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Abstract

The needs of struggling literacy learners beyond the early years of schooling warrant greater attention. For struggling literacy learners to attain their academic, vocational, and social goals, schools should position literacy as a whole school priority and enhance opportunities for student literacy learning across all learning areas. However, it is not known if literacy is typically supported as a whole school commitment in contemporary secondary schools. This paper draws on survey data from the Australian nation-wide 2019 *Supporting Struggling Secondary Literacy Learners* (SSSLL) project. Findings suggest that many mainstream secondary school teachers do not perceive that there is a whole-school approach to support struggling literacy learners in their schools, or that there are adequate strategies and supports to meet the needs of struggling literacy learners in their schools. Findings also suggest 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 the realization of a supportive whole-school culture for struggling literacy learners.

Keywords

Leadership, whole school literacy, literacy, school culture, quantitative research, secondary school, high school

Introduction

Meeting students' literacy needs and building their literacy skills is expected to be a whole school priority in the USA (Draper, 2002) and Australia (ACARA, 2017). It is also an expectation in England, where Ofsted (2013: 8) has positioned improving students' literacy as a shared responsibility and commitment across school subject areas and where, ideally, "the teaching of reading, writing and communication is highly effective and cohesively planned and implemented across the curriculum." While Ofsted (2013: 42) notes that the focus on whole-school literacy is not a new

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concern, there are questions about how effectively schools adopt this approach, and the extent to which teachers in subject areas beyond Language Arts/English are willing to support literacy learning. In the Australian context, Rennie (2016) notes that “the catchcry ‘we are all teachers of literacy’ has been a mantra for several decades, yet seems to be a concept with which many secondary schools struggle.” This is of concern, with Hill and Crévola (1999) finding substantial improvements in literacy outcomes where a whole-school approach was taken. Schools need to plan for and enact practices that support the development of literacy skills across every subject area, and the positioning of literacy as a general capability taught across all disciplines in the Australian Curriculum may be viewed as a recognition of the importance of literacy for learning in other areas (Merga and Gardiner, 2019). As noted by Timperley (2006: 546), “evidence-engaged management and leadership means not only focusing on the schools’ aims, values and policies, but also examining how well they are realized in practice.” With enhancing literacy a key goal in most contemporary schools, school leadership must turn their attention to how this goal is realized in practice.

Struggling literacy learners beyond the early years

A whole-school approach to literacy may be particularly valuable for struggling literacy learners in secondary schools who have fallen behind their peers and for whom literacy is acting as a constraint on performance across other subject areas. Struggling literacy learners can be characterized as students who typically perform below the expected level for their age and who are often disengaged from literacy learning (Guthrie and Davis, 2003). Struggling literacy learners may experience a widening gap between their performance and that of their higher achieving peers, having their disadvantage compounded by a Matthew Effect (Stanovich, 2009). In Australia, by the time students reach 9th grade, the spread of literacy achievement in a classroom can be as great as eight years (Goss and Sonnemann, 2016), posing a notable challenge for schools and classrooms that must cater to this vast degree of diversity in literacy skills and knowledge. While struggling literacy learners in secondary schools may have diagnosed learning difficulties, or may speak English as an additional language, many struggling literacy learners do not conform to either category (Merga, 2019b), with schools needing to be responsive to diverse causation in students’ literacy barriers.

Leadership supporting struggling learners

The issue of how to best support struggling literacy learners beyond the early years of school is particularly pertinent as a school leadership priority in Australia, where nearly one in five adolescents tested fall into the low performer category on international testing (Thomson et al., 2016). Meeting the needs of these students is also of perennial concern in England despite notable increases in performance on international testing in recent times (Department for Education, 2018, McGrane et al., 2017). Supporting struggling literacy learners beyond elementary school is an important issue in the USA, where there have been noted declines in reading and writing over time (Graham, 2019; Spichtig et al., 2016), and where around a quarter of students in 8th grade do not attain the basic level on national reading assessments (Kim et al., 2017), and two thirds of 8th and 12th grade students score at or below the basic level on national writing assessments (National Center for Educational Statistics, 2012). While the body of research that explores literacy as a whole-school priority is growing, there is a paucity of research that considers how such approaches

may meet the needs of struggling literacy learners in secondary school contexts, and the role of school leadership in supporting and establishing such approaches.

It cannot be taken for granted that leaders and their broader school communities effectively position literacy as a general capability; in contemporary times, schools face competing demands, with the need to equip students with functional literacy skills potentially in competition with the requirements of preparation for high-stakes testing, which can lead to a “focus on results rather than learning” (Klenowski, 2012: 174). Supportive school leadership could be crucial for the development and sustenance of literacy as a whole-school priority across all learning areas in schools, with school leadership approaches likely to play a key role in shaping school priorities and practices, as well as school culture more broadly (Morris et al., 2019). This paper focuses on leadership and supports and strategies operating at a school level that these leaders may influence. School leaders can be seen as powerful and influential role models in enacting whole-school literacy approaches, with their priorities shaping school priorities and resourcing (Merga and Mason, 2019).

The importance of literacy

The end goal of a whole-school approach to literacy, or indeed any literacy education initiative, may be viewed as being to prepare students to meet functional literacy requirements to live independently beyond the secondary schooling years. While functional literacy can be subject to diverse conceptualization, and highly responsive to context, the Organization for Economic Co-operation and Development (OECD) defines literacy as “the ability to understand, evaluate, use, and engage with written texts to participate in society, achieve one’s goals, and develop one’s knowledge and potential” (OECD, 2013a: 59). It can be argued, however, that in contemporary times, real world literacy tasks may be increasingly diverse and complex as burgeoning technological platforms invite the consumption of an array of new written forms (e.g. the text message, the Twitter tweet), reshaping what it means to be functionally literate and posing new challenges for literacy education. As schools seek to ensure that students reach functional literacy before graduation, high-stakes testing may increasingly exert a gatekeeping function on graduation. For example, in Western Australia, students who do not achieve a minimum literacy standard “to meet the demands of everyday life and work in a knowledge-based economy” (School Curriculum and Standards Authority, 2014) in Year 9 high-stakes testing must sit an additional test to demonstrate functional literacy and be eligible to graduate with a Western Australian Certificate of Education.

Place and resourcing

Where students present as struggling literacy learners, their issues with literacy may preclude their meeting this functional literacy goal without intervention, highlighting the importance of identifying students who require additional literacy support to graduate. However, relatively little is known about secondary schools’ capacity to identify struggling literacy learners despite the common implementation of high-stakes diagnostic testing. Arguably even less is known about schools’ capacity to enact strategies to support struggling literacy learners once they are identified, with research typically focusing on schools’ ability to meet the needs of students with specific learning difficulties or disabilities rather than struggling literacy learners who may, as aforementioned, not readily fall into such categories.

Factors associated with place can also influence student outcomes. Place is a central concern in an approach informed by a social ecological model which posits that both social and environmental

factors that can relate to place can shape student attainment, achievement, and motivation (Saracho and Spodek, 2006). While there is a gap in literacy attainment between urban and rural schools (Gorur and Wu, 2015), little is known of how place and space impact upon reading and writing skills and attitudes beyond material resourcing, size, and staffing differences (Graham, 2019; Lamb et al., 2014). Analysis of Australian National Assessment Program – Literacy and Numeracy (NAPLAN) testing data indicate that “students in low socio-economic areas start behind, and make less progress in school,” and that “many regional and rural students make up to two years less progress than students in inner city areas between Year 3 and 9” (Goss and Sonnemann, 2016: 2). Some urban areas in Australia are already high performers in reading and writing. Therefore, to improve national performance, there is a need for “a more focused and targeted approach, rather than sweeping national reforms” (Gorur and Wu, 2015: 662), giving greater attention to place. Place may also influence adolescent reading and writing motivation, resourcing, and opportunity (Graham, 2018; Rutherford et al., 2017). Beyond resourcing differences, there is a need to understand the extent to which place influences school leadership and whole-school support of struggling literacy learners in secondary schools.

School leadership and whole-school support

To this end, this paper from the 2019 SSSL project investigates secondary schools’ capacity to meet the needs of struggling literacy learners beyond the early years. This paper explores teachers’ perceptions on the extent to which school leadership is committed to supporting struggling literacy learners across all learning areas, and whether supporting literacy is genuinely treated as a whole school priority. It also uniquely focuses on how schools identify and support struggling literacy learners, and how they build their capacity to attain crucial assessment and functional literacy goals. The influence of place is given close consideration as a potential shaping factor. This paper is also responsive to the increasing demand that school leadership decisions in school be responsive to quality data (Marsh and Farrell, 2015), with the insights provided by this research able to enhance the capacity of leadership to steer the school toward more positive outcomes for its most vulnerable literacy learners. To this end, the paper focuses on the following research questions:

Research Question 1 (RQ1): Do mainstream secondary school teachers perceive that there is a whole-school approach to supporting struggling literacy learners in their schools?

Research Question 2 (RQ2): Do mainstream secondary schools feature adequate strategies and supports to meet the needs of struggling literacy learners in secondary schools?

Research Question 3 (RQ3): Does perceived leadership commitment relate to supportive whole-school culture for struggling literacy learners?

Methods

In 2019 the SSSL data were collected from $n = 315$ Australian secondary English teachers who were currently teaching struggling literacy learners in mainstream classrooms. These respondents were felt to be well-situated to provide insights into their school leadership, school culture, and available resources for identifying and supporting struggling literacy learners. We specifically sought teachers with *current* experience teaching struggling literacy learners in mainstream classrooms, as teachers without this current experience would logically be unable to provide the same

quality data (informed by current lived experience) about school leadership and whole-school support of these students. The survey was specific about the desired sample, featuring the following preamble.

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.

Filtering questions were built into the early stage of the survey to ensure that teachers who were *not* currently instructing secondary English students in mainstream contexts that included struggling literacy learners would trigger a skip logic which would route these respondents to the end of the survey without further exposure to the instrument. While the aforementioned data would suggest that struggling literacy learners are common in secondary contexts, ability grouping may be relatively common in Australian schools, and therefore some teachers who work primarily with higher-ability streamed classes may have limited exposure to struggling literacy learners (e.g. OECD, 2013b; Perry and Lamb, 2016).

The data were collected on a survey tool in Qualtrics, which collected primarily quantitative data (other than demographic details) on Likert-type scales. Some qualitative data were also collected in open fields, but not in relation to the research questions that are the focus of this paper. The survey was prepared and subject to institutional ethics approval and exposed to cognitive piloting prior to data collection by an experienced secondary English teacher who provided feedback about the wording of the survey. Data collection took place from February 28 to May 27, 2019. The survey was promoted through a range of professional and social networks, with on-sharing by participants encouraged. The survey included a hyperlink to a detailed information letter in the preamble to enable informed consent. Though 392 responses were recorded, partial and filtered responses were excised from the final data set, leaving $n = 315$ complete responses as the basis of the data reported on in this paper. The descriptive statistics of the respondents are summarized in Table 1, and they suggest that respondents tended to be female, over 30, with a large range in years of teaching experience.

In the absence of data around the total number of secondary teachers teaching struggling literacy learners in mainstream secondary English classroom contexts in Australia, there are limitations on the sample size calculation. This led to the use of GPower (Faul et al., 2009) version 3.1.9.2 to calculate a minimum sample size. Using Cohen's convention of a medium effect size threshold of .30 (Cohen, 2013), with a 95% confidence interval, the minimum sample size required is $N = 138$. Therefore, the sample of $N = 315$ responses exceeds this minimum requisite. Random sampling among this population was not possible, as there is no available database of Australian mainstream secondary English teachers who currently work with struggling literacy learners, and as such, both convenience and snowball sampling was purposively managed to recruit a sample of respondents from across Australia (Merga, 2019b).

Table 2 illustrates that all states and territories of Australia were represented in this study. Respondents are typically located in metropolitan schools, with 30% teaching in rural or remote contexts. Australian schools are categorized using an Index of Community Socio-Educational Advantage (ICSEA) (ACARA, 2015), and it was interesting to note that where the ICSEA of their school was known by the respondent, the school tended to be below the average ICSEA. Over 60% of respondents taught in public schools.

Table 1. Respondent characteristics.

Characteristic	in sample ($n = 315$)	in sample (%)
Gender		
Female	270	85.71
Male	42	13.33
Other	3	0.95
Age group		
<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
Years teaching experience		
<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
Years post teacher training		
<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

This paper reports on all data from the survey with relevance to the aforementioned research questions. To this end, the respondents were asked to indicate their level of agreement on a five-point Likert scale, with “1” being strongly agree and “5” being strongly disagree, on the following statements.

A preliminary data analysis was conducted to determine the data distribution structure. This includes a test of normality using the Kolmogov-Smirnov test and a comparison of *mean* and 5% *trimmed mean* to investigate potential outliers in the dataset. The dataset was also divided into two sub-samples based on the respondents’ teaching location—teaching at urban/metropolitan ($n = 220$) or rural/remote ($n = 95$)—to account for the influence of place. Differences in the variables between these sub-samples were tested through independent sample *t*-tests. This procedure was done to ensure that there is no systemic difference in the variables as a result of location-specific factors which can complicate the generalization of main results.

Table 2. School characteristics.

Characteristic	in sample (<i>n</i> = 315)	in sample (%)
Location		
Metropolitan	220	69.84
Rural	90	28.57
Remote	5	1.59
State/territory of school location		
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
School type		
Government (public)	195	61.90
Private	120	38.10
ICSEA		
Above average ICSEA	67	21.27
Average ICSEA (1000)	79	25.08
Below average ICSEA	106	33.65
Unsure	63	20.00
Year groups being taught^a		
Year 7	140	
Year 8	147	
Year 9	158	
Year 10	176	
Year 11	175	
Year 12	153	

^aMultiple selections were permitted on this survey item, so percentage is not relevant.
ICSEA = Index of Community Socio-Educational Advantage.

Bivariate correlations tests were computed to answer RQ3. Both a parametric test, Pearson correlation, and a non-parametric test, Kendall's τ , were run on the variables of interest (Table 3, Mat Roni, Merga and Morris, 2020). The latter was used as a basis to determine if the outputs of the former can be used for subsequent analysis and to form opinions on the findings when the Kolmogorov-Smirnov procedure indicates the data are not normally distributed. Effectively, this extra step stands as a "robustness" check for the Pearson correlation results. Pearson correlation tests were also run at the sub-sample level in which the magnitude of the correlation coefficients was examined to determine if the results at the aggregate level remain valid at a lower-order. This procedure requires the correlation estimates for each group to be standardized to z -score, z_r , and the differences, $Z_{\text{Difference}}$, to be tested for statistical significance. The z_r for each correlation estimate and $Z_{\text{Difference}}$ were calculated as follows (see Field, 2013).

$$z_r = \frac{1}{2} \log_e \left(\frac{1+r}{1-r} \right)$$

Table 3. Survey items.

Items	Variables	Statements
Q56	Leadership	My school leader is strongly committed to ensuring that struggling literacy learners have their literacy skills developed across all learning areas in my school.
Q27	Culture	Supporting literacy is genuinely treated as a whole-school priority across all learning areas in my school.
Q43	Id.SLL	My school has effective strategies to identify struggling literacy learners.
Q34	Test	In my school, we do enough to prepare struggling literacy learners for high-stakes literacy testing (e.g. NAPLAN or OLNA in Western Australia).
Q39	Functional	In my school, we do enough to prepare struggling literacy learners to achieve functional literacy skills (i.e. to meet the communicative demands of contemporary life beyond school).
Q44	Id.Specific	My school has effective strategies to identify students with specific learning disorders and difficulties (e.g. dyslexia) that can impact upon literacy learning.
Q45	Spp.Specific	My school has effective strategies to support students with specific learning disorders and difficulties (e.g. dyslexia) that can impact upon literacy learning.

SLL = struggling literacy learner, Leadership = leadership commitment, Culture = supporting SLL as whole-school priority, Id.SLL = strategy to identify struggling literacy learners, Test = prepare SLLs for high-stakes literacy test, Functional = prepare SLLs for functional literacy test, Id.Specific = strategy to identify specific learning disorder, Spp.Specific = strategy to support specific learning disorder.

Where,

r = correlation estimate for each bivariate correlation for each group
and $Z_{\text{Difference}}$,

$$Z_{\text{Difference}} = \frac{z_{r_1} - z_{r_2}}{\sqrt{\frac{1}{N_1} + \frac{1}{N_2}}}$$

Where,

z_{r_1} = z-score for group 1, urban/metropolitan.

N_1 = sample size for group 1, urban/metropolitan.

z_{r_2} = z-score for group 2, rural/remote.

N_2 = sample size for group 2, rural/remote.

The results of these statistical tests are presented below.

Results

Before moving into more complex analysis, the raw data offer useful insights in this under researched space, as per Table 4 below. It can be noted that 56.51% of respondents agreed that their school leader is strongly committed to ensuring that struggling literacy learners have their literacy skills developed across *all* learning areas in their school. Fewer (54.92%) respondents agreed that supporting literacy is genuinely treated as a whole school priority across all learning areas in their school.

In relation to the results around the preparation of students to achieve functional literacy and testing requirements, agreement with the statement “In my school, we do enough to prepare struggling literacy learners for high-stakes literacy testing” was low (32.07%). More teachers agreed that their school does enough to prepare struggling literacy learners to achieve functional literacy skills, at 51.43%.

Table 4. Results, $n = 315$.

Variables	Strongly agree %	Somewhat agree %	Neither agree nor disagree %	Somewhat disagree %	Strongly disagree %
Leadership	22.54	33.97	16.83	20.32	6.35
Culture	20.32	34.60	12.06	21.27	11.75
Id.SLL	14.92	40.32	10.48	21.90	12.38
Test	5.04	27.03	32.70	24.13	10.48
Functional	8.57	42.86	15.56	23.49	9.52
Id.Specific	16.83	44.13	15.87	17.14	6.03
Spp.Specific	39.68	27.62	11.75	11.43	9.52

SLL = struggling literacy learner, Leadership = leadership commitment, Culture = supporting SLL as whole-school priority, Id.SLL = strategy to identify struggling literacy learners, Test = prepare SLLs for high-stakes literacy test, Functional = prepare SLLs for functional literacy test, Id.Specific = strategy to identify specific learning disorder, Spp.Specific = strategy to support specific learning disorder.

Table 5. Descriptive statistics, $n = 315$.

Item	Variables	Mean	5% trimmed mean	SD	Skewness	Kurtosis
Q56	Leadership	2.540	2.489	1.221	0.398	-.935
Q27	Culture	2.695	2.661	1.324	0.351	-1.137
Q43	Id.SLL	2.514	2.460	1.138	0.591	-.553
Q34	Test	3.070	3.078	1.071	0.110	-.714
Q39	Functional	2.825	2.806	1.167	0.381	-.972
Q44	Id.Specific	2.765	2.739	1.290	0.374	-1.115
Q45	Spp.Specific	2.917	2.908	1.228	0.22	-1.189

SLL = struggling literacy learner, Leadership = leadership commitment, Culture = supporting SLL as whole-school priority, Id.SLL = strategy to identify struggling literacy learners, Test = prepare SLLs for high-stakes literacy test, Functional = prepare SLLs for functional literacy test, Id.Specific = strategy to identify specific learning disorder, Spp.Specific = strategy to support specific learning disorder.

Less than two thirds (60.96%) of teachers agreed that their secondary school has effective strategies to identify students with specific learning disorders and difficulties (e.g. dyslexia) that can impact upon literacy learning, though more (67.30%) agreed that their school has effective strategies to support students with specific learning disorders and difficulties (e.g. dyslexia) that can impact upon literacy learning. However, in general, only 55.24% of respondents agreed that their school has effective strategies to identify struggling literacy learners.

Further analysis yielded interesting trends. Firstly, data distribution was deemed to be non-normal, as per the Kolmogorov-Smirnov test. However, skewness and kurtosis are within ± 1.96 , indicating that the data are approximately normally distributed. The *mean* and 5% trimmed *mean* for all variables are also similar, suggesting that potential outliers in the data are not a concern. The descriptive statistics of the variables are summarized in Table 5.

In Table 5, leadership ($M = 2.54$, $SD = 1.22$) is slightly above the mid-point in the five-point Likert scale. The magnitude is similar to culture ($M = 2.70$, $SD = 1.32$), which lies between *somewhat agree* and *neutral (neither agree nor disagree)*. The similarity of the mean values of

Table 6. *T*-tests on variables based on school locations.

	Levene's test		<i>t</i> -test		
	<i>F</i>	<i>p</i> -value	<i>t</i> -value	<i>df</i>	<i>p</i> -value
Leadership	.296	.587	-.877	313.	.381
Culture	1.737	.188	-1.575	313.	.116
Id.SLL	.018	.893	-.446	313.	.656
Test	1.482	.224	-2.704	313.	.007
Functional	.01	.922	-.693	313.	.489
Id.Specific	1.799	.181	-1.269	313.	.206
Spp.Specific	.134	.715	-1.084	313.	.279

SLL = struggling literacy learner, Leadership = leadership commitment, Culture = supporting SLL as whole-school priority, Id.SLL = strategy to identify struggling literacy learners, Test = prepare SLLs for high-stakes literacy test, Functional = prepare SLLs for functional literacy test, Id.Specific = strategy to identify specific learning disorder, Spp.Specific = strategy to support specific learning disorder.

these variables and their strong correlation, which is explained later in this section, warrant a closer examination in future studies. Pearson correlation and Kendall's τ correlation tests were conducted on the variables previously introduced. Results of these tests are similar, and therefore the correlation estimates from the Pearson correlation test were used for subsequent analyses.

Given that the respondents in the study work in metropolitan, rural, and remote schools, location can be a potential source of determinant influence if a systemic difference is found to be statistically significant in the main results. This can affect generalization of the results of this study. We split the data into two subsamples—metropolitan/urban ($n = 220$) and rural/remote ($n = 95$). We later ran an independent *t*-test on leadership, priority (culture), and supports with respondents' locations as a factor. The *t*-test suggests all variables except *Test* are similar, as indicated in Table 6.

RQ3 seeks to determine if leadership, culture, and support interests are correlated. Bivariate correlation tests among the variables using *t*-tests indicate leadership and culture correlate the strongest, $r = .697$, followed by Id.Specific (identification of specific learning difficulty) and Spp.Specific (supporting specific learning difficulty), $r = .689$. By Cohen's (2013) convention, these correlations are of a large effect size. In fact, leadership-culture and Id.Specific-Spp.Specific share a large variance of 49% ($r^2 = .485$) and 47% ($r^2 = .474$), respectively. These are also considered as having a medium-to-large effect size by the Cohen's convention on r^2 . The bivariate correlations of the variables show that the variable pairs correlate statistically significantly ($p < .001$) with the effect size ranging from medium to large (small: $r = \pm .10$, medium: $r = \pm .30$, and large: $r = \pm .50$), with an exception of Functional-Culture, Test-Id.SLL, and Test-Culture, which register small-to-medium effect size. An interesting note on the results is the correlation strengths demonstrated by leadership. This variable correlates with other variables in the study between .319 (or 10% shared variance between test and leadership) and .697 (49% shared variance between leadership and culture), suggesting a medium to large magnitude. The results of the test are summarized in Table 7.

The $Z_{\text{Difference}}$ results are also added to Table 7. As indicated in the table, we find that the $Z_{\text{Difference}}$ of two subsamples are not statistically significant, despite the initial *t*-test indicating that there is a difference in the variable *Test*, location-wise. On this finding, we conclude that there is no systemic difference influencing the results with regard to the geographical location of the schools. Therefore, generalization of the findings may not be contingent on school location.

Table 7. Correlations and between-groups correlation differences.

Bivariate correlations	Pearson, <i>r</i>	Urban/ metropolitan		Rural/ remote		<i>Z</i> _{Difference}	<i>p</i> -value ^a
	<i>n</i> = 315	<i>n</i> = 220	<i>Z</i> ₁	<i>n</i> = 95	<i>Z</i> ₂		
Leadership – Culture	.697**	.716**	.899	.649**	.774	1.011	.255
Id.Specific – Spp.Specific	.689**	.676**	.822	.713**	.893	-.575	.220
Id.Specific – Id.SLL	.564**	.577**	.658	.536**	.599	.478	.210
Spp.Specific – Id.SLL	.561**	.546**	.613	.595**	.685	-.584	.221
Id.SLL – Leadership	.515**	.465**	.504	.629**	.740	-1.898	.291
Spp.Specific – Functional	.512**	.490**	.536	.558**	.630	-.754	.236
Spp.Specific – Leadership	.505**	.515**	.570	.478**	.520	.395	.202
Functional – Id.SLL	.444**	.425**	.454	.488**	.533	-.640	.226
Id.SLL – Culture	.442**	.429**	.459	.477**	.519	-.486	.211
Id.Specific – Functional	.425**	.435**	.466	.401**	.425	.331	.195
Id.Specific – Leadership	.394**	.375**	.394	.428**	.457	-.508	.213
Functional – Test	.394**	.425**	.454	.334**	.347	.856	.245
Functional – Leadership	.390**	.389**	.411	.391**	.413	-.019	.161
Spp.Specific – Test	.348**	.314**	.325	.411**	.437	-.899	.248
Id.Specific – Test	.346**	.332**	.345	.357**	.373	-.228	.183
Id.Specific – Culture	.329**	.341**	.355	.288**	.296	.473	.210
Spp.Specific – Culture	.321**	.345**	.360	.288**	.296	.509	.214
Test – Leadership	.319**	.284**	.292	.388**	.409	-.944	.251
Functional – Culture	.293**	.283**	.291	.313**	.324	-.265	.187
Test – Id.SLL	.286**	.267**	.274	.330**	.343	-.556	.218
Test – Culture	.224**	.143*	.144	.393**	.415	-2.181	.296

p* < .05, *p* < .001, ^a*p*-value for *Z*_{Difference}

SLL = struggling literacy learner, Leadership = leadership commitment, Culture = supporting SLL as whole-school priority, Id.SLL = strategy to identify struggling literacy learners, Test = prepare SLLs for high-stakes literacy test, Functional = prepare SLLs for functional literacy test, Id.Specific = strategy to identify specific learning disorder, Spp.Specific = strategy to support specific learning disorder.

Discussion

The diversity in literacy skills and achievement of secondary-school students in Australia poses serious challenges for school leaders and teachers. A whole-school approach to teaching literacy and supporting effective literacy development for all is seen as a priority in education today (ACARA, 2017; Draper, 2002). As previously reviewed here, less is known about teachers' perceptions of school leadership commitment to support struggling literacy learners and strategies implemented to identify and support these students in secondary schools. Without such information, it is difficult to determine what needs to be done to promote effective literacy development for all students in secondary school contexts. Findings from the current study make a significant contribution to this knowledge gap.

In relation to RQ1, many mainstream secondary school teachers did not strongly perceive a whole-school approach to support struggling literacy learners in their schools, with 54.92% agreeing that supporting literacy is genuinely treated as a whole school priority across all learning areas in their school. This suggests that the positioning of literacy as a general capability to be developed

across all learning areas may be poorly realized in Australian schools. Leadership support for ensuring that struggling literacy learners have their literacy skills developed across all learning areas in their school also indicated room for improvement, with 56.51% of respondents perceiving strong leadership commitment to this goal.

These findings suggest that although school leaders may value promoting literacy development for all, more work may be needed to develop a whole-school culture in which responding to the literacy needs of all students, including those of struggling literacy learners, becomes secondary school teachers' daily practice across learning areas. The task of developing a whole-school approach to promote literacy development for all is no small undertaking as it requires considerable engagement, effort, and professionalism from all relevant stakeholders, including school leaders and teachers. Applying a whole-school vision to effectively support struggling literacy learners in secondary schools requires a combination of philosophy, knowledge, and action (McGhee and Lew, 2007). School leaders and teachers need knowledge about literacy related skills and evidence-based practices to support literacy instruction and development. Importantly, school leaders and teachers need to know how to "apply this knowledge to create, enact, sustain, and modify (as needed)" a vision for teaching literacy related skills in their classrooms and contexts (Graham, 2019: 293). School leaders who have strong knowledge about evidence-based practices to support struggling literacy learners should promote opportunities to empower teachers, students and staff to do their best work (McGhee and Lew, 2007), including promoting professional development opportunities in their schools.

However, for school leaders to have impetus to intervene in order to build whole school cultures supportive of reading across all learning areas, the need for this must be acknowledged; perhaps Australia's national curricular positioning of literacy as a general capability is not enough to ensure that this is realized in schools. While there may be numerous root causes, including the aforementioned competing demands on schools and leadership, it is also possible that leadership does not fully realize the need for this approach. As noted by Mulford et al. (2007: 243), "when principals' perceptions of their schools' literacy and numeracy success, even taking into account student background, were compared with actual literacy and numeracy test results, it was found that many principals overestimate their actual success." Thus, even where students are seen to be falling behind, and acknowledging the limitations of the high-stakes testing instruments used, principals' optimism in this area may preclude them prioritizing whole-school literacy learning. As such, it cannot be taken for granted that the importance of adopting a whole-school approach to enhancing the outcomes of struggling readers into secondary school is universally acknowledged, and perhaps further research could illustrate how this message can be more effectively conveyed to school leaders, and the barriers to this understanding, so that appropriate interventions can be developed.

The question (RQ2) of whether mainstream secondary schools feature adequate strategies and supports to meet the needs of struggling literacy learners in secondary schools also offered compelling insights. Schools were not perceived to be doing enough to prepare struggling literacy learners for high-stakes literacy testing, with less than a third of respondents agreeing that their school managed this effectively, which is concerning considering the aforementioned link between high-stakes test attainment and graduation in some areas of Australia. This finding should not be seen as a recommendation that schools "teach to the test," as research suggests that many schools may already be doing this, leading to a narrowed curriculum focus (e.g. Polesel et al., 2014; Thompson and Harbaugh, 2013). Instead, such findings may suggest that more research could focus on how to prepare struggling literacy learners to meet the demands of high-stakes testing

while still affording student-centered learning that is highly engaging and perhaps stimulating reconsideration of the validity of having such limited instruments positioned to determine students' graduation, without consideration of other data, such as longitudinal classroom performance and data collected outside high-stakes testing situations (Merga, 2019b). However, more teachers agreed that their school adequately prepared struggling literacy learners to achieve functional literacy skills, with just over half agreeing. Teachers clearly perceive a need for schools to do more in both of these literacy skill areas. As outlined in the introduction, with students' assessed and functional literacy attainment increasingly linked to opportunity for graduation (SCSA, 2014), and functional literacy crucial to secure optimal vocational, academic, and social opportunities for students (Merga, 2019a), these concerns are pertinent. OECD (2018) findings indicate that Australian students scoring in the highest quarter for reading performance at 15 were significantly more likely than those in the lowest quarter of performance to be working in a skilled job at age of 25, which is supported by earlier research which notes a significant positive relationship between literacy performance and adult employment (OECD and Statistics Canada, 2000) and earning potential (McIntosh and Vignoles, 2001).

While schools are expected to play an important role in identifying struggling literacy learners experiencing specific learning disorders and difficulties (e.g. dyslexia), less than two thirds of respondents agreed that their schools had effective strategies in place to enact this role, though once diagnosis was established, there was a stronger perception of schools' capacity to support these students (67.30%). However, where there were students who were struggling literacy learners who did not readily fall into a diagnosable category, only 55.24% of respondents agreed that their school employed effective strategies to identify these struggling literacy learners. This is despite Australia's commitment to high-stakes literacy testing in Years 3, 5, 7, and 9, which are ostensibly designed to facilitate such identification so that targeted support can be provided to enhance student performance at both individual and group levels, though the extent to which NAPLAN can be constructed as a diagnostic tool is a point of ongoing contention (e.g. Parliament of Australia, n.d.). As such, the NAPLAN tests cannot be relied upon as a diagnostic tool, and other educational measures may not be meeting the identification requirements of struggling literacy learners who are not experiencing a diagnosable issue and who may be commonly encountered in schools (Merga, 2019b). It is also possible that the issue with identification in this demographic can be further problematized by the diverse causation of barriers to learning faced by those who continue to struggle with literacy skills beyond the early years of schooling, with research consistently finding that there is no one common gap typically faced by this heterogenous group (e.g. Merga, 2019b; Brasseur-Hock et al., 2011; Buly and Valencia, 2002; Dennis, 2013).

Perhaps the most important finding that this paper offers (RQ3) is that regardless of place, the strongest relationship among the variables examined was between perceived leadership commitment and realization of a supportive whole-school culture for struggling literacy learners, constituting a large effect size. This means that according to these data, leadership can confidently assert that their commitment in this regard may make a strong difference, which has previously only been contended. While this is a valuable finding, it must also be noted that with leadership support perceived to be higher than actualization of whole-school support in the findings relating to RQ1, this suggests that leadership support may not, in itself, be a wholly sufficient determinate of the successful actualization of a whole school approach, highlighting the likely importance that leaders effectively engage the broader school community, such as teachers and support staff, in this shared and curriculum-mandated goal. It must also be noted that a notable limitation is that findings are

reflective of teacher perceptions only. While teachers may be very well situated in schools to provide key insights into all of the research questions, future research could also consider drawing on perspectives for leaders, students, and other key stakeholders within the community to enhance the rigor of the findings. The findings inferred by this study can inform this future inquiry, ideally with a greater sample and across both Australian and international contexts, to enhance the transferability and generalizability of findings. Previous research exploring literacy related issues as perceived by teachers and school principals indicate that views may not always align, making opportunities for data triangulation desirable (e.g. Mulford et al., 2007). It is also worth observing that the second largest effect size related was between strategies to identify specific learning disorder and strategies to support specific learning disorder, suggesting that where schools are effective in identification for specific learning disorders, unsurprisingly, they may also be better equipped at supporting identified students.

Conclusion

In conclusion, it can be observed that these data suggest that there may be room for considerable improvement in Australian schools' adoption of a whole school approach to supporting literacy as a whole school priority across all learning areas in schools in order to optimize outcomes for struggling literacy learners beyond the early years. Strategies and supports to meet the needs of struggling literacy learners in secondary schools may fall short in many Australian schools, and rendering improvements in this area can help students to meet their academic and functional literacy goals. It is also noted that improvements in this area may lie in the hands of school leaders. Perceived leadership commitment to ensuring that struggling literacy learners have their literacy skills developed across all learning areas may be strongly linked to a supportive whole-school culture becoming a reality in schools, highlighting the importance of leadership valuing and stewardship of this learning priority. With literacy essential for young peoples' opportunity and attainment both at school and beyond, and the Australian curriculum supporting the importance of literacy as a general capability to be taught across the curriculum, greater consideration needs to be given to how leaders' commitment to this goal is realized in order achieve this whole school approach, highlighting a valuable area for future research which is beginning to garner greater attention (e.g. Merga and Gardiner, 2019; Merga and Mason, 2019).

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