Australian Writing Survey: Building an evidence base



Research Brief

Part One February 2020

Institute for Learning Sciences and Teacher Education Professor Claire Wyatt-Smith and Christine Jackson

Overview

Large-scale testing at national and international levels has made it possible to track performance trends in ways not achievable in earlier eras. The National Assessment Program - Literacy and Numeracy (NAPLAN), for example, has generated valuable data over the twelve years of testing commencing 2008 to the present, revealing declines in writing performance in every Australian State and Territory.

This decline in student writing has provoked questions about why there is a downward trend in writing in Australian schooling. Other questions have also opened up about what we know about the practices teachers rely on to teach writing. To date, little is known about how writing is taught and assessed across subject areas and across year levels. This gap highlights the absence of a national evidence base to show how writing is being taught in phases of learning and across curriculum areas.

This Research Brief is the first in a series of three that make available evidence from the Australian Writing Survey (AWS®)1 first implemented in Queensland2 to generate evidence about the teaching of writing in schools. The survey seeks to provide information to address the concerning picture of student decline in the writing domain as reported from the NAPLAN writing results (ACARA, 2020). The AWS[©] was designed by researchers in the Institute for Learning Sciences and Teacher Education (ILSTE) with the intention to hear from teachers regarding their reported practices in the teaching of writing. 4306 teachers from New South Wales across State, Catholic and Independent sectors have also completed the AWS[©].

Using the survey findings from Queensland, this Research Brief explores the adequacy of Initial Teacher Education (ITE) in preparing teachers for teaching writing and other aspects of literacy education that support instruction in writing and using writing to learn. The study adopted a multivariate approach drawing on teacher responses across schooling stages and the number of years taught, to examine preparedness for teaching writing in the classroom.

The brief highlights future opportunities for improving preparedness in order to 'short-circuit' the consequential flow-on effects of poor writing skills on future schooling success and students' post school pathways. The recommendations of all three research briefs are targeted at a range of stakeholders from the system, school and classroom levels, including those responsible for curriculum and assessment policy; school leaders and teachers; and those responsible for ITE and assuring the readiness of graduates for Australian classrooms.



^{1 ©} Australian Writing Survey (AWS) Wyatt-Smith & Jackson, 2016

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What does the data show about student writing?

It is important to acknowledge the value and uniqueness of NAPLAN data. Currently there is no 'like' international largescale standardised writing assessment against which Australia can benchmark students' levels of writing competence. Tests such as the Program for International Student Assessment (PISA), Trends in International Mathematics and Science (TIMMS), and Progress in International Reading Literacy Study (PIRLS) assess the domains of reading literacy, mathematics and science literacy, but 'writing', understood from a basic skills and genre-based perspective, is not assessed by any of these tests.

In Australia, we can look to NAPLAN data to examine how students are performing in writing in Year 3, 5, 7 and 9 against benchmark standards within and across states and territories. The National Minimum Standard (NMS) was developed under the authority of a Benchmarking Taskforce in 1998, with the final literacy and numeracy benchmarks for Years 3, 5 and 7 published in 2000 (Curriculum Corporation, 2000). At the time of writing, however, a Year 9 benchmark has not been published.

According to the NAP website, "The NAPLAN assessment scale is divided into ten bands to record student results in the tests. Band 1 is the lowest band and band 10 is the highest band. The national minimum standards encompass one band at each year level and therefore represent a wide range of the typical skills demonstrated by students at this level" (ACARA, 2018).

The results from the 2019 NAPLAN writing test present a concerning picture (see Table 1 below). The data show percentages of students across all levels that sit in three benchmarked standards: below NMS, at NMS and above NMS. What the data reveal is a growing percentage of students who are below the NMS from Year 3 through to Year 9 across all states and territories. The writing results represent a pattern that Wyatt-Smith and Jackson (2016a) have termed "accelerating negative change" (p. 1). This means that as students are progressing through the Australian schooling system, increasing percentages are unable to meet the minimum benchmark standard of writing.

The NAPLAN writing results from 2019 demonstrate a growing trend of students falling below the NMS, with the NAPLAN data reporting 2.0% of Australian students in Year 3 below the NMS increasing to 15.8% below the NMS in Year 9 (ACARA, 2020).

	Below National Minimum Standard (%)				At				Above			
					National Minimum Standard (%)				National Minimum Standard (%)			
	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
	3	5	7	9	3	5	7	9	3	5	7	9
	Band 1	Band 3 and below	Band 4 and below	Band 5 and below	Band 2	Band 4	Band 5	Band 6	Band 3-6 +	Band 5-8+	Band 6-9+	Band 7-10
NSW	1.2	4.8	8.4	15.1	3.7	12.7	18.1	22.0	93.6	81.1	71.9	61.3
VIC	1.2	2.4	5.5	11.8	2.4	9.8	17.1	21.2	94.2	85.5	75.5	64.6
QLD	2.6	7.7	12.0	21.1	6.0	17.0	21.7	24.6	90.2	74.1	65.0	52.9
WA	2.5	6.4	9.5	13.0	4.8	14.1	17.4	18.8	91.5	78.3	71.9	67.0
SA	2.6	7.8	8.9	15.6	5.8	17.3	20.0	20.6	89.3	72.2	68.5	60.8
TAS	2.6	7.8	11.6	18.3	5.3	17.1	21.8	22.2	90.5	73.4	65.1	57.9
ACT	1.9	4.2	8.2	13.5	3.9	12.1	17.0	19.8	92.4	81.9	73.0	65.4
NT	25.0	34.1	40.8	48.4	10.5	17.4	18.8	17.3	61.8	46.2	38.1	31.8
AUSTRALIA	2.0	5.6	9.0	15.8	4.2	13.5	18.8	21.9	92.1	79.3	70.6	60.5

The above data are drawn from the NAPLAN writing results (ACARA, 2020)

Implications for Australian students

Writing at a level that is below NMS has implications for a student's ability to access the senior curriculum. In senior schooling, writing demands of the curriculum increase as learning becomes more complex. We argue that in all phases of schooling, writing competency is a minimum requirement, with literacy demands in all curriculum areas well recognised to present potential barriers to student success in learning.

An inability to write at a minimum standard will have consequences for young people's post-school pathways, with national and international research reporting that low levels of rudimentary literacy skills could impact workforce options in the future (Shomos & Forbes, 2014; Graham, Rouse & Harris, 2018).

Students who are below the national minimum standard have not achieved the learning outcomes expected for their year level. They are at risk of being unable to progress satisfactorily at school without targeted intervention (ACARA, NAP. 2018).

Using the AWS[®] to generate evidence from teachers about how they teach writing.

Australian Writing Survey

The AWS[©] has been designed to address the significant gap in knowledge to inform education policy, research and practice in regard to writing instruction. The primary aim of the survey is to generate information about (i) the practices teachers rely on in teaching writing across different curriculum areas and phases of learning, and (ii) teachers' self-reports of how well prepared they are to teach writing based on their ITE. It gathers information about the types of professional development that teachers have completed in writing pedagogy and assessment. The survey has eight main focus areas or themes as follows:

- 1. Initial Teacher Education (ITE)
- 2. Professional Learning and Development
- 3. Writing Strategies and Instruction
- 4. Text Types
- 5. Language in Use (focus on grammar)
- 6. Use of Digital Technologies
- 7. Assessment and Reporting
- NAPLAN Writing

The survey was developed by the two lead authors of this brief in consultation with senior policy advisors. It is informed by the Australian Curriculum, Assessment and Reporting Authority (ACARA, 2018a), New South Wales Department of Education Literacy Continuum (2017), the Australian Institute for Teaching and School Leadership (AITSL) Professional Standards for Teachers (AITSL, 2015), and the Action Now: Classroom Ready Teachers Report (Teacher Education Ministerial Advisory Group, 2014).

Items were developed into themes shown above, in order to focus on specific characteristics associated with the pedagogy of writing and writing assessment. Central to the study was the aim of connecting time spent on writing strategies and instruction and the sustained writing that students engaged in during class time.

Teachers were asked at the beginning of the AWS[®] to identify a class they had taught in the preceding fortnight. The reasoning for this question was to contextualise the answers for teachers when considering their response for all subsequent survey questions.

Methodology used in this research brief

The Queensland Department of Education (DoE) Evidence Hub constructed a sampling frame for selecting schools by prioritising a range of schools with 'improving', 'stable' and 'declining' performance in writing from 2011 to 2015 across some key demographics (region and school size) and other relevant data including NAPLAN participation rates over time. The five-year time series was selected as the basis for creating a trajectory of performance as 2011 was the first year that persuasive writing was introduced in NAPLAN writing assessment.

Performance data in Year 5 and Year 9 from NAPLAN testing (not Year 7) was used as the basis for selection as the movement of Year 7 Queensland students into secondary school in 2015 interrupted the time series data for Year 7 writing.

From the 74 schools that were invited to participate in the AWS®, 55 schools went on to have staff complete the Australian Writing Survey. From the 55 schools that participated in the AWS® 600 surveys were completed.

Part One: A focus on Initial Teacher Education: How well are our teachers prepared to teach writing?

Of the 600 teachers who completed the AWS®, all schooling stages (P-12) and curriculum were represented in the data. Theme One of the AWS® focused specifically on the adequacy of various aspects of teachers' preparation, with questions designed to examine the teaching of writing and other aspects of literacy education that support instruction in writing and using writing to learn. The analysis in Part One focuses on ITE and is based on school stages and years of teaching experience.

Method of recycled predictions explained

The analysis is based on the answers provided to the following questions:

(i) Which of the following were included in your ITE? (Figure 1)

(ii) In your ITE did you receive explicit instructions on the teaching of writing skills (Figures 2 and 3) and assessment skills (Figure 4). The responding teachers indicated whether they were: (i) not prepared; (ii) minimally prepared; (iii) adequately prepared; (iv) considerably prepared; (v) extensively prepared.

For the purposes of this analysis, the responses (i)-(v) (outlined above) were represented by the variable y and grouped into 'prepared' (y=1) if the teacher's response was 'adequately prepared', 'considerably prepared', or 'extensively prepared'. If the response was 'not prepared' or 'minimally prepared' they were grouped into 'not prepared' (y=0).

Hereafter, y=1 and y=0 are referred to as, respectively, (the teacher was) 'prepared' and 'unprepared'.

The purpose of this analysis was to explain variation in y by school stages and years of teaching experience, which was achieved through the application of a logistic regression model. Other factors known to explain variation in y (teacher preparedness) are teachers' gender, employment status and qualifications, and hence were included in the model to control for their effects.

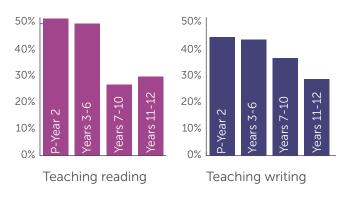
The results of the analysis are presented as probabilities of being prepared for the relevant ITE activity given schooling stages (Figures 1 & 2) and years of teaching experience (Figures 3 & 4), controlling for all other factors included in the model.

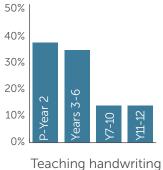
Schooling stages: P-2, 3-6, 7-10 and 11-12

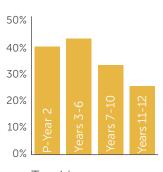
The first ITE question asked teachers to consider what skills were included during their ITE and how 'prepared' they felt to teach these skills. When looking across schooling stages, those at the secondary stages (7-10 and 11-12) were less likely to feel 'prepared' by the ITE than teachers who taught in the primary stages (P-2 and 3-6) (Figure 1).

Figure 1 shows a greater inclusion of these skills in P-2 and 3-6 compared to preparation for the secondary years (7-12). It is arguable that secondary teachers would not be expected to feel prepared to teach handwriting. In regards to teaching writing, however, the chance of feeling prepared was 37% for 7-10 teachers and 28.9% for 11-12 teachers. The evidence suggests that across all the schooling stages, teachers were more likely (over 50%) to not feel prepared for teaching writing.

Figure 1 Which of the following were included in your ITE?





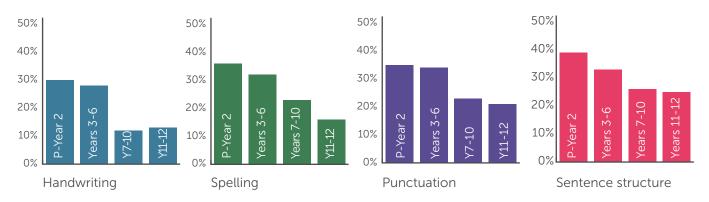


Teaching grammar

This observation carries over to the explicit *instruction* of skills in ITE (see Figure 2 below). The probability of teachers being prepared, through their ITE, to teach handwriting, spelling, punctuation, and sentence structure was significantly lower for those teaching 7-10 and 11-12 than for those teaching P-2 and 3-6.

These four skills might be regarded as 'basic skills' suitable for being taught at the earlier (primary), rather than the later (secondary) stages of schooling. However, given that 2.0% of Year 3 students are below NMS, increasing to 15.8% for Year 9 students (ACARA, 2020), strengthening preparation in spelling, punctuation and sentence structure for preservice teachers in secondary education appears warranted.

Figure 2 In your ITE did you receive explicit instructions on the teaching of:



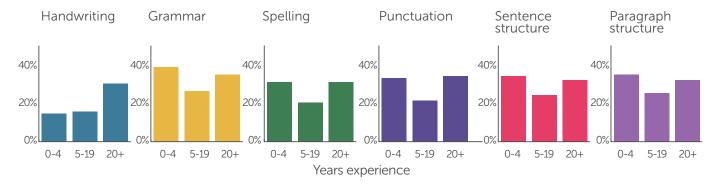
Years of Experience: 0-4, 5-19, 20+

Teachers with 5-19 years of experience had the lowest probability of being prepared to teach 'basic' writing skills based on their ITE (See Figure 3). This was true of grammar, spelling, punctuation, sentence structure, and paragraph structure. Teachers in the 20+ demographic group were more likely to be prepared to teach these skills in their preparation compared to those in the 5-19 group.

Teachers with 0-4 years experience were more likely to be prepared to teach basic writing skills (grammar, spelling, puncutation, sentence structure and paragraph structure) compared to teachers with 5-19 years experience.

All teachers, independent of their experience, were approximately 60% more likely to feel unprepared for teaching handwriting, grammar, spelling, punctuation, sentence structure and paragraph structure.

Figure 3 In your ITE did you receive explicit instructions on the teaching of:



ITE graduates with 0-4 years experience (See Figure 4) reported a greater emphasis in their preparation on how to: model the writing process; provide assessment models for marking writing; mark student writing; provide feedback and use external data compared to teachers with 5-19 and 20+ years experience.

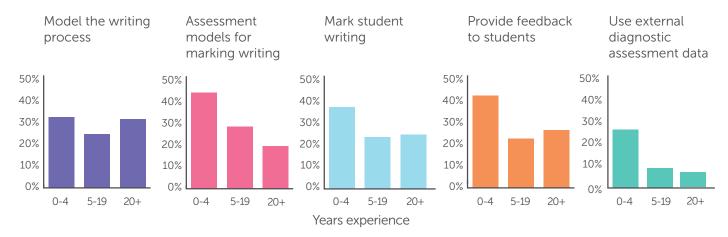
We are now in the 13th year of national testing, which may explain the low percentages from the 5-19 years

and 20+ demographic responses regarding explicit instruction for using external data. The low percentages of exposure on how to use external data during ITE highlights the need for professional development.

Once again, all teachers were more likely (over 50%) to feel unprepared in the teaching of these assessment skills in ITE, across all levels of experience (Figure 4).

These teachers' perceived lack of preparedness in teacher education means that there is a heavy reliance on employing authorities to provide targeted professional learning to address reported shortfalls in beginning teacher capabilities in teaching writing (Wyatt-Smith et.al, 2017).

Figure 4 In your ITE did you receive explicit instruction on the teaching of:



What is not addressed in this brief is the impact of reported gaps in ITE preparation on student learning. This survey opens the space to consider opportunites for a greater focus on the teaching of writing in ITE. It points to the need for a critical systematic examination of the nature and extent of preparation in approaches to teaching writing and assessment in ITE.

The related gap in knowledge concerns how prepared students are to write and whether this is impacting their subsequent progress and achievement. It is time for Australia to give serious consideration to a longitudinal study of the teaching of writing across the years of schooling.

The research points to the following considerations

- 1. Further investigation into ITE and the intersection of professional development in supporting gaps in knowledge regarding how to teach writing.
- 2. Prioritising professional development in the teaching of writing and assessment:
 - skills associated with 'writing' as distinct from 'literacy'
 - a targeted emphasis on secondary teachers' professional development (Years 7-12) in teaching writing in the curriculum areas
 - a concerted focus on teachers' classroom assessment practices and their use of external data for improving learning and informing teaching.

The next brief will present information about the time teachers spend teaching writing across the four stages of schooling (P-2, 3-6, 7-10 and 11-12). The third brief in the series will focus attention on competing standards and expectations in the teaching of writing.

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For further information contact:

Christine Jackson +617 3623 7421 Christine Jackson @acu.edu.au

© Australian Catholic University Limited (ABN 15 050 192 660)

Brisbane Office Cathedral House Level 4, 229 Elizabeth Street Brisbane Qld 4000





