5. That is, a child's achievement is positively affected by higher average peer performance.
 - For example, in reading for both Years 3 and 5, a one point increase in peers' average test scores is associated with between a 0.221 and 0.250 point increase in an individual child's test score. This would mean that a one standard deviation increase in peers' average test scores (about 30 NAPLAN points) leads to a 7 NAPLAN point increase in an individual child's test score.
- The estimated effects for Year 7 students were smaller than those of Years 3 and 5, and only significant for numeracy. Given that students undertake Year 7 NAPLAN in the first couple of months at a new school; this was explained as peers having had less opportunity to influence individual students than is the case in other year levels. The effects for Year 9 students were larger and significant for all NAPLAN domains.
- There were stronger peer effects for boys than girls in Years 3 and 5 across all domains. Peer effects tended to be slightly smaller for high-SES students than for low-SES students in Years 3 and 5. Peer effects were also found to be similar in both small and large schools.

- The paper concludes that variations in the backgrounds (low- or high-SES) or characteristics of peers are not important for an individual child's achievement but that the performance of their peers is.

Project Background

- Peer effects refer to the ways in which the actions or background characteristics of classroom peers affect an individual child's behaviour or outcomes. Peer effects in educational achievement might work through a number of mechanisms: including direct learning between peers; competition between peers; classroom disruption; and the influence of peers on the pace and level at which the teacher can teach the class. Peer effects also operate via current peer behaviour or achievement (e.g. individuals study harder and/or perform better in tests if their peers study harder and/or perform better in tests).
- Most of the economic literature on peer effects in education has focused on exploring the influence of peer background characteristics (e.g. race, gender) on student achievement; however this paper focusses on the influence of peer achievement.
- The paper asserts that this is the first such study of peer effects using Australian school achievement data in place of survey data allowing for greater reliability of findings.

Project Methodology

- The researchers used NAPLAN data for Victorian government school students from 2008 to 2011 to estimate peer effects in school achievement in Years 3, 5, 7 and 9 across five achievement domains: reading; writing; numeracy; spelling; grammar; and punctuation.
- Background characteristics were also considered: including gender; date of birth; Indigenous status; whether English is the main language spoken at home; and parents' occupations and education levels.

Acknowledgments

This summary note is based on the 2013 research report, *Right Peer, Right Now? Endogenous Peer Effects and Achievement in Victorian Primary Schools*, by Duncan McVicar, Julie Moschion and Chris Ryan. The research report can be accessed at:

https://www.melbourneinstitute.com/downloads/working_paper_series/wp2013n22.pdf