

# EARLY BIRD CATCHES THE WORM: THE CAUSAL IMPACT OF PRESCHOOL PARTICIPATION AND TEACHER QUALIFICATIONS ON YEAR 3 NAPLAN COGNITIVE TESTS



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*particularly using the data from the Longitudinal Study of Australian Children and the Household Income and Labour Dynamics in Australia (HILDA) Survey. Her main research interests are economics of education and labour economics. Prior to joining AIFS, Diana worked as a Research Fellow at the Melbourne Institute of Applied Economic and Social Research at the University of Melbourne, where her research work focused mainly on retirement decision-making and, more recently, early childhood education.*

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## Abstract

Using data from the Longitudinal Study of Australian Children (LSAC), this is the first analysis for Australia to evaluate the impact of attendance at preschool programs on matched Year 3 nationwide National Assessment Program – Literacy and Numeracy (NAPLAN) test outcomes in the domains of numeracy, reading, spelling, writing and grammar. We also disaggregate the impact of specific teacher qualifications on children's cognitive outcomes. While one year of learning in Year 3 is represented by about 50 NAPLAN points, we find average preschool domain effects as much as 10–15 points. The impacts for NAPLAN scores in numeracy, reading and spelling domains are the strongest and are significant. The highest increases in NAPLAN scores were attained by children whose preschool teachers had diploma- or degree-level qualifications, identifying for the first time the crucial nature of teacher qualifications in driving nationally representative long-run preschool treatment outcomes.