Ready to write? Investigating the writing experiences of pre-service teachers and their readiness to teach writing

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For over a decade, there has been growing concern about declining 'standards' of school students' writing (Gardner, 2018; Wyatt-Smith & Jackson, 2020). Teachers' own writing experiences and writer identities are important considerations in developing teacher preparedness and skill in the teaching of writing. It cannot be assumed that pre-service teachers entering university have the pre-requisite skills and experience to effectively teach writing. This study investigated the pre-entry writing practices of first year Primary and Early Childhood Education (ECE) BEd students at one Australian university. Findings show they most frequently wrote informal, digital texts. It is suggested a lack of experience of writing extended texts, required in the primary English curriculum, may contribute to the decline in school students' achievement in writing, when assessed against national standard benchmarks (Gardner, 2018; Wyatt-Smith & Jackson, 2020). International studies suggest the teaching of writing has not been addressed well in initial teacher education (ITE) courses (Brindle et al., 2016; Rietdijk, Janssen, van Weijen, van den Bergh & Rijlaarsdam, 2017; Wyatt-Smith & Jackson, 2020). This study supports Wyatt-Smith and Jackson's (2020) view that greater attention should be given to the teaching of writing in teacher education courses in order to produce the next generation of 'teacher-writers' capable of improving the quality of writing in primary schools.

Introduction

Despite the importance of writing to the knowledge economy (Brandt, 2014; National Assessment Governing Board, 2010), and the imperative for adept writers in the workforce, relative to reading, writing is a neglected aspect of research in literacy education (Hodges, Feng, Kuo & McTigue, 2016; Mackenzie, Scull & Munsie, 2013). A study of 120 major American corporations found that companies spend billions of dollars a year correcting poorly written documents (The National Commission on Writing, 2004). It might be expected that the teaching of writing would feature more prominently in national discourses on literacy (NSW Standards Authority, 2018). However, some Anglophone countries continue to privilege reading over writing, as evidenced by major reviews of the teaching of early reading (National Reading Panel, 2000 (USA); Rose, 2006 (UK); Rowe & National Inquiry into the Teaching of Literacy, 2005 (Aus)). Ironically, evidence suggests that sustained writing improves reading skills (Graham & Hebert, 2010, 2011). Amongst educational researchers, writing and the teaching of writing has received relatively scant attention (Dockrell, Marshall & Wyse, 2015 (UK); National Commission on Writing, 2003 (USA); Wyatt-Smith, 2020 (Aus); Wyse, 2017 (UK). Juzwick et al., (2006) noted a paucity of research on school-age students, with most studies targeting under-graduates, young and mature adults. Chamberlain (2019) also reported on the dearth of research in the middle phases of primary schooling. The absence of research evidence has perhaps created an epistemic void, which may leave some teachers feeling unsure about how best to teach writing.

National test data in Australia suggest that over the past decade 'standards' of writing have declined (Gardner, 2018; Wyatt-Smith & Jackson, 2020). International 'litmus-tests' in specific jurisdictions accentuate concern about the 'state' of writing across the world. In the Netherlands, writing instruction in two thirds of schools is deemed inadequate (RietDijk, et. al., 2017 p.174). A comparative analysis of the 2011 and 2017 *National Assessment Program – Literacy and Numeracy* (NAPLAN) results in Australia, found that over a six-year period achievement levels in writing had fallen by 2.3 points in Year Three; 10.1 points in Year Five; 16.1 points in Year Seven and 14 points in Year Nine (Gardner, 2018). Wyatt-Smith & Jackson (2020) corroborated the trend. Outcomes for Indigenous Australian students is even worse, exposing endemic inequality in education between Aboriginal and non-Aboriginal students (Ford, 2013). Such findings suggest a need for a longitudinal study of writing in Australia, in order to identify students' gaps in both subject knowledge and preparation for writing (Wyatt-Smith et al. 2020).

The trend is not new, nor is it confined to Australia. At the beginning of the 21st century, two thirds of 4th Grade students in the USA did not meet the demands of the writing curriculum (Persky, et al., 2003), and the results of the 2011 and 2017 *National Assessment of Educational Progress* (NEAP) assessments provided further evidence of the shortfall. In 2011, 74% of 8th Grade (13-14 years old) students and 73% of 12th Grade (17-18 years old) students were described as having only '...partial mastery of the prerequisite skills...' (p. 1) necessary for proficient Grade level writing (National Center for Education Statistics, 2012). The results were replicated almost identically in the 2017 NEAP results, with 73% of both 8th and 12th Graders achieving a standard below the level of proficiency, and 74% of 4th Graders (9-10 year olds) also flatlining (National Center for Education Statistics, 2017). In England, students' writing is considered to be relatively poor in relation to other subjects (Education Standards Research Team, 2012). This widespread concern about the state of students' writing across jurisdictions warrants systematic research to identify the causes of the problem, as well as provide recommendations for its amelioration.

As this study suggests, one causal factor may be the significant number of entry-level students in primary teacher education courses who have relatively little recent experience in writing the text types they will be expected to model to students in primary classrooms.

Tensions in the teaching of writing

The 'problem' with the teaching of writing is nothing new. Graves (1981) suggested that a failure on the part of adults to understand the writing process, resulted in them 'blocking' students' progress and desire to write, whilst Kress (1997, p3.) asserted that curricula do not sufficiently prepare students for their future communicative needs. The teaching and assessment of writing, influenced by high-stakes tests, which emphasise transcriptional features, at the expense of compositional aspects of writing have been critiqued (D'Arcy, 1999; Gardner, 2012). Based on the findings of this study, we contend that in addition to an initial teacher education (ITE) writing curriculum focusing on transcriptional features, such as handwriting, orthography, syntax, and textual structures, student teachers need

planned opportunities to actively engage in writing, as writers, across a range of genre, if they are to develop the acumen to confidently model writing in the classroom.

National tests themselves may not be robust indicators of the quality of writing in our schools. In his analysis of the standardised national NAPLAN writing tests, given to Australian students in Years 3, 5, 7, and 9, Perlman (2018) criticised, amongst other things, an over-emphasis on transcriptional features and restricted scope, which prevented students from demonstrating higher order writing skills. If high-stakes tests constrain writing, the onus falls on teachers to teach beyond the test, by constructing a robust and meaningful pedagogy for writing. However, if, as Graves (1981) suggested, 'adults' lack sufficient understanding of the writing process, and we include teachers in this category, the profession may be prone to using untested commercial programs (Lovell & Phillips, 2009), marketed as the panacea for the 'writing problem'. Given 'high-stakes' testing in some jurisdictions, and a commensurate lack of in-service professional development (NSW Education Standards Authority, 2018), teachers might be forgiven for resorting to quick-solutions. The corollary is a writing instruction based on the technical implementation of scripted lessons created by publishers and external providers (Olivant, 2015), leading to the demise of professional autonomy, creative pedagogy (Harrison, 2012; Giroux & Schmidt, 2004), and critical reflection (McCarthey, et. al., 2014, p. 85).

According to Bloom and VanSlyke-Briggs (2019) a 'closed loop' already exists in which school students are trapped in a dependency culture of 'pre-packaged, corporate-produced materials' (p.107). In such a culture, early career and pre-service teachers lack the capacity and self-efficacy to construct creative pedagogies (Bloom & VanSlyke-Briggs, 2019), which may include the teaching of writing. Based on the hypothesis that teachers with strong writer identities are better prepared to teach, and improve, the writing of their students, some teacher educators in the USA, Britain, and New Zealand have explored innovative ways of developing teachers' and student teachers' knowledge of the writing process (Cremin & Baker, 2014; Cremin & Myhill, 2012; Gardner, 2014; Locke, 2015). Teachers who write experience the affective discomforts associated with ambiguity, risk taking, and uncertainty that is often inherent in the compositional process (Cremin, 2006). Engagement of both the cognitive and affective aspects of writing, as writers themselves, is a means by which teachers can acquire subject knowledge in praxis (Gardner, 2010: 26).

Where it is not already happening, the ensuing discussion suggests the ITE primary English curriculum should include active opportunities for students to write. Otherwise, the combination of prescriptive commercial programs (Bloom & VanSlyke-Briggs, 2019); narrowly framed writing curricula (Olivant, 2015), and poorly designed, high-stakes tests of writing (Perlman, 2018) may lead to 'learned helplessness' (Diener & Dweck, 1978) across the profession.

Writing and initial teacher education

The observed decline in the standards of writing has multiple causes, but one factor found to strongly influence students' writing is the effectiveness of pedagogy (Fisher, Myhill & Twist, 2011; Kim, Al Otaiba, Sidler & Gruelich, 2013). Whilst acknowledging differences

in initial teacher education (ITE) courses across jurisdictions, international studies suggest inadequate instructional practices are commonplace. Rietdijk et al., (2017) reported that teachers in the Netherlands have little training in how to teach writing. Brindle et al.'s (2016) study of 3rd and 4th Grade Teachers in the USA found that 76% of teachers said their ITE courses prepared them less well to teach writing than any other subject. Over fifty percent of the 600 teachers who responded to 'The Australian Writing Survey', reported their ITE courses did not adequately prepare them to teach writing (Wyatt-Smith, et al., 2020). A systematic review of 28 international studies by Cremin and Oliver (2017) revealed that the teaching of writing is largely inadequate, with insufficient time devoted to writing instruction, extended writing, and peer-to-peer collaboration. The study also found that often the only 'audience' for students was their teacher and that communicative purposes for writing were often absent (Graham, 2019, p. 278-281).

Atypically, 59% of educators in a British study of 188 respondents were positive about their training to teach writing, with 90% saying they were effective teachers of writing (Dockrell, Marshall & Wyse, 2015). However, 81% of teachers had received professional development in writing following their ITE course. Teachers' confidence to teach writing is founded on professional preparation, as well as the time and importance they give to writing instruction (Graham & Harris, 2018). Cremin and Oliver's (2017) systematic review found only five research projects that had investigated the writing of primary or elementary student teachers. Four of these studies were undertaken in the USA (Draper, Barksdale-Ladd & Radenich, 2000; Gallavan, Bowles & Young, 2007; Morgan, 2010; Norman & Spencer, 2005) and one was conducted in the UK (Gardner, 2014). Noting the lack of attention given to writing, the NSW Education Standards Authority (2018) has suggested a minimum content requirement for teaching writing in ITE programs.

Teachers as writers

In the past, teachers have been encouraged to develop their skills and confidence as writers (Calkins, 1994; Elbow, 1973; Graves, 1983; Murray, 1985) and to take risks in their classrooms to demonstrate the challenges of the creative process (Wells & Lyons, 2017). In order to effectively model the meta-cognitive processes involved in written composition, when employing a gradual release of responsibility (GRR) model of teaching and learning (Pearson & Gallagher, 1983; Fisher & Frey, 2008; 2013; 2018), it is imperative that teachers have self-efficacy as writers and a confident command of the writing process. The GRR model begins with the teacher modelling textual composition as they voice aloud the linguistic and textual choices they are making, followed by the teacher and students, or groups of students, collaborating to produce the same text type, and culminating in a final stage of students authoring independently.

Dawson (2016) suggested that teacher-writers have greater empathy for students because they understand the struggle and uncertainty entailed in the compositional process. When positioned as teacher-writers, teachers not only developed stronger writer identities but changed their pedagogy of writing, giving students greater freedom (Cremin et al., 2020). Students reported both greater motivation and ownership of their writing, as well as increased confidence. While this study affirms the importance of classroom communities

of writers, Cremin et al. (2020) concluded further research is required to identify if positive links exist between teacher-writer identity and improvements in students' writing.

Methods

The sparse knowledge of student teachers, as writers, makes this study a significant contribution to a neglected area of academic and professional scrutiny. To learn more about education students' engagement with, and experience of, writing students were surveyed in the first week of their Primary, or Early Childhood B.Ed course. We sought to elicit students' recent experience of writing across different genres, as well as the extent to which, on entering ITE, they already possessed the pre-requisite skills to model compositional processes, across various genres. Also we asked what might be the ramifications for the teaching of writing, if these skills were lacking?

This study employed a quantitative, descriptive approach to data collection. Students were asked to complete a questionnaire, using the online survey platform, *Qualtrics* (see Appendix 1). Completion was undertaken independently and in their own time. Conducted over three years, from March 2019 to April 2021, the study included students from three annual intakes. Participation was voluntary and the request to participate was communicated, in writing, via the online learning platform, *Blackboard*. The survey consisted of 18 closed questions designed to elicit information about students' literacy practices and behaviours. A 'temporal' Likert scale was used, requiring participants to identify how recently they had written specified text types. The temporal scale ranged from the day on which the survey was completed to a period of two years before completion. Text types ranged from digital forms such as text messages and emails, to poetry, narrative and persuasive writing.

Sample

The sample of 1217 participants included three sets of students. A small group, 1.9% (n=23), were local students studying online; a second group, (21.1%; n =256), studied on campus; and the largest group of distance learners (77%; n=934) studied via Open Universities of Australia (OUA). OUA provides university access to students who are unable to attend on-campus classes for various reasons. Whilst 18.2% of Australian teachers are male, in our study males accounted for only 9.5% (n=116) of the sample (Cruickshank, 2017; McGrath & Bergen, 2017). There were 1101 (n=90.5%) women in the sample. Participants' ages ranged between 17 and 40 +, with the youngest group of students (aged 17-20) making up 20.0% (N = 244). In the age range 21-25 there were 231 students (19.0%); 17.2% (N=210) were aged 26 -30. The largest group (29.6%; N = 360) were aged 31-40 and 14.2% (n=173) were aged over 40.

The age demographic reflects the fact that over three-quarters of students were studying via OUA which tends to attract mature age students (Australian Government Department of Education, Skills and Employment, 2019). The fact the majority of students were aged over 21 suggested they might not have recent experience in extended writing.

Findings and discussion

The survey captured students' recent engagement with writing by identifying the text types they most frequently used. Questions sought to identify their informal and formal uses of writing, as well as the social and academic purposes of writing. Text types categorised as informal and social were: text messages, emails, social media posts, and list-making. Those considered more formal and academic were: narratives, persuasive texts, letters, poetry, diary entries, book reviews, explanations, and instructions.

Digital texts: The 'new' normal

In keeping with Perrin and Kumar's (2019) finding that 92% of adults in the USA go online each day, the normativity of instant, or text, messaging is confirmed in this study. The vast majority of students (86.9%; n=1057) had sent a text message on the day they completed the survey, and a further 11.4% (n=139) had done so within the previous week. The tendency to write using digital devices was supported by two further findings. On the day of completing the survey, 39.4% (n=478) of students had written an email and a further 45.0% (n=546) had written one within the previous week. So, over a week 98.4% of students had written at least one text message and 84.4% had sent at least one email. The use of social media was slightly lower with 68.6% (n=820) of students using various platforms to write messages during the course of a week, with 33.7% (n=403) having done so on the day they completed the survey. A further 13.6% (n = 162) had written via social media within the previous month. Writing lists was the most frequent form of non-digital writing. On the day of the survey, 39.27% (n=476) of students had written a list and a further 84.4% (n=1023) had written one within the previous week. These data are represented in Figure 1, which captures the percentage of students writing digital texts and lists across recent time-frames, from those written on the day they completed the survey, to those written up to three months before the survey.
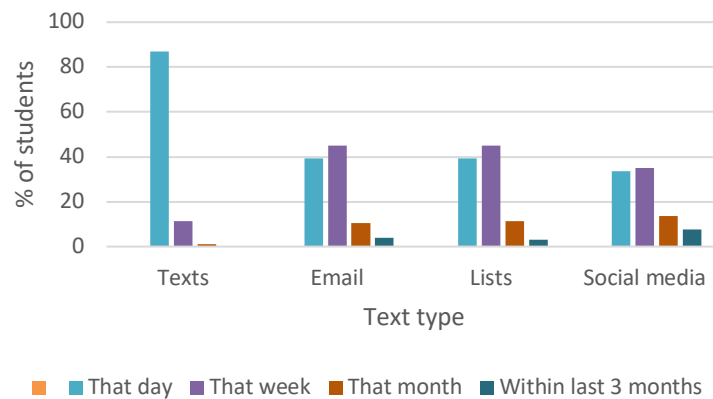

Figure 1: Students' experience of writing digital texts

Digital texts tend to be short, multi-modal compositions, which include abbreviations and emojis, denoting mood, tone, and emotion. Whilst these texts extend the range of literacy available to 21st century students, it is unlikely to be sufficient preparation for writing

extended texts. Elsewhere, it is documented that undergraduates prefer to read digital texts (Singer & Alexander, 2017) and find difficulty reading extended texts (Twenge, Martin & Spitzberg, 2019) and it may be that frequently writing short digital texts causes a similar reduction in cognitive stamina, necessary to write extended compositions. This is a subject for further research, however.

Writing non-digital texts

A quarter of students had not written an essay in over a year, and almost a fifth of the sample (18.8%: n=228) had not written one in over two years. Given the demographic of the student cohort, this finding is unsurprising and reflects the number of mature students returning to study after a long absence. Nevertheless, the finding suggests the possibility that some students may need academic support to be re-acquainted with essay writing.

The survey elicited how recently students had produced text types common to Australian primary schools, and the writing curricula of other Anglophone countries, including recounts, reports, instructions, poetry, and information texts. The text types privileged by NAPLAN writing assessments, which Australian primary students take in Years 3 and 5, are narrative and persuasion. At the very least, newly qualified teachers need to be adept to teach the compositional processes and textual structures of these texts. However, evidence suggests the majority of pre-service teachers enter the profession with no greater experience of writing, or how to teach it, than was acquired in their own schooling (Gardner, 2018; Graham, 2019; Persky, et al., 2003; Rietdijk, et al., 2017; Wyatt-Smith & Jackson, 2020).

If studies suggest the quality of writing instruction in schools is below par (Persky, et al., 2003; Rietdijk et al., 2017; Wyatt-Smith & Jackson, 2020), then many pre-service teachers have scant scaffolding to construct an informed pedagogy of writing. In the week before the survey, 5.1% (n=61) of students had written a story. It may seem unlikely that 1 in 20 students were budding story writers, but these students were studying a literacy unit in which they were already positioned as writers. Although not required to write a story, it is possible some students did so, in response to the set writing task for that week. A further 5.7% (n=68) had written a story during the previous month. However, it is noteworthy that 54.1% (n=651) of students had not written a story in over 2 years. Slightly fewer students (5.0%; n=60) had written a persuasive piece at some point the previous week and a further 14.7% (n=178) had done so within a month. Although many students had more recent experience of writing persuasions than narratives, almost two in five students, (38.5%; n=466) had not written this text type in over two years.

Writing informal letters was far more popular than either narrative or persuasions, but less frequent than digital forms. On the day of the survey, 4.6% (n=56) of students had written a letter. This figure increased to 23.0% (n=278) for the previous week and 42.2% (n=513) for the previous month. A smaller number (12.0%, n=145), had not written an informal letter for more than two years.

The unpopularity of poetry found elsewhere (Ofsted, 2007) was replicated in this study with 68% (n=758) of students saying they had not written a poem in over two years, whilst only 9% (n=109) had written one within the last month, and 13.5% (n=163) had written a poem in the last three months.

Keeping a diary appears to be waning, given that 43% (n=513) had not kept a diary for over two years. Just over a fifth (22%, n=168) had kept one within the previous month. There was little evidence that students had recent, reflective engagement with literature through writing, with 75% (n=900) reporting they had not written a book review in over two years, and only 5% (n=110) having written one in the previous three months.

Report writing fared better, however. Within the previous month, 18% (n=218) had written a report and a further 24% (n=283) had produced one within the previous three months. Even so, almost 24% (n=283) of students had not written a report in over two years. Writing instructions was a relatively common practice. Within the previous three months, 63% (n=762) had written at least one set of instructions and a further 12% (n=141) reported having done so within six months. A much smaller group (9%; n=103) of students had not written this text type in over two years. This figure rose to 12% (n=147) for those who had not written an explanatory text in over two years. However, the majority of students, 63% (n=771) had relatively recent practice writing explanations, having done so within the previous three months. These data are represented in Figure 2, which clearly shows the most widely used text types in primary classrooms are the very genres with which these pre-service teachers have the least recent experience of writing.
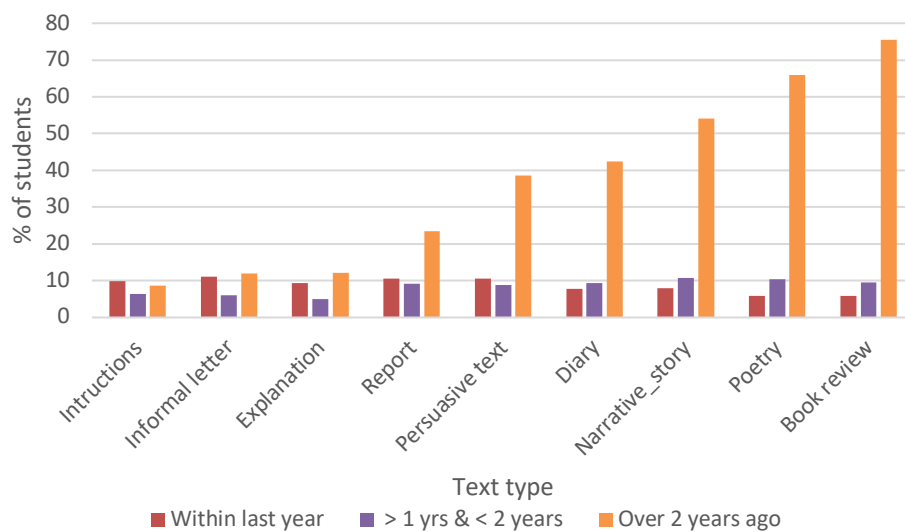

Figure 2: Students' writing of text types used in the primary classroom

Students' experiences of writing texts used in the primary classroom

The kind of writing, or text type, a person engages with is dependent on the associated social and cultural purpose. For some participants writing was part of their job role but for the majority, there was no necessity to write beyond simple digital texts such as emails, and special media posts. This is indicative of the changes to writing practices over the years, where social media, texting, and email communications have replaced the more formal writing of the past. The fact a majority of students had relatively recent experience in writing informational/expository texts is perhaps indicative of text types commonly used in secondary and tertiary education. Although knowledge of these genres is an asset for pre-service teachers, recent experience in writing the texts commonly found in the early years and primary education is imperative. The finding that almost 7 in 10 Year One, pre-service teachers, had not written a poem in over two years, and that almost 6 in 10, and 4 in 10, respectively had no recent experience of narrative or persuasive writing, is concerning.

If, as Rietdijk et. al. (2017) suggested, teachers' knowledge of writing influences their teaching of writing, these findings imply that students begin ITE courses with significant gaps in knowledge. In addition to personal experiences of writing, McCarthey et. al. (2014, p.83) argued that teachers' pedagogies of writing are influenced by curriculum demands and professional development.

Declining national standardised test results and international comparisons increase government pressure on schools to raise achievement. However, three decades of neoliberal education policies in education have decimated centralised professional development delivered by experts with tacit knowledge of the schools in their jurisdictions (Robinson, 2015). For example, Western Australia, a state eight times the size of the United Kingdom, now has only two centrally funded literacy consultants. The void is filled by 'tips for teachers' disseminated via social media; one-off ad hoc training by consultants, or manuals that accompany commercial writing programs.

The importance of a knowledgeable teacher of writing

Based on classroom-based research in English schools, Fisher et. al. (2011) found that teachers who emphasised the importance of meaning-making, purpose, the use of linguistic devices, and their effect on the reader, elicited effective writing from students (Fisher et al., 2011). In addition, educators who have applied a Hallidayan perspective (Halliday & Matthiessen, 2014; Halliday, 1978), focusing on the social functions of different text types, as well as their linguistic and textual structures, have emphasised the importance of metalinguistic dialogue between teachers and students during the compositional process (Healy & Gardner, 2021; Myhill, Newman & Watson, 2020; Myhill, 2019; Myhill, 2018; Myhill, Jones & Wilson, 2016; Myhill & Newman, 2016; Myhill, Jones, Lines & Watson, 2012). A solid grounding in teaching grammar in the context of student's own writing might obviate increasing incursions into the classroom of formulaic writing programs, by making compositional processes meaningful events in which the teacher and

students co-construct texts around an appropriate selection of linguistic devices, designed to create particular effects for different audiences.

Pedagogic practices in the teaching of English such as modelled and shared writing in which the teacher spontaneously writes, demonstrating to students the metacognitive processes that influence their word choices, sentence structures, meanings, and effects on the reader, require teachers to be confident and adept writers across the major text types taught in primary schools. The findings of this study suggest that many ITE students may lack confidence and/or skills, due to infrequent writing of these text types. However, if ITE courses included sufficient opportunities to develop experienced 'insider' knowledge of the writing process, students might be better placed to demonstrate to primary school students the 'craft' of writing, involving an iterative, recursive movement of thinking, planning, writing, and monitoring, as texts emerge. This assertion is supported by evidence from 'teachers as writers' research, which combines personal experience of writing and professional development, showing that when teachers develop agentic voices as writers, through sustained practice, they acquire more informed classroom pedagogies of writing (Cremin & Baker, 2014; Wells & Lyons, 2017). Evidence also suggests that targeted teaching by means of guided writing contributes to improvements in students' writing (Education Standards Research Team, 2012). In addition, the compositional challenges negotiated by teachers, as writers, encouraged them to be more 'empathetic' to their students, as writers (Brooks, 2007, p. 178).

The findings of this study provide valuable information about the 'on-entry' writing experiences of undergraduate students in one institution. However, given international evidence pointing to the neglect of writing in schools, it is suggested these data are pertinent to ITE providers beyond the focus institution. In essence, these findings demonstrate that significant numbers of entry-level students may have relatively little recent experience in writing the text types they will be expected to model to students in primary classrooms. Unless they have opportunities to write these texts in their courses, many of these students will graduate without having written narratives, persuasive texts, poetry, reports, or information texts for at least six years, and for some the time-lapse will be much longer. This lack of experience contributes to a 'cycle of decline' (see Figure 3). The cycle begins in schools where evidence suggests students may receive an inadequate experience of writing (Gardner, 2018; Wyatt-Smith & Jackson, 2020; Rietdijk, et. al., 2017) followed by few opportunities to develop in-depth knowledge of writing as pre-service teachers, with the corollary that graduate primary teachers may be insufficiently equipped to teach writing. The cycle, therefore, remains unbroken. It is what Bloom and VanSlyke-Briggs (2019), referred to above, called the 'closed loop'.

These data might be regarded as 'knowledge-for-change' because they indicate the need for the ITE Primary English curriculum in Australia to be revamped to include practical experience in the teaching of writing. The advice may also apply to ITE institutions internationally. Given the importance of writing to national economies (Brandt, 2014; Harder, 2006; National Commission on Writing, 2004), governments have a vested interest in ensuring pre-service teachers have an excellent grounding in *being* writers, in order to explicitly teach writing from the vantage point of deep practical expertise.
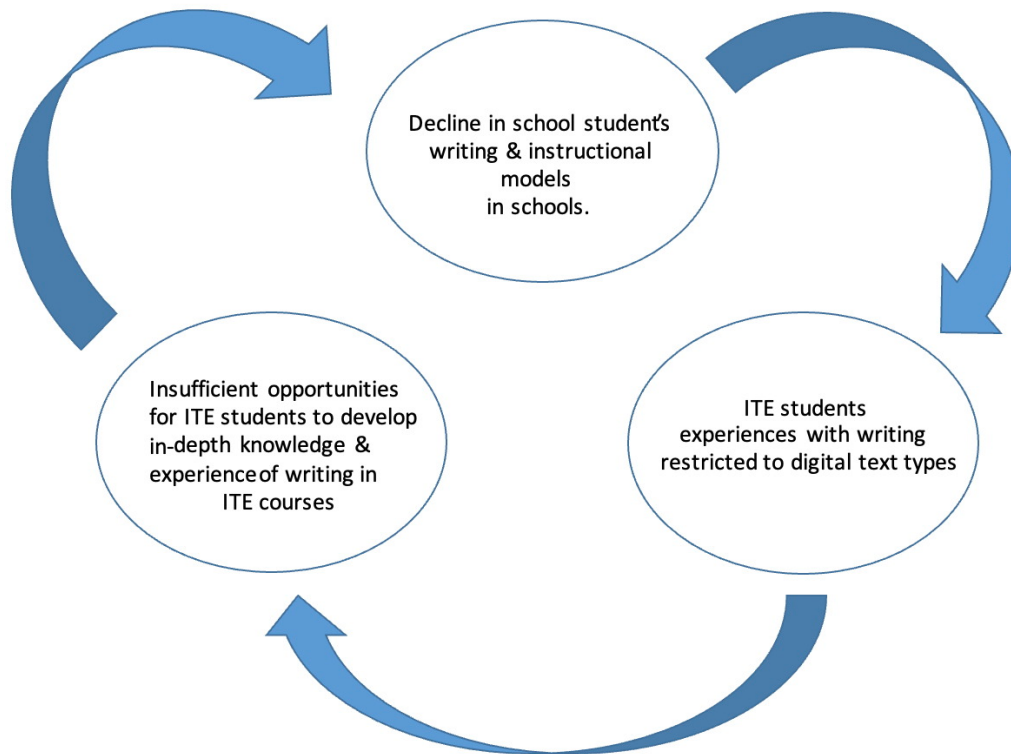
Figure 3: The cycle of decline in the teaching of writing

Conclusion

Against a backdrop of declining standards of primary school students' writing and a dearth of research evidence about the reasons for this, as well as the means to reverse the trend, this research reveals that whilst pre-service primary and ECE teachers write regularly, their staple writing tends to be short digital texts. Whilst these text types extend students' repertoire of writing skills, the finding that over fifty percent of the 1217 pre-service teachers surveyed had not written a poem, story, or book review; and one in four had not written a persuasive piece or diary in over two years, suggests that the next generation of graduates may be ill-equipped to teach writing, despite an expectation that teachers have the expertise to teach young developing writers how to construct extended written compositions across different text types. We endorse the view that teachers should be writers (Cremin, Myhill, Eyres, Nash, Wilson & Oliver, 2020; Dawson, 2016) and advocate that graduates entering the profession need confidence as teacher-writers. We, therefore, posit that if they are not already doing so, teacher education providers should make provision in their courses for pre-service primary and ECE teachers to re-engage with, and reflect upon, the compositional processes of texts they have had little recent experience of writing.

The assumption cannot be made that pre-service teachers have sufficient knowledge or experience of writing from their everyday experiences. Our findings affirm the necessity for the explicit teaching of writing as a vital part of the curriculum for pre-service teachers. However, this necessitates the allocation of appropriate resources, at both the institutional and national level, to meet students' needs, as writers. Additional resources for teacher educators to improve students writing at university level may be a cost-effective means of raising the achievement of school-age students also.

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Appendix 1: Student questionnaire

Q1. **Gender**   Male ◯ Female ◯

Q2. **Age group**   17-20 ◯   21-25 ◯   26-30 ◯   31-40 ◯   40+ ◯

Q3. **Which cohort are you in?**   Face to face ◯   Regional online ◯   OUA ◯

Q4. **When was the last time you wrote a text message?**
today ◯   this week ◯   this month ◯   within last 3 months ◯
within last 6 months ◯   within last year ◯   1 year to 18 months ago ◯
18 months to 2 years ago ◯   over 2 years ago ◯

Q5.   When was the last time you wrote an email?
today ○   this week ○   this month ○   within last 3 months ○
within last 6 months ○   within last year ○   1 year to 18 months ago ○
18 months to 2 years ago ○   over 2 years ago ○

Q6.   When was the last time you wrote a list?
today ○   this week ○   this month ○   within last 3 months ○
within last 6 months ○   within last year ○   1 year to 18 months ago ○
18 months to 2 years ago ○   over 2 years ago ○

Q7.   When was the last time you wrote an informal letter?
today ○   this week ○   this month ○   within last 3 months ○
within last 6 months ○   within last year ○   1 year to 18 months ago ○
18 months to 2 years ago ○   over 2 years ago ○

Q8.   When was the last time you wrote a message on social media?
today ○   this week ○   this month ○   within last 3 months ○
within last 6 months ○   within last year ○   1 year to 18 months ago ○
18 months to 2 years ago ○   over 2 years ago ○

Q9.   When was the last time you wrote an essay?
today ○   this week ○   this month ○   within last 3 months ○
within last 6 months ○   within last year ○   1 year to 18 months ago ○
18 months to 2 years ago ○   over 2 years ago ○

Q10.   When was the last time you wrote a story?
today ○   this week ○   this month ○   within last 3 months ○
within last 6 months ○   within last year ○   1 year to 18 months ago ○
18 months to 2 years ago ○   over 2 years ago ○

Q11.   When was the last time you wrote a poem?
today ○   this week ○   this month ○   within last 3 months ○
within last 6 months ○   within last year ○   1 year to 18 months ago ○
18 months to 2 years ago ○   over 2 years ago ○

Q12.   When was the last time you wrote a report?
today ○   this week ○   this month ○   within last 3 months ○
within last 6 months ○   within last year ○   1 year to 18 months ago ○
18 months to 2 years ago ○   over 2 years ago ○

Q13.   When was the last time you wrote a diary entry or memoire?
today ○   this week ○   this month ○   within last 3 months ○
within last 6 months ○   within last year ○   1 year to 18 months ago ○
18 months to 2 years ago ○   over 2 years ago ○

Q14.   When was the last time you wrote a set of instructions?
today ○   this week ○   this month ○   within last 3 months ○
within last 6 months ○   within last year ○   1 year to 18 months ago ○
18 months to 2 years ago ○   over 2 years ago ○

Q15. When was the last time you wrote an explanation?
today ○   this week ○   this month ○   within last 3 months ○
within last 6 months ○   within last year ○   1 year to 18 months ago ○
18 months to 2 years ago ○   over 2 years ago ○

Q16. When was the last time you wrote a persuasive piece of writing?
today ○   this week ○   this month ○   within last 3 months ○
within last 6 months ○   within last year ○   1 year to 18 months ago ○
18 months to 2 years ago ○   over 2 years ago ○

Q17. When was the last time you wrote a book review?
today ○   this week ○   this month ○   within last 3 months ○
within last 6 months ○   within last year ○   1 year to 18 months ago ○
18 months to 2 years ago ○   over 2 years ago ○

Appendix 2: Raw date for Tables 1 and 2

	Texts	Email	Lists	Social media	Narrative/ story	Persuasive text	Informal letter	Poetry	Diary	Book review	Report	Instructions	Explanation
That day	86.92	39.41	39.27	33.72	1.08	1.16	4.63	0.66	3.65	0.25	0.58	3.83	5.06
That week	11.43	45.01	45.13	34.9	3.99	3.8	18.35	4.05	9.53	0.67	3.65	15.49	16.42
That month	1.15	10.55	11.47	13.56	5.65	9.76	19.42	4.3	9.03	1.76	13.86	24.15	24.13
Within last 3 month	0.33	3.79	3.14	7.53	8.22	13.23	19.17	4.47	10.02	2.18	23.49	19.98	18.33
Within last 6 month	8	0.82	0.41	2.76	8.39	14.23	9.17	4.38	8.12	4.36	15.19	11.74	9.62
Within last yr	0	0.16	0.25	2.01	7.89	10.5	11.16	5.79	7.79	5.78	10.62	9.83	9.29
> 1 yrs & < 2 years	0.08	0.16	0.08	1.67	10.72	8.76	6.12	10.34	9.36	9.55	9.12	6.41	4.98
Over 2 yrs ago	0	0.08	0.25	3.85	54.07	38.54	11.98	66	42.5	75.44	23.49	8.58	12.19

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