



National Centre for Longitudinal Data

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Increased literacy scores for Indigenous children in schools using the cross-curriculum priority

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Results from *Footprints in Time: the Longitudinal Study of Indigenous Children (LSIC)* indicate that children attending schools using the Aboriginal and Torres Strait Islander histories and cultures cross-curriculum priority have higher average literacy scores than children in schools that do not.

Methodology

More than 1,200 children and their primary carers were interviewed in the sixth wave of LSIC. In addition, teachers of the children were asked to complete a written questionnaire. Teachers are asked a series of questions about the study child, themselves, their programme and their school. Many of the questions are the same as those used in the Longitudinal Study of Australian Children (LSAC) while some questions are unique to LSIC. Although most parents and carers give permission for their child's teacher to complete a questionnaire, responses from teachers covered less than half of the children in the study (543).

For this analysis, the Academic Rating Scale (ARS)¹ was used to assess the literacy of children in the study. The ARS consists of 10 items describing different literacy skills against which the teacher rates the child's ability on a five-point scale.

Teachers in LSIC are also asked a series of questions about their school's Aboriginal and Torres Strait Islander education focus, including the employment of Indigenous staff, whether elders visit and whether teachers understand the importance of identity and family connection. One of these items asks whether:

This school is using the **Australian Curriculum cross-curriculum priority of Aboriginal and Torres Strait Islander histories and cultures** in its teaching.

Results

There are 500 children's ARS literacy scores in wave 6 with a range of 10–50, a mean of 30.3 and a standard deviation of 12.2. In terms of curriculum, 44.9 per cent of teachers said their school was 'currently using the Aboriginal and Torres Strait Islander histories and cultures cross-curriculum', 28.6 per cent said their school was working on it, 8.8 per cent said it was not using it and 16.3 per cent said they did not know if they were using it (a further 1.3 per cent refused to answer).

To ascertain whether children in the schools which were using the Indigenous curriculum were performing better than children in other schools, a dichotomous variable was created to compare the ARS results of children in the two groups of schools.

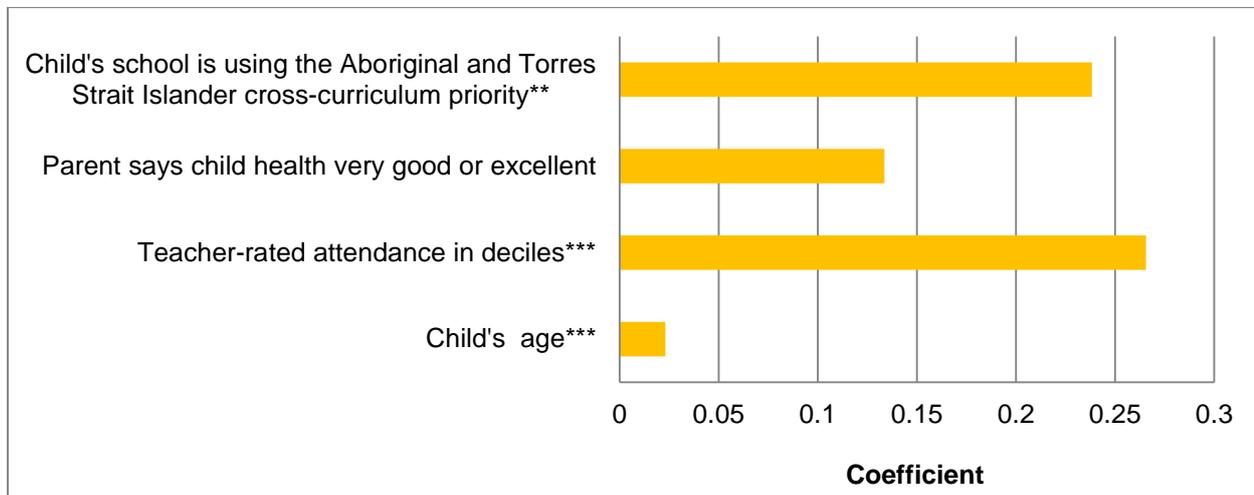
A multiple regression model which controlled for variables known to be related to literacy, (such as school attendance^{2,3}) was constructed. Figure 1 shows that literacy scores do seem to be related to whether the

¹ Teacher Academic Rating Scale (TRATE)—as used in Early Childhood Longitudinal Study, Kindergarten Cohort of 1998–99, ECLS-K, US Department of Education (Spring Teacher Questionnaire).

² HK Hancock, CCJ Shepherd, D Lawrence, D & SR Zubrick, *Student attendance and educational outcomes: Every day counts*, Report for the Department of Education, Employment and Workplace Relations, Canberra, 2013.

Indigenous cross-curriculum priority is used in the school even when controlling for attendance, child's age in months, and responding parent's education. The multivariate model includes 450 children and accounts for about 24.8 per cent of the variation in literacy scores⁴.

Figure 1: The relative contribution of Aboriginal and Torres Strait Islander cross-curriculum priorities to LSIC children's literacy scores



Note: ** $p < 0.05$; *** $p < 0.01$.

In addition to the teacher-reported ARS language and literacy measures, *Footprints in Time* interviewers conduct vocabulary and reading assessments with the children in the study. Vocabulary scores (for children aged around 6 in 2013) were 2.8 points higher ($p < 0.01$) for the children whose teachers say their school includes the Aboriginal and Torres Strait Islander cross-curriculum priority ($n = 274$, in a multiple regression model with child's age, attendance and parent education). However, reading scores for the older children did not show a statistically significant difference with the inclusion of the priority. This could be partially due to the limited power of the analysis as fewer teachers completed questionnaires for the older children, so that only 181 teacher questionnaires could be matched with the 452 available reading scores.

Limitations

Although clear, the results in Figure 1 should be interpreted with caution. LSIC is not a representative sample and the results should not be generalised. In addition, the characteristics of responding teachers may be quite different to those of teachers who did not respond and as the ARS is a subjective measure that involves teachers rating of child ability, this may impact on the outcome. Nonetheless, it will be worth seeing whether the results are replicated in other studies or in wave 7 of LSIC with other measures of children's literacy ability.

As there is only a single question in the LSIC teacher questionnaire about the inclusion of cross-curriculum priorities, it is also difficult to ascertain whether the result is related to the school's inclusion of these priorities, or whether each child's literacy score is more closely related to something else, such as an individual teacher's practice. For example, the summative evaluation of the Stronger Smarter Learning Communities (SSLC) project⁵ found that teachers who had levels of engagement with Indigenous families, communities and cultures outside school were more likely to report that they were teaching Indigenous topics in the classroom.

³ N Biddle, *Developing a Behavioural Model of School Attendance: Policy Implications for Indigenous Children and Youth*, CAEPR WORKING PAPER NO. 94/2014 Centre for Aboriginal Economic Policy Research CAEPR WORKING PAPER NO. 94/2014.

⁴ Adjusted R-squared.

⁵ A Luke, C Cazden, R Coopes, V Klenowski, J Ladwig, J Lester, S MacDonald, L Phillips, PG Shield, N Spina, P Theroux, MJ Tones, M Villegas, & AF Woods, *A Summative Evaluation of the Stronger Smarter Learning Communities Project: Vol 1 and Vol 2*. Queensland University of Technology, Brisbane, 2013.