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Teachers' perceptions of their preparedness for supporting struggling literacy learners in secondary English classrooms

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ABSTRACT

The initial and ongoing professional education of teachers to prepare them to support students' literacy development warrants research attention. The importance of meeting the needs of struggling literacy learners in secondary school does not diminish as students move through the years of schooling. This paper reports on data from the 2019 Supporting Struggling Secondary Literacy Learners mixed-methods project, which sought to explore the challenges of meeting the needs of struggling literacy learners in Australian secondary schooling, from the perspectives of teachers of mainstream English classrooms. Adequacy of initial teacher education to support struggling literacy learners seems to have been low for the majority of teachers, and for both recent and earlier graduates. Where gaps were indicated, qualitative data provided valuable insights. Findings can be used to inform initial teacher education programmes and ongoing professional development opportunities, to ensure that such learning experiences are reflective of current teacher needs.

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Introduction

The initial and ongoing professional education of teachers to prepare them to support students' literacy development in the early years and beyond deserves close research attention. Literacy supports student achievement in disciplines beyond English (Sullivan and Brown 2015), and it is intrinsically linked with individual life-chances, with high literacy levels associated with strong academic performance at secondary school (Daggett and Hasselbring 2007) and vocational opportunities beyond school (Australian Bureau of Statistics 2013; Kirsch et al. 2002; McIntosh and Vignoles 2001; OECD, 2018). In Australia, many students move through the schooling system without attaining essential functional literacy skills, and more than two-fifths of Australian adults lack the functional literacy skills needed to communicate effectively in contemporary life, limiting their vocational, academic and social opportunities (ABS, 2013). Concerns about adult literacy also hold currency in the United Kingdom, where 15% of adults struggle to read and write at a basic level at significant economic cost (World Literacy Foundation 2018). The

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importance of meeting the needs of struggling literacy learners is unlikely to diminish, as around one in five adolescents are low performers in literacy, and this number is growing over time (Thomson, De Bortoli, and Underwood 2016; Thomson et al. 2019). Similarly, beyond Australia, concerns are being voiced about the high percentage of young people with low literacy rates (Kuczera, Field, and Windisch 2016). These students can be termed struggling literacy learners, as they fall below the expected level of literacy attainment for their age. While literacy as a concept is regularly revised and contested (e.g. Stevens 2005), for the purposes of this paper, we draw on the Australian Curriculum, Assessment and Reporting Authority (ACARA) conceptualisation of literacy as relating to “the knowledge, skills and dispositions to interpret and use language confidently for learning and communicating in and out of school and for participating effectively in society” (ACARA, 2017). We acknowledge that this conflation of literacy and basic functional literacy does not account for the rich intersections of diverse aspects of literacy, such as between functional and critical literacy.

While ideally literacy instruction should be positioned as a whole-school priority (Wray 2002), little is known about current strategies, resources and interventions secondary teachers use to support struggling students in mainstream English classes, where literacy instruction is an expected norm. There has been limited inquiry into how initial teacher education (ITE) and in-service professional development (PD) equips teachers to support struggling literacy learners in adolescence. Focus on PD as well as ITE is important, as learning requirements for teachers are ongoing and non-linear (Clark, Helfrich, and Hatch 2017). In addition, the majority of research, policy and debate about literacy learning in schools is concentrated on early childhood and primary schooling years, drawing attention from children in middle childhood and adolescence (Alvermann 2002), though research suggests that literacy learning is an ongoing concern, and that struggling readers in middle childhood and adolescence experience diverse skill and knowledge gaps rather than homogeneous issues (Buly and Valencia 2002; Dennis 2013). Teacher perception of the issues faced by struggling literacy learners in the Australian context is poorly understood. The level of whole-school, cross-disciplinary support both provided for and needed by struggling literacy learners is also not known, though support for literacy learning across all learning areas is a curricular imperative (Australian Curriculum, Assessment and Reporting Authority 2017).

There is great diversity in barriers faced by struggling literacy learners (Merga 2019b; Brasseur-Hock et al. 2011). Therefore, teachers of adolescent students who are struggling to meet growing literacy demands require knowledge of a wide range of possible supporting practices to “provide appropriate instruction, prevent students from falling farther behind, and help bring struggling readers closer to reading for knowledge and pleasure” (Edmonds et al. 2009, 263). However, Australian research suggests that only 49% of beginning secondary teachers had confidence in their preparedness to teach reading (Louden and Rohl 2006). Only around half of primary and secondary teachers were positive about their preparation to work with students with learning difficulties. Low teacher preparedness findings may also be reflective of the fact that 21% of English teachers in Australian schools are teaching “out of field”, lacking adequate disciplinary preparation for their role (Weldon 2016), while other research suggests that teachers’ own literacy levels may in some cases limit effective provision

of literacy support (Moon 2014). Identifying specific gaps in teacher preparedness to meet the needs of struggling literacy learners can improve ITE and PD opportunities for teachers, which may then enhance the literacy outcomes of struggling literacy learners.

When seeking to improve the literacy attainment of adolescent students, current secondary teachers working with struggling literacy learners in mainstream classrooms may be considered key informants, as they may make a significant contribution to enhancing student achievement. Both higher education providers and schools could heed any learning gaps identified by current teachers in their ITE and PD to enhance student outcomes. To this end, the 2019 *Supporting Struggling Secondary Literacy Learners (SSSLL)* project recognises teachers' contribution of expertise through lived experience working with these individuals. The project is concerned with the "lived space" in teacher education, which can be "understood by pre-service and in-service teachers during and after they have completed their teacher preparation program", where "the diverse forms of disciplinary and academic knowledge acquired through teacher education become part of 'practical consciousness' developed by beginning teachers in their particular workplaces" (Rowan et al. 2015, 285). This paper draws on data from mainstream English teachers from across all states and territories of Australia to determine secondary English teachers' perceptions of the sufficiency of their training to support struggling literacy learners in the mainstream classroom. It also explores the extent to which teachers' pre- and in-service learning experiences are associated with self-perceived teacher knowledge in supporting struggling literacy learners, and the nature of recurring participant-identified gaps in these learning opportunities. The identification of specific gaps in ITE and in-service professional development can enable teacher trainers at both levels to develop and adjust teacher education, training pedagogy and curriculum to better meet the needs of teachers. This can in turn enhance the outcomes of struggling literacy learners.

Focusing this inquiry are the following research questions:

- (1) Do Australian mainstream secondary English teachers perceive that they have sufficient ITE and PD to support struggling literacy learners?
- (2) Do recent graduates perceive a greater level of preparedness than less recent graduates?
- (3) Where teachers do not perceive support, what are the identified gaps in ITE and PD?

While this study investigates the issues raised from the perspective of English teachers in Australia, the study has implications for the provision of ITE and PD for teachers in other English-speaking countries who face similar concerns regarding the support of struggling literacy learners. Across many of these nations, attempts to address perennial concerns about literacy performance have generally focused on identifying and supporting struggling literacy learners in the early years (European Literacy Policy Network 2016). Teachers are a key component of the learning environment in that they can support students to overcome their learning challenges (Bell, McPhillips, and Doveston 2011), and therefore research insights that enhance their preparedness to meet the needs of struggling literacy learners in the secondary context could have a powerful impact on student learning.

However, we note that our focus on ITE and PD is part of a larger inquiry which situates teacher education as one of the numerous possible influential factors that could potentially be adjusted to yield better outcomes for struggling literacy learners. Other findings from this research project suggest that factors that influence the outcomes of struggling students “include, but are not necessarily limited to literacy skill gaps and English as an additional language status, absenteeism, home factors, student attitudes and engagement, school and systems factors, and learning difficulties and disabilities influencing learning” (Merga 2019b, 21), some of which could potentially be partly mitigated through teacher preparedness, but others of which remain resistant. We also found that “regardless of place, school leadership commitment to ensuring that struggling literacy learners have their literacy skills developed across all learning areas may be crucial to realisation of a supportive whole-school culture for struggling literacy learners” (Merga, Mat Roni, and Malpique 2020, 1), and that teachers lack adequate resourcing and staffing support to meet the needs of struggling literacy learners in mainstream secondary classrooms, and that this is particularly an issue in public schools (Merga, Mat Roni, and Malpique [under review](#)).

As such, we do not suggest that any adjustments to ITE and PD indicated by this research will, in isolation, ensure that all struggling literacy learners reach their functional literacy goals. Indeed, as we have previously illustrated, “addressing the challenge of meeting the needs of SLLs (struggling literacy learners) beyond the early years of schooling is a wicked problem” (Merga, 2019b, 20), wicked problems being multi-faceted and of complex and interrelated causation (Rittel and Webber 1973). Instead, this paper is intended to support teacher educators’ revision and development of their materials, to highlight any possible adjustments that could be made, based on the views of current teachers endeavouring to meet the needs of struggling literacy learners in mainstream secondary schooling contexts. We do not contend that teachers and teacher education bear individual responsibility for students’ literacy levels and the improvement of these. Rather, this paper becomes part of a feedback loop from teachers to teacher educators, and with participation in the study voluntary, teachers who participated were keen that their voices be heard, so that their experiences could inform both their ongoing PD, but also the training of new teachers.

Methods

As previously noted, the 2019 *SSSLL* project investigated a diverse range of research interests related to supporting struggling secondary literacy learners to enhance their literacy attainment. This paper focusses on the data related to the first of these diverse interests, reporting solely on the fulsome data collected around teacher preparedness in relation to ITE and PD. In Australia, ITE typically encompasses both university-delivered classes (either face-to-face or online) and school-based practical learning, though proportions of these elements differ across institutions, states and time. PD relates to the professional learning that teachers experience while working in a teaching role, and this may occur at their school, or at an external location, and be facilitated by colleagues or external training providers. Length of ITE that is sufficient for teacher registration in Australia varies greatly, and in recent times ITE could be taken as an undergraduate (Bachelors) or post-graduate qualification (Graduate Diploma or Master’s degree), running from one to five years of full-time study focussed on education. Ethics approval was granted by the institutional Ethics Committee prior to data collection and survey piloting.

All participants provided recorded informed consent at the first item on the survey, and all participation was entirely voluntary.

This paper reports on both qualitative and quantitative data sourced concurrently using a survey tool (Stentz, Clark, and Matkin 2012), which collected the views of secondary teachers currently working with struggling secondary students from every state and territory within Australia. The data set comprises the 315 completed surveys, demographic details about the teacher participants (Table 1) and the schools in which they worked (Table 2). While the total size of the eligible target population of English teachers working with struggling literacy learners in secondary English classrooms is not known, this study uses GPower (Faul et al. 2009) version 3.1.9.2 to estimate a minimum sample size needed for statistical analysis. Using Cohen's convention of a medium effect size threshold of .30 (Cohen 2013), with 95% confidence interval, this was calculated as $N = 138$, which this study comfortably exceeds. As can be noted by Table 2, all states and territories in Australia were represented in this study, including: South Australia (SA), Tasmania, the Northern Territory (NT), New South Wales (NSW), Western Australia (WA), Queensland, Victoria and the Australian Capital Territory (ACT).

It is also important to note that many of the struggling students referred to by teachers in this paper would not be classified as having special needs. Not only does this paper specify that it is concerned with the teaching of struggling literacy learners in mainstream rather than special needs focused classrooms, previously reported data from this study found that

Table 1. Respondent characteristics.

Characteristic	in sample (N = 315)	in sample (%)
<i>Gender</i>		
Female	270	85.71
Male	42	13.33
Other	3	0.95
<i>Age Group</i>		
<20	0	0.00
21–30	51	16.19
31–40	92	29.21
41–50	90	28.57
51–60	65	20.63
61–70	16	5.08
>71	1	0.32
<i>Years teaching experience</i>		
<3	32	10.16
3–6	55	17.46
7–10	49	15.56
11–14	58	18.41
15–18	32	10.16
19–22	21	6.67
23–26	22	6.98
27–30	22	6.98
>30	24	7.62
<i>Years post teacher training</i>		
<3	27	8.57
3–6	58	18.41
7–10	43	13.65
11–14	51	16.19
15–18	41	13.02
19–22	21	6.67
23–26	18	5.71
27–30	25	7.94
>30	31	9.84

Table 2. School characteristics.

Characteristic	in sample (N = 315)	in sample (%)
<i>Location</i>		
Metropolitan	220	69.84
Rural	90	28.57
Remote	5	1.59
<i>State/territory of school location</i>		
SA	41	13.02
Tasmania	12	3.81
NT	14	4.44
NSW	82	26.03
WA	56	17.78
Queensland	50	15.87
Victoria	45	14.29
ACT	15	4.76
<i>School type</i>		
Government (public)	195	61.90
Private	120	38.10
<i>ICSEA*</i>		
Above average ICSEA	67	21.27
Average ICSEA (1000)	79	25.08
Below Average ICSEA	106	33.65
Unsure	63	20.00

*ICSEA relates to the socio-educational backgrounds of students at this school (ACARA 2015)

**multiple selections permitted, so percentage not relevant.

less than half (48.89%) of respondents agreed that the SLLs (struggling literacy learners) in their classroom typically have a diagnosed learning difficulty (e.g. dyslexia), and around a quarter of respondents agreed that the SLLs in their classroom were typically of EALD (English is an additional language or dialect) status (24.76%), suggesting that while students may be undiagnosed, SLLs at secondary level may not necessarily be EALD or have a learning difficulty. (Merga 2019b, 9)

Therefore teachers of English in secondary schools cannot be reliant on special needs experts to support struggling secondary literacy learners in mainstream English classrooms, as funding for this support is contingent on diagnosis of special needs (Australian Government 2019), and many students do not fall into this category.

To ensure that each respondent met the criteria of being a teacher of struggling literacy learners in mainstream English classrooms in the secondary context, the preamble of the survey was specific:

Please only continue to take the survey if you are *currently* teaching secondary students, and if you teach mainstream classrooms. Teachers who only teach in extension (Gifted and Talented or School-based Academic Extension) classrooms should not proceed. If you teach in both mainstream and extension classrooms, please respond in relation to your mainstream classrooms only.

In addition to the preamble statement, respondents were also subject to the following eligibility items early in the survey, with “no” responses triggering a skip logic, re-routing respondents to the end of the survey without exposure to subsequent items.

- (1) Are you a current teacher of secondary students (in any of the years 7–12)?
- (2) Do you currently teach at least one mainstream (not extension) English class?

- (3) The mainstream English classrooms that I teach typically include at least some struggling literacy learners.

The mixed methods approach employed was an embedded design, with the qualitative strand building on the quantitative data (Cresswell and Plano Clark 2011). Quantitative data were collected to determine teachers' perceptions of the sufficiency of ITE and PD, illustrating the extent to which perceived gaps are an issue, and enabling analysis of the extent to which perceived ITE preparedness is reflective of experience. Qualitative data collected through open fields on the same tool then provide insights into current perceived gaps in ITE and PD that could be addressed. Data were collected using the following survey items in relation to the two research questions.

Do Australian mainstream secondary English teachers have sufficient ITE and PD to support struggling literacy learners?

Respondents indicated their level of agreement with the following statements on three 5-point Likert-type items.

- (1) There was sufficient instruction in my initial teacher training to prepare me to support struggling literacy learners in the classroom.
- (2) There have been sufficient professional development opportunities as a teacher to enable me to continue to build my capacity to support struggling literacy learners in the classroom.
- (3) I am highly knowledgeable about practices that can enhance struggling literacy learners' literacy skills.

Do recent graduates perceive a greater level of preparedness than less recent graduates?

In order to address research question 2, this study identified the teachers' self-reported level of exposure to instructions during their training to support struggling literacy learners. They were asked to:

- (1) Identify how many years ago they completed the training (*time*). This section identifies the respondents in 9-class ordinal groups from less than three years ago to more than 30 years ago.
- (2) Indicate their level of agreement on the sufficiency of instructions they received during their training on a scale of 1 (*strongly agree*) to 5 (*strongly disagree*). The responses were reversed-coded in the analysis to assist the interpretation of the results.

A bivariate correlation test was later run on the data. The responses were also subjected to a one-way analysis of variance (ANOVA) test to investigate if the currency of teacher training differs (i.e. in terms of level of the teachers' level of preparedness in supporting struggling literacy learners). The ANOVA test uses the years of completing the training (*time*) as the factor and the level of agreement on the sufficiency of the instruction (*sufficiency*) as the dependent variable.

This study extended the investigation on research question 2 by examining the level of knowledge about practices (*knowledge*) to support struggling literacy learners. This is the same 5-point Likert scale of agreement to the statement which is used to answer research question 1.

- (3) I am highly knowledgeable about practices that can enhance struggling literacy learners' literacy skills.

Similar to the above procedure, the responses were reversed-coded, and a bivariate correlation test as well as ANOVA procedure were also run on knowledge and time.

Where gaps were identified in ITE and PD, what are they?

Skip logics were programmed in items 1 and 2 so that only disagreeing respondents were exposed to items 3 and 4, with neutral and positive respondents excluded from exposure, and re-routed to the next items.

- (1) If you disagree with the statement *"There was sufficient instruction in my initial teacher training to prepare me to support struggling literacy learners in the classroom"*, which specific areas do you feel needed more attention in your initial teacher training course?
- (2) If you disagree with the statement *"there have been sufficient professional development opportunities as a teacher to enable me to continue to build my capacity to support struggling literacy learners in the classroom"*, which specific areas do you feel more professional development would be useful?

For qualitative data analysis, a "flexible coding" method as described by Deterding and Waters (2018) was employed. This approach seeks to meet the requirements of large qualitative data sets utilising qualitative data analysis (QDA) software. NVivo was used as QDA software to support thematic coding of the data, using an iterative thematic coding approach (Rice and Ezzy 1999). Both code and meaning saturation were attained through the coding process, suggesting that the sample size for the qualitative component was more than sufficient (Hennink, Kaiser, and Marconi 2017). Participant quotes are as fulsome as could be accommodated within the word limits of the journal, to allow for the reader to have a sense of the voices of the contributors, and their experiences.

Results

Adequacy of training to support struggling literacy learners

As per Table 3, around two thirds of respondents disagreed that their ITE prepared them to meet the needs of struggling literacy learners in the secondary English classroom, with only 24.13% in agreement or strong agreement. While more respondents seemed satisfied with their professional development opportunities to continue to build capacity to support struggling literacy learners, 38.73% somewhat or strongly disagreed, indicating scope for further improvement in this space, particularly as only 53.65% of respondents felt highly knowledgeable about practices that can enhance struggling literacy learners' literacy skills.

Influence of time since ITE completion on sense of preparedness

At the sample level, the respondents generally reported that the instructions to support struggling literacy learners during their teacher's training were somewhat insufficient with the sample *mean* of 2.24. At the sub-sample level, there is an indication that there was a slight improvement in the training the teachers received where the recent graduates (less than 3 years group) reported a higher agreement to the statement (*mean* = 2.67), although this is nearing the neutral. The means and the standard deviations for sufficiency and knowledge are summarised in [Table 4](#).

In relation to practical knowledge to support struggling literacy learners, the respondents felt that they had somewhat sufficient knowledge, *mean* = 3.36. Closer examination at sub-sample level reveals that teachers who completed ITE more than 30 years ago reported the highest knowledge, *mean* = 3.77, while the recent graduates (less than 3 years ago) generally disagreed with the statement, *mean* = 2.85. The breakdowns of the means for knowledge about practices according to different cohorts are provided in [Table 4](#).

Although there are differences in the mean across different graduate teachers cohorts, ANOVA test shows that these differences are not statistically significant, ($F(8, 306) = 1.024$, $p = .418$). This indicates that recent graduate and more experienced teachers do not differ in their assessment of sufficiency of instructions received during their training, which in this case, was felt to be less than adequate. This is further supported by the result from a non-significant bivariate correlation test using Pearson product-moment between time and sufficiency, $r = .028$, $p = .616$.

Identified gaps in ITE and PD

Of the 208 respondents who disagreed or somewhat disagreed that there was sufficient instruction in their ITE to prepare them to support struggling literacy learners in the classroom, 175 chose to specify gaps they felt needed more attention in their ITE. Those who agreed or were neutral were not exposed to this question.

Table 3. Agreement with adequacy of ITE and PD and knowledge for meeting the needs of struggling literacy learners.

Agreement	in sample ($N = 315$)	in sample (%)
<i>ITE</i>		
Strongly agree	23	7.30
Somewhat agree	53	16.83
Neither agree nor disagree	31	9.84
Somewhat disagree	78	24.76
Strongly disagree	130	41.27
<i>PD</i>		
Strongly agree	38	12.06
Somewhat agree	109	34.60
Neither agree nor disagree	46	14.60
Somewhat disagree	84	26.67
Strongly disagree	38	12.06
<i>Knowledge</i>		
Strongly agree	42	13.33
Somewhat agree	127	40.32
Neither agree nor disagree	63	20.00
Somewhat disagree	68	21.59
Strongly disagree	15	4.76

Table 4. Descriptive statistics of ITE sufficiency and knowledge across time.

Years since training completion (time)	Sufficiency of instruction during training (Sufficiency) ⁺			Knowledgeable about practices to support SLLs (Knowledge) ⁺	
	N	mean	Std. Dev.	mean	Std. Dev.
Less than 3	27	2.6667	1.4142	2.8519	1.0635
3–6	58	1.9655	1.1542	2.9310	1.1218
7–10	43	2.2326	1.4115	3.1860	1.0747
11–14	51	2.1373	1.3312	3.7255	1.0407
15–18	41	2.3171	1.3312	3.4634	0.9772
19–22	21	2.4286	1.3990	3.6667	1.2780
23–26	18	2.2778	1.4473	3.2778	1.3198
27–30	25	2.0000	1.1180	3.5600	0.8699
More than 30	31	2.5161	1.5027	3.7742	0.9205
Total	315	2.2413	1.3374	3.3587	1.1037

⁺Reverse-code in the analysis, 1 = *Strongly disagree*, 2 = *Somewhat disagree*, 3 = *neither agree nor disagree*, 4 = *Somewhat agree*, 5 = *Strongly agree*.

Of the 122 respondents who disagreed or somewhat disagreed that there have been sufficient professional development opportunities as a teacher to enable them to continue to build their capacity to support struggling literacy learners in the classroom, 90 respondents chose to state specific gaps where more professional development would be useful. Those who agreed or were neutral were not exposed to this question. The following explores the recurring gaps identified in ITE and PD.

Practical strategies

A strong interest in greater emphasis on practical strategies emerged in the data on ITE, with respondents describing a desire for practical strategies with explicit impact. A respondent in the NT teaching at an urban public school noted that

teacher training doesn't allow for real-world scenarios in that it encourages teachers to have individual programs for students, which is not practical when you have a high volume of struggling literacy learners, as well as other students who need support.

Similarly, a teacher in a public school in urban Queensland noted the need for

very basic literacy interventions in English teacher training with concrete practical examples and instructions on how to implement. I think some more hands on experience would be good – some real-life scenarios and/or videos of how to support a student who's struggling in the middle of a busy/hectic classroom.

As such, there was a need for “actual lessons we could use instead of theories of English”, with pragmatic and practical strategies desired.

This theme also recurred in the data on PD. For example, one respondent described a need for “very practical experience of a variety of methods of literacy teaching techniques rather than on a silver bullet or latest trend approach. Less data collection and more nitty gritty teaching examples would be good”. Similarly, another respondent noted that “good pedagogy should include a suite of skills to support all learners. Most teachers would benefit from PD which arms them with a range of good, useful, multi-purpose

strategies, which support low-literacy students as well as ‘mainstream’ students”. As such, a need for practical strategies could be persistent both in early career and beyond.

Guidance on differentiation in mainstream contexts

Respondents felt that their ITE needed more detail on the practicalities of differentiation. A teacher in a public school in rural Victoria explained the relevance of this skill set in the context of her classroom norms.

There was actually no discussion of the diversity in student abilities. Teaching students should be taught how to teach a classroom full of mixed ability kids. For example in my Year 9 English class, there are kids working at Grade 2 level and others working at Year 10 standard.

Similarly, a teacher noted the failure of her ITE to prepare her for the struggling students she works with in the urban public school in Victoria.

I only completed a degree for secondary teaching so all of my instruction was for students in Years 7-12 and suitable tasks for students at level. I currently teach 20+ kids who have reading comprehension at a Grade 3 level. I teach four students who have reading comprehension at Prep/Foundation level. None of my training prepared me for students who are so drastically low. Minor differentiation for students was discussed as part of my degree, but never for students who are more than a year behind their peers.

The range in ability referenced by these respondents shows the practical challenges of differentiation with learners with widely diverse ability in the mainstream classroom. Linking with the previous theme, respondents sought “practical skills in differentiation, understanding by university that you will have multiple students with diverse needs to deal with in any one class”. Respondents also stressed the importance of building diagnostic capacity for targeted intervention as part of differentiation, with reference to “how to identify literacy issues, how to implement differentiated strategies to support literacy, where to locate resources, what to do with these resources, and how to identify if/when literacy has been achieved”. There was a need for “specific diagnostic knowledge and steps for implementation – all the discussion was very general”.

This was also an issue for teachers identifying gaps in PD. A teacher in a private school in rural NSW wanted training on

... differentiating, how to provide sufficient time to those students who need it without ignoring the needs of the other students in the classroom who may not struggle with literacy demands, but can’t build skills and knowledge due to the time spent with students who struggle with their literacy.

Teachers still needed support in “how to help students with lower literacy while still extending those with good literacy levels. Basically, things that everyone can do at different levels”.

Behaviour management and engagement

Respondents described a need for greater ITE attention on behaviour management and engagement strategies. The relationship between students’ literacy issues and behaviour was also described, with a respondent explaining that “I had no idea how low some students would be and I was not prepared enough to help them or even recognise that low literacy was the key problem impacting behaviour and engagement”. More support was needed to

“find ways to motivate students who lacked hope of motivation”. A respondent described the importance of training in “how to integrate struggling learners into the classroom without them feeling stupid. How to teach others that they can still have really high abilities but struggle with literacy”.

Respondents also identified the importance of further PD in this area, with a focus on engagement. A teacher at an urban public school in the ACT stated:

I was unprepared 15 years ago to go into a year 9 classroom and find that there were students who could not read or write at a functional level. I was fortunate that the class I was on had significant behavioural issues and no one cared what I did with my students, so I harassed my primary school teaching mum for all of her beginning literacy resources and we started from there. There was no constructive help – no professional development that was tailored for teaching teenagers to read. It was a hard slog; teenagers have identified ways to avoid people finding their gaps in knowledge, and they don't like being babied. Specific age appropriate professional development would be valuable.

The need to receive PD that would enable respondents to provide appropriate support was recurring, with support needed on “how to catch students up and still move them through the curriculum while maintaining their dignity”. Culture and context in relation to student engagement also emerged in the PD data, respondents requesting “strategies for accelerating literacy which are actually appropriate for our unique context and students in the NT”, and how to engage and support students from culturally diverse backgrounds, and particularly Aboriginal students.

Grammar and foundational skill scaffolding

ITE may not prepare secondary English teachers to teach foundational skills typically associated with primary school education, with a suggestion of insufficient attention to instruction of fundamental literacy skills. There may be little preparation to encounter struggling literacy learners as a norm, with another teacher noting that “I had no idea when I left uni that I could expect to be teaching so many students with literacy levels below their grade. I was trained to teach students to write essays and answer exam questions, but not trained to teach them punctuation and grammar”. A teacher in an urban Queensland public school made a similar reflection.

As a secondary-trained English teacher my ITE reading instruction was about reading to learn – it was assumed that students would be competent readers – I was not taught anything about working with children who struggle to decode or to read at all. Similarly, in writing the assumption was that all students would be accessing the curriculum at their grade level – there was no instruction on how to work with students who cannot conjugate a verb accurately or create a simple sentence.

Knowledge gaps, as described by others, included “teaching sentence structure, paragraph structure, essay structure and the different genres. Knowing spelling rules, punctuation”, and “how to teach decoding, reading ... also basics in writing (phonics etc.) but also basic grammar knowledge, basic English concepts, the basic curriculum content of our discipline (this was never taught)”. This gap in ITE forced some respondents to learn this essential content in the workplace, with a teacher noting that in the ITE experience, “we did nothing for strugglers and specifically being secondary, we did not cover any aspect of primary or pre-primary which is what I am learning now. I have a student with an IQ of 46”.

Respondents also described wanting PD in this space, and these responses also held a sense of urgency. For instance, it was noted that “I need to know really basic stuff like phonics and very basic decoding. I have foundation level students in my year 8 class. I am not equipped in ANY way to assist them in a meaningful way”. There was a need to learn “how to manage a classroom of learners at hugely disparate levels of attainment, how to teach reading, how to teach basic sentence construction with teenagers”.

Meeting needs of students with specific challenges

Greater detail on how to meet students with specific challenges, such as learning difficulties, disabilities, and EALD (English as an additional language or dialect) status was raised in relation to ITE. While this also related closely to the theme of differentiation as previously explored, support on how to meet the needs students with “specific issues” was raised. This included the challenge of how to teach “EALD in the mainstream”, with a respondent suggesting that “every teacher should do TESOL [Teaching English to Speakers of Other Languages]”. More ITE focus was needed on the “range of barriers that inhibit literacy learning, particularly diagnosed learning disabilities e.g. dyslexia”, and “helping kids with specific issues (such as visual processing disorders other than dyslexia or other areas like this)”, “to understand the specific needs of students with barriers to literacy and what they struggle with and to develop strategies that teachers can engage with to assist those students”.

This was also a recurring issue for teachers seeking PD. For instance, a teacher in a public school in rural Victoria noted a need for

PDs on dyslexia and how to teach literacy to low kids. We need to be taught how to teach basic spelling/phonics to kids who seem to have missed out on this, or were not able to grasp this in primary school. There are more and more kids arriving in Year 7 with very low skills.

There was a demand for “more focused professional development on assisting students with particular literacy difficulties and more training in the modification of existing curriculum”.

Opportunity for quality professional development

A number of respondents described limitations on opportunity for quality professional development, due to their geographic location or school priorities. For example, it was noted that “being rural there are limited PD opportunities, Skype opportunities are not provided or promoted by PD providers”, and “rural face to face opportunities are so limited!”. Remote respondents also raised accessibility issues.

Quality was also felt to be limited in some schools, where “the issue isn’t AMOUNT of PD, it’s the quality and practicality of the PD staff are given here”. A teacher at a private school in urban WA noted that

Professional development is often ‘saved’ for ATAR [Australian Tertiary Admissions Rank] course teachers, rather than for teachers who teach 7-10, or even General Yr11/12 courses. This is an issue with both school decision making, but also the variety of PD actually on offer. Most PD offers resources, strategies and lesson ideas for extension or ATAR.

As such, supporting struggling literacy learners was not necessarily situated as a PD resourcing priority in schools.

Data, research and resource-supported practice

While resourcing was mentioned by a few respondents in relation to ITE, it recurred more strongly in the data around PD. Data and research-supported practice was primarily of interest in relation to PD. This included “identifying learning needs, how to action assessment quickly, evidence-based practice that assists low level learners”, and “transforming data into teaching strategies”. A lack of resources for struggling literacy learners was raised, with respondents contending that “there isn’t enough engaging materials for low literacy students e.g. novels”. Similarly, a teacher in an urban Victorian public school noted a need for

training that covers low level but high interest resources. Everything available at my students’ level is too childish for teenagers. Something based around adjusting resources and instruction for extremely low high schoolers would be fantastic. Everything seems to be targeted at Primary School teachers.

Training on how to source age and skill appropriate resources with guidance on their use was identified as valuable.

Discussion

According to the data from this project, it can be contended that adequacy of ITE to support struggling literacy learners seems to have been perceived as low for the majority of Australian English teachers entering mainstreams classrooms that include struggling literacy learners. This gap in preparation could influence students’ learning attainment. The findings relating to current levels of satisfaction with PD indicate that nearly two-fifths of respondents disagree that there have been sufficient professional development opportunities to build capacity to support struggling literacy learners, and teachers’ confidence and strong knowledge to support these students is relatively low. While these data are subject to the limitations of self-report and recall, as they are not longitudinal, findings also suggest that teacher preparedness has remained relatively static over time in relation to ITE, and therefore these data suggest that it cannot be contended that ITE is significantly worse or better for more recent graduates than those who graduated decades ago. This suggests that the concern holds currency, and that there may be an ongoing and persistent issue with ITE to support struggling literacy learners. Also, unsurprisingly, current perceived knowledge about practices to support struggling literacy learners was higher among those who have completed the training more than 30 years ago, indicating that experience plays an important role as teachers learn in their work role.

The main focus of this paper was the qualitative data which show where these improvements could best be rendered, making visible the perceived realities behind the statistics presented. While the extent to which these findings are generalisable cannot be known without further quantitative research that builds on these exploratory findings, these recurring insights provide a valuable foundation for this future research. The emphasis on practical strategies reflects the contention that “one explanation for the difficulties beginning teachers experience is that the curriculum in university-based teacher preparation programs does not prepare them for the specific tasks they must accomplish” (Liston, Whitcomb, and Borko 2006, 352), reflective of previous research in this area (Louden and Rohl 2006). A focus on practical skills and efforts to bridge the gap between theory and practice may be indicated. The recurrence of this theme in the data on PD suggests that on-

the-job acquisition of practical skills in this area may not be sufficient for all teachers, and therefore it may not be realistic to supply students with strong theory at ITE and assume the practical strategies will be furnished once students enter service. This theme closely related to the need for practical guidance on differentiation in mainstream contexts. While countries such as the UK may have relatively high dependence on educational support staff to facilitate differentiation in the mainstream context (Webster and Blatchford 2019), it should be noted that the onus may more typically fall on the secondary classroom teacher in Australia, with only 28.25% of respondents in this study agreeing that they have sufficient access to support staff to meet the needs of struggling literacy learners in the mainstream classroom. This gap in support may also explain why desire for training in differentiation to meet the needs of students at all levels of ability persisted at both ITE and PD levels.

While teachers highlighted the need for further training in behaviour management and engagement at both levels, as PD, greater focus on culture and context was emphasised. Countering deficits in student self-efficacy to enhance engagement and minimise behavioural issues can be challenging in this context. By the time they join secondary school, struggling literacy learners have typically experienced years of failure, and therefore they lack efficacy expectations which can limit their willingness to engage (Bandura 1977). As explored in Hinshaw (1992), an extensive history of research links academic underachievement, particularly in reading, with “behavioural problems of an acting-out or externalising nature” (p. 127). Teachers wishing to support struggling literacy learners may need a strong repertoire of behaviour management skills appropriate for this cohort, as well as skills in literacy pedagogy.

While Australian ITE has recently increased emphasis in equipping pre-service teachers with personal grammatical knowledge to enable them to pass the mandatory Literacy and Numeracy Test for Initial Teacher Education Students (commonly referred to as LANTITE), there is no mandatory assessment of teachers ability to actually teach grammar and foundational literacy skills. This paper does not propose the introduction of another mandatory hurdle for pre-service teachers. However, with assessment driving instruction in the contemporary neoliberal educational environment (Polesel, Rice, and Dulfer 2014), it does argue that preparation for teaching of grammar and foundational skill scaffolding may be more important than LANTITE testing, as noted by others (e.g. Freebody and Freebody 2017). ITE and PD educational priorities may need adjustment accordingly to be responsive to a need for both personal grammar and foundational literacy skills, and the ability to provide instruction in these areas beyond the early years of schooling.

Supporting the mainstream schooling of students with learning difficulties and disabilities, and learners for whom English is an additional language or dialect (EALD) in countries with linguistically and culturally diverse populations requires a diverse skill set. Ollerhead (2018) notes that

effective preparation of teachers to address the language and literacy needs of EAL (English is an additional language) students is essential for their ability to access content knowledge in mainstream classrooms. Many EAL students have learning difficulties related to disrupted schooling, which significantly impact upon their first language literacy development. (p. 257)

Considering the remarkable level of diversity in barriers encountered by struggling literacy learners, preparing both pre- and in-service teachers to meet the unique needs of students with specific challenges and difficulties, particularly where these issues are

collocated (e.g. EALD and learning difficulties such as dyslexia), can require a vast degree of training in specialised knowledge and skills.

Two themes primarily recurred in the PD data, with limited expression in the ITE data. The theme of opportunity for quality PD, particularly in rural and remote contexts, is an established and ongoing concern (e.g. Maher and Prescott 2017). However, also of interest in these data were the reflections on quality of PD, and the instances of unequal resourcing of PD for struggling literacy learners, with PD to support higher achieving (particularly university pathway ATAR) students favoured. The theme of data, research and resource-supported practice recurred in the PD data, though there was mention of a need for further guidance around resourcing in the ITE data. The need for adequate resourcing to support struggling literacy learners is crucial (Merga 2019a), with access to reading and support materials that are both age and skill level appropriate a key concern.

Conclusion

As increasing numbers of adolescents enter secondary school with low literacy skills, the issue of adequately preparing both pre- and in-service teachers to meet their needs deserves greater attention. This paper offers clear potential to improve the literacy outcomes of struggling literacy learners in adolescence by making visible the needs gaps in secondary school teachers' ITE and PD. The study extends the body of knowledge in this area by highlighting a possible need for greater teacher education in practical strategies, differentiation in mainstream contexts, behaviour management and engagement, grammar and foundational skill scaffolding, and meeting needs of students with specific challenges. It also raises the potential need for greater opportunity for quality professional development, and greater access to data, research and resource-supported practice. These gaps can inform teacher and school leader planning for professional development in schools, and potentially also inform the literacy instruction component for pre-service teachers devised by teacher educators seeking to prepare the primary and secondary teachers of the future. ITE providers can examine their current offerings to see if these gaps are addressed within current learning programmes, and schools could support their teachers by providing PD in these areas if these gaps are found to be consistent with what teachers are experiencing in their diverse school contexts.

However, we note that before any changes are made to current ITE and PD regimes, these programmes should be carefully audited in each context first to ensure that these are extant rather than historical gaps, and that effective measures have not been taken in recent times to address them. There is a need to determine what ITE and PD actually consists of, so that a judgement can be made about perceived gaps, and this is essential future research. We also suggest that any changes be adjunct to current models if they are felt to be effective, rather than be sweeping changes that can have untoward effects on the quality of ITE as has historically been the case (e.g. Freebody and Freebody 2017; Hodgson 2014). With our research team including current and former teacher educators, we feel this research is best used to strengthen our current course materials in the areas indicated by the teachers, and considering how these adjustments can be complemented by the activities our students undertake while on school placement. Given the tendency for findings about ITE and PD gaps to be misappropriated to enact changes that do not lead to the best outcomes for teachers and their students, these caveats must be stated.

We feel that it nonetheless remains important that ITE and PD be responsive to the needs identified by teachers, and that ITE and PD continue to evolve in response to research.

Gaps can be addressed in diverse novel ways, such as through dialogic problem-posing seminars (Hill, Bass, and Stewart 2019). Findings may also influence policymakers' planning and resource allocation, particularly in relation to place-related factors, as more may need to be invested to ensure that teachers in rural contexts get adequate access to ongoing professional development in this space. Similarly, PD to support high-ability students should not be given unequivocal preference over supporting struggling literacy learners. Findings could stimulate education departments and educational organisations to improve teacher training opportunities to enhance the outcomes of struggling literacy learners. For utility as comprehensive needs analysis, as aforementioned, the qualitative findings in this paper can form the basis for future quantitative investigation to test generalisability. However, progress in this space is also problematised by the aforementioned diverse causation of challenges faced by struggling literacy learners in the secondary schooling context, as well as the need for further research to develop a robust evidence base for effective interventions and instruction to support struggling literacy learners in the secondary school context (Griffiths and Stuart 2013). In addition, while, as explained previously, the delivery of ITE typically occurs across both university-based (and/or online) and school-based contexts, future research could more closely consider how preparedness is differently facilitated across these contexts, exploring the relative roles of schools and universities in the training process. With length of ITE focussed on education typically varying between three to five years at undergraduate level, and one to two years and post-graduate level, it may not be practicable for ITE courses to facilitate the level of preparedness that is desired by the respondents in this study. All teachers continue to learn about all aspects of English teaching as they become full-time teachers and throughout their careers. Even where training has been optimal, diverse additional factors (e.g. Merga, 2019; Merga, Mat Roni, and Malpique 2020) may strongly influence teachers' sense of preparedness to meet student needs, so it is not suggested that attention to ITE and PD can be a sole solution to the ongoing issue of struggling literacy learners in secondary English classrooms.

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References

- Alvermann, D. E. 2002. "Effective Literacy Instruction for Adolescents." *Journal of Literacy Research* 34 (2): 189–208. doi:10.1207/s15548430jlr3402_4.
- Australian Bureau of Statistics. 2013. *Programme for the International Assessment of Adult Competencies, Australia, 2011-2012 (4228.0)*. Canberra, Australia: Australian Bureau of Statistics.
- Australian Curriculum, Assessment and Reporting Authority. 2015. "What Does the ICSEA Value Mean?" http://docs.acara.edu.au/resources/About_icsea_2014.pdf
- Australian Curriculum, Assessment and Reporting Authority. 2017. "Literacy." <https://www.australiancurriculum.edu.au/f-10-curriculum/general-capabilities/literacy/>
- Australian Government. 2019. "What is the Government Doing to Support Students with Disability?" https://docs.education.gov.au/system/files/doc/other/what_is_the_government_doing_to_support_students_with_disability_1.pdf
- Bandura, A. 1977. "Self-efficacy: Toward a Unifying Theory of Behavioural Change." *Psychological Review* 84 (2): 191–215. doi:10.1037/0033-295X.84.2.191.
- Bell, S., T. McPhillips, and M. Doveston. 2011. "How Do Teachers in Ireland and England Conceptualise Dyslexia?" *Journal of Research in Reading* 34 (2): 171–192. doi:10.1111/j.1467-9817.2009.01419.x.
- Brasseur-Hock, I. F., M. F. Hock, M. J. Kieffer, G. Biancarosa, and D. D. Deshler. 2011. "Adolescent Struggling Readers in Urban Schools: Results of a Latent Class Analysis." *Learning and Individual Differences* 21 (4): 438–452. doi:10.1016/j.lindif.2011.01.008.
- Buly, M. R., and S. W. Valencia. 2002. "Below the Bar: Profiles of Students Who Fail State Reading Assessments." *Educational Evaluation and Policy Analysis* 24 (3): 219–239. doi:10.3102/01623737024003219.
- Clark, S. K., S. R. Helfrich, and L. Hatch. 2017. "Examining Preservice Teacher Content and Pedagogical Content Knowledge Needed to Teach Reading in Elementary School." *Journal of Research in Reading* 40 (3): 219–232. doi:10.1111/1467-9817.12057.
- Cohen, J. 2013. *Statistical Power Analysis for the Behavioural Sciences*. 2 ed. Hoboken: Taylor and Francis.
- Cresswell, J. W., and V. L. Plano Clark. 2011. *Designing and Conducting Mixed Methods Research*. 2nd ed. Thousand Oaks, California: SAGE.
- Daggett, W., and T. Hasselbring. 2007. *What We Know about Adolescent Reading*. USA: International Centre for Leadership in Education.
- Dennis, D. V. 2013. "Heterogeneity or Homogeneity: What Assessment Data Reveal about Struggling Adolescent Readers." *Journal of Literacy Research* 45 (1): 3–21. doi:10.1177/1086296X12468431.

- Deterding, N. M., and M. C. Waters. 2018. "Flexible Coding of In-depth Interviews: A Twenty-first Century Approach." *Sociological Methods & Research* 004912411879937. doi:10.1177/0049124118799377.
- Edmonds, M. S., S. Vaughn, J. Wexler, C. Reutebuch, A. Cable, K. K. Tackett, and J. W. Schnakenberg. 2009. "A Synthesis of Reading Interventions and Effects on Reading Comprehension Outcomes for Older Struggling Readers." *Review of Educational Research* 79 (1): 262–300. doi:10.3102/0034654308325998.
- European Literacy Policy Network. 2016. "Literacy in England. Country Report." *Children, adolescents and adults*. http://www.eli-net.eu/fileadmin/ELINET/Redaktion/user_upload/England_Long_Report.pdf
- Faul, F., E. Erdfelder, A. Buchner, and A.-G. Lang. 2009. "Statistical Power Analyses Using G*power 3.1: Tests for Correlation and Regression Analyses." *Behavior Research Methods* 41 (4): 1149–1160. doi:10.3758/BRM.41.4.1149.
- Freebody, S., and P. Freebody. 2017. "Australian Teachers' Literacy Levels: Comparisons from the OECD International Survey of Adult Skills." *ALEA Hot Topic April 2017*. <https://www.alea.edu.au/documents/item/1521>
- Griffiths, Y., and M. Stuart. 2013. "Reviewing Evidence-based Practice for Pupils with Dyslexia and Literacy Difficulties." *Journal of Research in Reading* 36 (1): 96–116. doi:10.1111/j.1467-9817.2011.01495.x.
- Hennink, M. M., B. N. Kaiser, and V. C. Marconi. 2017. "Code Saturation versus Meaning Saturation: How Many Interviews are Enough?" *Qualitative Health Research* 27 (4): 591–608. doi:10.1177/1049732316665344.
- Hill, J., E. L. Bass, and T. T. Stewart. 2019. "Promoting Preservice Teacher Efficacy through Dialogic Problem-posing Seminars." *English in Education* 1–13. doi:10.1080/04250494.2019.1626195.
- Hinshaw, S. P. 1992. "Externalizing Behavior Problems and Academic Underachievement in Childhood and Adolescence: Causal Relationships and Underlying Mechanisms." *Psychological Bulletin* 111 (1): 127–155. doi:10.1037/0033-2909.111.1.127.
- Hodgson, J. 2014. "Surveying the Wreckage: The Professional Response to Changes to Initial Teacher Training in the UK." *English in Education* 48 (1): 7–25. doi:10.1111/eie.12028.
- Kirsch, I., J. de Jong, D. Lafontaine, J. McQueen, J. Mendelovits, and C. Monsuer. 2002. *Reading for Change: Performance and Engagement across Countries*. Washington DC: Organisation for Economic Co-operation and Development (OECD).
- Kuczera, M., S. Field, and H. J. Windisch. 2016. "Building Skills for All: A Review of England." Paris: OECD Publishing.
- Liston, D., J. Whitcomb, and H. Borko. 2006. "Too Little or Too Much: Teacher Preparation and the First Years of Teaching." *Journal of Teacher Education* 57 (4): 351–358. doi:10.1177/0022487106291976.
- Louden, W., and M. Rohl. 2006. "'Too Many Theories and Not Enough Instruction': Perceptions of Preservice Teacher Preparation for Literacy Teaching in Australian Schools." *Literacy* 40 (2): 66–78. doi:10.1111/j.1467-9345.2006.00440.x.
- Maher, D., and A. Prescott. 2017. "Professional Development for Rural and Remote Teachers Using Video Conferencing." *Asia-Pacific Journal of Teacher Education* 45 (5): 520–538. doi:10.1080/1359866X.2017.1296930.
- McIntosh, S., and A. Vignoles. 2001. "Measuring and Assessing the Impact of Basic Skills on Labour Market Outcomes." *Oxford Economic Papers* 53 (3): 453–481. doi:10.1093/oeq/53.3.453.
- Merga, M. K. 2019a. "How Do Librarians in Schools Support Struggling Readers?" *English in Education* 53 (2): 145–160. doi:10.1080/04250494.2018.1558030.
- Merga, M. K. 2019b. "'Fallen through the Cracks': Teachers' Perceptions of Barriers Faced by Struggling Literacy Learners in Secondary School." *English in Education* 1–25. doi:10.1080/04250494.2019.1672502.
- Merga, M. K., S. Mat Roni, and A. Malpique. 2020. "School Leadership and Whole-school Support of Struggling Literacy Learners in Secondary Schools." *Educational Management Administration & Leadership* 174114322090503. doi:10.1177/1741143220905036.

- Merga, M. K., S. Mat Roni, and A. Malpique. *under review*. Do Australian secondary English teachers believe they have adequate time and resourcing to meet the needs of struggling literacy learners?
- Moon, B. 2014. "The Literacy Skills of Secondary Teaching Undergraduates: Results of Diagnostic Testing and a Discussion of Findings." *Australian Journal of Teacher Education* 39 (12): 111–130. doi:10.14221/ajte.2014v39n12.8.
- Ollerhead, S. 2018. "Pedagogical Language Knowledge: Preparing Australian Pre-service Teachers to Support English Language Learners." *Asia-Pacific Journal of Teacher Education* 46 (3): 256–266. doi:10.1080/1359866X.2016.1246651.
- Organisation for Economic Co-operation and Development (OECD). 2018. "Equity in Education: Breaking down Barriers to Social Mobility Australia." <https://www.oecd.org/pisa/Equity-in-Education-country-note-Australia.pdf>
- Polesel, J., S. Rice, and N. Dulfer. 2014. "The Impact of High-stakes Testing on Curriculum and Pedagogy: A Teacher Perspective from Australia." *Journal of Education Policy* 29 (5): 640–657. doi:10.1080/02680939.2013.865082.
- Rice, P., and D. Ezzy. 1999. *Qualitative Research Methods: A Health Focus*. Melbourne: Oxford University Press.
- Rittel, H. W., and M. M. Webber. 1973. "Dilemmas in a General Theory of Planning." *Policy Sciences* 4 (2): 155–169. doi:10.1007/BF01405730.
- Rowan, L., D. Mayer, J. Kline, A. Kostogriz, and B. Walker-Gibbs. 2015. "Investigating the Effectiveness of Teacher Education for Early Career Teachers in Diverse Settings: The Longitudinal Research We Have to Have." *The Australian Educational Researcher* 42 (3): 273–298. doi:10.1007/s13384-014-0163-y.
- Stentz, J. E., V. L. P. Clark, and G. S. Matkin. 2012. "Applying Mixed Methods to Leadership Research: A Review of Current Practices." *The Leadership Quarterly* 23 (6): 1173–1183. doi:10.1016/j.leaqua.2012.10.001.
- Stevens, D. 2005. "Showing the Strategy Where to Go: Possibilities for Creative Approaches to Key Stage 3 Literacy Teaching in Initial Teacher Education." *English in Education* 39 (1): 19–31. doi:10.1111/j.1754-8845.2005.tb00607.x.
- Sullivan, A., and M. Brown. 2015. "Reading for Pleasure and Progress in Vocabulary and Mathematics." *British Educational Research Journal* 41 (6): 971–991. doi:10.1002/berj.3180.
- Thomson, S., L. De Bortoli, and C. Underwood. 2016. "PISA 2015: A First Look at Australia's Results." <https://research.acer.edu.au/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1021&context=ozpisa>
- Thomson, S., L. De Bortoli, C. Underwood, and M. Schmid. 2019. "PISA 2018: Reporting Australia's Results, Volume I Student Performance." <https://research.acer.edu.au/ozpisa/35/>
- Webster, R., and P. Blatchford. 2019. "Making Sense of 'Teaching', 'Support' and 'Differentiation': The Educational Experiences of Pupils with Education, Health and Care Plans and Statements in Mainstream Secondary Schools." *European Journal of Special Needs Education* 34 (1): 98–113. doi:10.1080/08856257.2018.1458474.
- Weldon, P. R. 2016. *Policy Insights: Out-of-field Teaching in Australian Secondary Schools*. Camberwell, VIC: Australian Council for Educational Research.
- World Literacy Foundation. 2018. "The Economic & Social Cost of Illiteracy." *A white paper by the World Literacy Foundation*. <https://worldliteracyfoundation.org/wp-content/uploads/2019/06/TheEconomicSocialCostofIlliteracy-2.pdf>
- Wray, D. 2002. "Literacy in the Secondary Curriculum." *Literacy* 35 (1): 12–17.