

# **An investigation into the early literacy skills of English second language learners in South Africa**

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## **Abstract**

This study employs the Comprehensive Emergent Literacy Model (CELM) theoretical framework, as it refers to the impact of context on learning early literacy skills. It is relevant to this study as the participants were English second language learners from cultures, communities, and demographics different from those of English first language speakers in South Africa. Early literacy skills, specifically phonological awareness (PA), are predictive of later literacy success. Many English second language (EL2) learners are unable to develop language and early literacy skills. Foundational skills such as general PA skills, often need explicit instruction to prepare the learners to learn to read in English. Twenty-one EL2 Grade 1 learners in an English medium private school in South Africa were selected as participants. Early literacy skills were assessed at the beginning of Grade 1. Reading, spelling, and reading comprehension skills were assessed after two terms in Grade 1 to determine if there is a correlation between early and later literacy skills. Results indicated significantly strong positive correlations between early literacy and later literacy skills. These results and previous research suggest that EL2 learners must be exposed to high-quality early literacy skills as early as possible to provide them with a foundation for future literacy success.

## **Keywords**

Literacy, early literacy, phonological awareness, phonemic awareness, second language, EL2

## Introduction

### *Background*

Researchers accept that early literacy competency is linked to reading proficiency (Lessing & De Witt, 2016). Early literacy skills, awareness of rhyming and syllables, phonological awareness (PA) and knowledge of print-related vocabulary, such as print-sound matching, start to develop before formal reading instruction (Goodrich et al., 2017).

PA, the ability to analyse and manipulate the sound structure of oral language, correlates with the acquisition and competency of reading and writing (Corriveau et al., 2010). Children chronologically acquire the PA skills of their first language from the less to the more sophisticated (Le Roux, 2016). PA is an umbrella term encompassing ‘easier’ skills such as the awareness of rhyme, onset and rime, and segmentation of multisyllabic words, as well as more complicated skills such as phonemic awareness (PhA), which includes awareness of individual speech sounds (Bernthal et al., 2013). PhA is seen as the best predictor of reading ability (Alcock et al., 2018; Le Roux et al., 2017).

In early reading, PhA provides the learner with the ability to decode unfamiliar words (Lessing & De Witt, 2016). Decoding is an important component of beginning reading and takes more time to learn in opaque orthographies (such as English) than in transparent orthographies (Alcock et al., 2018). English has many irregular words, which requires the teaching of sight words in English (Department of Basic Education, 2014a). In opaque orthographies the phoneme-grapheme coupling is less direct where one grapheme can be used to portray a variety of phonemes, for example, /æ/ (cat), /ɑː/ (ask), /ɔː/ (all), /ə/ (about), /ɪ/ (paper). As a result, words are not always pronounced as they are spelled, making decoding and therefore the reading acquisition process more difficult (Le Roux, 2016). Learners who have difficulty recognising familiar words or decoding new words will have a lower chance of

learning the meanings of these words. As a result, these learners will struggle to comprehend the text that was read, affecting their academic achievement (Pretorius & Spaul, 2016).

Atmore (2013) suggests that for optimal educational development, the development of basic reading, writing and numeracy skills are essential in the first six years of a child’s life (i.e. before entering Grade 1). By the end of their preschool years, sophisticated PhA such as segmentation and blending skills are developing, preparing the learners for literacy acquisition in Grade 1 (Le Roux, 2016). The same precursor skills (oral language, PA and print knowledge) that are important predictors of later reading ability among L1 learners are also important predictors for learners learning to read in their second language (L2) (Goodrich et al., 2017). There are, however, marked differences between the abilities of learners reading in their L1 and those reading in their L2 (Koda, 2007; Le Roux et al., 2017). Reading in a second language is a cross-linguistic skill as it involves interactions between the languages, and is therefore more complex than reading in the first language (Koda, 2007). Literacy development may be influenced by the age of first exposure to the second language, the amount of exposure to the second language, as well as the similarities and differences between the two languages (Hoff et al., 2012).

Dissimilarities in the phonetic repertoire of languages are seen as a risk for the acquisition of PhA skills in English second language (EL2) learners (Le Roux et al., 2017). African languages, for example, contain only five to eleven monophthongs with no diphthongs or long vowels, whereas standard South African English contains 20 vowels (seven short monophthongs, six long monophthongs and seven diphthongs) (Bekker, 2009). Seeff-Gabriel (2003) found that EL2 learners are not always able to correctly perceive the vowels of English. This possible erroneous perception affects their PA and PhA of English vowels, which may affect their literacy skills (Geertsema & Le

Roux, 2014; Le Roux, 2016). In addition to differences in the phoneme inventories, differences in the oral language traditions are present as well. In an interview with Professor Sebate, an expert in the field of African languages, it was noted that rhyme (i.e. in the form of nursery rhymes, for example) is not present in African languages (P Sebate, personal communication, 5 April 2018). The absence of early exposure to rhyme in African languages is concerning as the awareness of rhyme is one of the earliest forms of PA to develop, typically well before the end of preschool (Janssen et al., 2015). EL2 learners may therefore complete PA tasks in English less successfully compared to their English first language (EL1) peers because of insufficient awareness of rhyme (Lund et al., 2015).

### *The South African context*

English is the Language of Learning and Teaching (LoLT) in most schools in South Africa and many African language-speaking parents enrol their children in English-medium schools (Jordaan, 2011; Webb et al., 2010). Many EL2 learners in South Africa, often not academically proficient in English, are attending school alongside EL1 learners (Howie et al., 2017; Webb et al., 2010). The context in which many EL2 learners find themselves, does not necessarily support literacy development (Rohde, 2015). The EL2 learners hail from a wider range of cultures and socio-economic backgrounds than their EL1 peers. These differences influence their access to early literacy skills developmental opportunities, which impact later literacy development (Howie et al., 2017; Rohde, 2015). It is therefore not only the difference in proficiency in the medium of instruction between L1 and L2 learners that put many EL2 learners at a disadvantage.

Sequential bilingualism is the norm rather than the exception in South Africa. Seeing that many young learners in South Africa are sequential bilinguals when entering school, these EL2 learners may have only basic communication skills in

English, which do not enable them to cope with the academic demand in school. Challenges may arise when teachers and parents accept that EL2 learners are proficient in English when they demonstrate sufficient basic interpersonal communication skills (BICS). EL2 learners often need more assistance in acquiring cognitive academic language proficiency (CALP).

For many EL2 learners it is a demanding task to acquire CALP in English whilst simultaneously trying to master academic content at the same pace as their EL1 peers. Various authors have suggested that learners who start formal education in their second language may have slower vocabulary growth and often face disadvantages in later literacy acquisition (Bialystok & Craik, 2010; Bialystok et al., 2010; Janssen et al., 2015). The National Reading Panel has identified vocabulary as one of five components of a balanced literacy program (Johnson, 2017). There are strong correlations between oral language skills in children and early literacy acquisition and reading comprehension (Boyer, 2017; Rohde, 2015). EL2 learners often do not have the same proficiency in English as EL1 learners. Additionally, many EL2 learners, specifically in South Africa, enter school without learning to read in their L1. In this case there is no carryover of skills when learning to read in the L2 or LoLT (Prinsloo & Heugh, 2013). Reading comprehension is often obstructed as learners with low proficiency in their L2 learn to decode print without necessarily understanding what the decoded word means (Pretorius & Spaull, 2016).

According to the Progress in International Reading Literacy Study (PIRLS) of 2016, South Africa scored the lowest of the 50 participating countries regarding reading and comprehension (Howie et al., 2017). The learners were assessed in their language of instruction. Results indicated that 78% of South African Grade 4 students are not able to read for meaning. More than half of the learners who completed the assessment in English (57%) were unable to attain the lowest benchmark. These low scores could be attributed to the fact that of the participants who were tested

in English, only 21% spoke the language at home as their L1, although English is their LoLT (Howie et al., 2017). The remaining 79% learn in their L2, alongside English L1 peers. In addition to the PIRLS 2016 results, only 52% of Grade 3 learners in South Africa passed the literacy assessment section of the Annual National Assessment (ANA) of 2014 (the most recent ANA results available) (Department of Basic Education, 2014b).

Many South African children are not exposed to quality early learning programmes before entering Grade 1 (Atmore, 2013). EL2 learners in South Africa do not always receive the much-needed English exposure necessary for the development of sufficient early literacy skills before or in the Grade R (Reception year) to acquire reading and writing skills in Grade 1. The early identification of risk for reading difficulties, especially in EL2 learners, and the subsequent early intervention thereof, are imperative (Goodrich et al., 2017). The aim of this study was to examine the correlation between the early literacy skills of learners in South Africa at the start of Grade 1 and their reading, spelling and reading comprehension skills after two terms of schooling.

The following research question was postulated: does the level of early literacy skills of South African EL2 learners at the beginning of Grade 1 correlate with that of literacy skills acquired after two terms in Grade 1?

The null hypothesis (Ho) stated that the early literacy skills obtained at the beginning of the year would not correlate with the literacy skills obtained after two terms in Grade 1. The alternative hypothesis (Ha) proposed that the early literacy skills obtained at the beginning of the year would correlate with the literacy skills obtained after two terms in Grade 1.

## Method

A quantitative, causal-comparative study design with descriptive components was employed. Participants were assessed, once at the beginning

**Table 1.** L1 distribution of participants.

Language	Frequency
Sepedi	9
Setswana	6
Tshivenda	3
isiXhosa	1
Xitsonga	1
Sesotho	1

of their Grade 1 year and again at the end of their second term in Grade 1.

### *Participant information*

Twenty-one EL2 Grade 1 learners in an English-medium private school in South Africa were selected. The school follows the South African Curriculum Assessment Policy Statements (CAPS).

Of the 21 EL2 learners between the ages of 5 years 8 months and 6 years 11 months ( $M=6$  years and 2.7 months;  $SD=4.4$  months), seven (33.33%) were female and 14 (66.67%) were male. All the participants had a L1 other than English. Table 1 indicates the L1 distribution of the participants.

### *Ethical considerations*

The Research and Ethics Committee of the Faculty of Humanities, University of Pretoria granted ethical clearance prior to data collection (REF: GW20180110HS). Consent and assent were obtained from all relevant stakeholders. Confidentiality was assured as identifying information of all stakeholders was kept confidential. Access to participant information and results was restricted to those directly involved in the research study.

### *Sampling*

Non-probability, convenient sampling was used. Twenty-one was the largest number of participants available from the two Grade 1 classes. The criterion for inclusion was that the

participants should previously have attended an English Grade R class, as determined by a questionnaire completed by the parents. Learners from different social economic statuses (SES) were not excluded as varying SES is present across all learning environments in South Africa (Webb et al., 2010). Participants were screened for hearing loss and language disorders prior to selection.

### *Data collection procedure*

*Assessment – Part 1 (Time taken: approximately 1 hour per learner).* The Phonological Awareness Test-2 (PAT-2) (Robertson & Salter, 2007) was used to assess the phonological awareness of the participants at the beginning of the year, during their first few weeks in Grade 1. The PAT-2 is standardised for learners aged 5:0 to 9:11. When it was observed that the participants obtained low scores on the PAT-2, the Test of Preschool Early Literacy (TOPEL) (Lonigan et al., 2007) was administered as well, even though it is standardised for ages 3 to 5:11 years. The TOPEL was used to gain additional insight of the P-G knowledge, definitional vocabulary and PA of the participants.

*Assessment – Part 2 (Time taken: approximately 1 hour per learner).* The tests used are all standardised for learners in the age range of the participants. The Letter Sound Knowledge (LSK) and the Early Word Recognition (EWR) subtests of the York Assessment of Reading for Comprehension (YARC): Early Reading (Hulme et al., 2009) were used to assess P-G knowledge and single word reading of the participants. The One-Minute Reading Test (OMRT) (Transvaal Education Department, 1987) was used to determine the number of one-syllable words the participants could read in one minute. The UCT spelling test (University of Cape Town, 1985) was used to assess the spelling abilities of the participants. The Gray Oral Reading Test-4 (GORT-4) (Wiederholt & Bryant, 2001) was used to assess the reading comprehension of the participants.

### *Reliability and validity*

Reliability and validity were ensured by limiting variables as much as possible during the data collection process. All the participants were assessed in the same room and the external noise was kept as low as possible. Standardised and published assessment tools were used in order to ensure that the reliability and validity of the study was as high as possible (Leedy & Ormrod, 2015). Reliability was established using test-retest as well as internal consistency methods such as Cronbach's alpha (Robertson & Salter, 2007). Reliability was further ensured by making use of content sampling, time sampling and inter-scorer differences (Wiederholt & Bryant, 2001). In terms of validity, the tests employed assessed all the accepted skills that are developmentally present at the ages within the test domain (Robertson & Salter, 2007).

### **Results and discussion**

In the following tables, a *p*-value of less than or equal to 0.05 was determined to be statistically significant.

Table 2 indicates the minimum, maximum, mean (*M*), and standard deviation (*SD*) of the continuous variables that were used in the study. The highest possible score, of each test and subtest, is shown in the last column of Table 2. For each test/subtest it is noted that the mean score is substantially lower than the total score.

### *Language proficiency and PA, P-G knowledge, reading, spelling and reading comprehension*

The correlations between the language proficiency (as assessed by the Kindergarten Language Screening Tool (KLST) and the definitional vocabulary subtest of the TOPEL) and PA skills (as assessed by the PAT-2) obtained at the beginning of the year are depicted in Table 3.

**Table 2.** Minimum, maximum, mean and standard deviation (SD) results of the tests and subtests used in the study.

	Minimum	Maximum	Mean (M)	SD	Total
KLST	10	32	23.05	6.92	39
PAT-2					
PA total	0	89	41.29	25.09	130
Rhyming	0	9	1.81	2.87	20
Segmentation	0	22	13.10	4.88	30
Segmentation of phonemes	0	6	1.33	1.74	10
Isolation	0	28	11.14	10.15	30
Deletion	0	16	7.38	5.08	20
Deletion of phonemes	0	8	2.29	2.72	10
Substitution	0	0	0	-	10
Blending	0	18	8.10	5.01	20
Blending of phonemes	0	9	1.95	2.77	10
P-G total (P-G knowledge)	0	79	15.90	18.67	139
Graphemes	0	40	13.14	11.47	59
Consonants	0	19	9.19	6.76	21
TOPEL					
Definitional vocabulary	28	68	52.81	11.88	70
Print knowledge (P-G knowledge)	3	35	17.00	9.18	36
PA	5	26	18.00	5.98	27
YARC					
EWR	0	18	5.71	5.42	30
LSK (P-G knowledge)	6	29	20.09	6.99	32
OMRT	0	28	5.81	7.91	
UCT Spelling test	0	15	4.05	3.97	
GORT-4					
Reading comprehension	0	4	0.48	1.21	5

**Table 3.** Correlations (*r*) and the corresponding *p*-values (*p*) for language proficiency and PA, PG-knowledge, reading, spelling and reading comprehension.

		JANUARY			JUNE			
		PA	P-G knowledge		Reading		Spelling	Reading comprehension
		PAT-2	PAT-2	TOPEL	YARC: EWR	OMRT	UCT spelling test	GORT-4
Language proficiency	Language screening (KLST)	<i>r</i> 0.648 <i>p</i> =0.001*	0.590 =0.005*	0.523 =0.015*	0.399 =0.073	0.413 0.063	0.473 =0.030*	0.566 =0.007*
	Definitional Vocabulary (TOPEL)	<i>r</i> 0.909 <i>p</i> <0.001*	0.644 =0.002*	0.754 <0.001*	0.673 =0.001*	0.744 <0.001*	0.707 <0.001*	0.608 =0.003*

\*Indicates a statistically significant correlation.

Correlations between language proficiency and reading, spelling and reading comprehension are depicted. Spearman's rho indicated a significant positive correlation between language proficiency, PA and P-G knowledge. Language proficiency (as assessed by the TOPEL) had a significant positive correlation with reading, spelling and reading comprehension, while language proficiency (as assessed by the KLST) had a significant positive correlation with spelling and reading comprehension only. The KLST and the definitional vocabulary results obtained in January provided an indication of the English oral language proficiency of the participants at the beginning of Grade 1.

Early language experiences, at home – where community, demographics and cultural influences play a role – or at school, contribute to the development of later literacy skills (Rohde, 2015). Numerous EL2 learners are not exposed to English-language environments outside the school setup where they are able to develop language and early literacy skills (Huo & Wang, 2017). Oral language competency should therefore be taken into consideration when assessing literacy skills. A significant correlation was found between language proficiency and reading comprehension. Learners who know and understand more words are more proficient at comprehending what they have read (Boyer, 2017). In a longitudinal study by Suggate, Schaughency, McAnally, and Reese (2018) it was found that children's early vocabulary correlates significantly with reading comprehension at age 12. In many countries, EL2 learners may not be exposed to English prior to school entry and may therefore enter school with limited English-language skills. EL1 learners can use their existing vocabulary knowledge when they learn to read and spell but may simultaneously be exposed to new words, impacting reading comprehension. Learners with a low proficiency in their L2 may learn to decode words without necessarily understanding the meaning. Language proficiency is seen to be a predictor of later academic success for EL2 learners. EL2

often learn a new language and academic content simultaneously, which can be challenging for learners and teachers (Boyer, 2017). The importance of exposure to high-quality language input from early childhood should therefore be highlighted (Pretorius & Spaull, 2016; Suggate et al., 2018).

### ***PA and reading, spelling, and reading comprehension***

Table 4 shows the correlations and corresponding *p*-values between PA and reading, spelling and reading comprehension.

PA (as assessed by the PAT-2 and the TOPEL) showed a significant positive correlation with reading, spelling, and reading comprehension. The significant role that PA plays in beginning reading argues the importance of teaching phonological skills to help EL2 learners acquire reading abilities. The segmentation, isolation, deletion, and blending of subskills of PA had a significant positive correlation with reading, spelling and reading comprehension. Rhyming, however, one of the first subskills of PA to develop, only showed significant positive correlations with reading and reading comprehension. Children develop the foundation for rhyming through the participation in songs and games associated with rhymes. As rhyme (i.e. in the form of nursery rhymes, for example) is not present in African languages, they may not develop this skill spontaneously and therefore need to be taught explicitly (P Sebate, personal communication, 5 April 2018). Fox (2001) explains that children who cannot recognize rhyme struggle to read as rhyme awareness assist young learners to make correct guesses about the identity of words.

### ***PhA and reading, spelling and reading comprehension***

The correlation, and the corresponding *p*-values, between PhA and reading, spelling and reading comprehension is depicted in Table 5.

**Table 4.** Correlations ( $r$ ) and the corresponding  $p$ -values ( $p$ ) for PA scores and reading, spelling and reading comprehension scores.

		Reading		Spelling	Reading comprehension		
		YARC: EWR	OMRT	UCT spelling test	GORT-4		
PAT-2	PA total	$r$	0.787	0.805	0.777	0.606	
		$p$	<0.001*	<0.001*	<0.001*	0.004*	
	Rhyming	$r$	0.501	0.454	0.356	0.624	
		$p$	=0.021*	=0.039*	=0.113	=0.003*	
	Segmentation	$r$	0.569	0.599	0.656	0.568	
		$p$	=0.007*	=0.004*	=0.001*	=0.007*	
	Isolation	$r$	0.870	0.881	0.875	0.612	
		$p$	<0.001*	<0.001*	<0.001*	=0.003*	
	Deletion	$r$	0.615	0.666	0.641	0.602	
		$p$	=0.003*	=0.001*	=0.002*	=0.004*	
	Blending	$r$	0.685	0.752	0.688	0.577	
		$p$	=0.001*	<0.001*	=0.001*	=0.006*	
	TOPEL	PA	$r$	0.777	0.855	0.786	0.597
			$p$	<0.001*	<0.001*	<0.001*	=0.004*

\*Indicates a statistically significant correlation.

**Table 5.** Correlations ( $r$ ) and the corresponding  $p$ -values ( $p$ ) for PhA scores and reading, spelling, and reading comprehension scores.

		Reading		Spelling	Reading comprehension
		YARC: EWR	OMRT	UCT spelling test	GORT-4
Blending of phonemes	$r$	0.644	0.690	0.528	0.608
	$p$	=0.002*	=0.001*	=0.014*	=0.003*
Segmentation of phonemes	$r$	0.486	0.558	0.429	0.549
	$p$	=0.025*	=0.009*	=0.052	=0.010*
Deletion of phonemes	$r$	0.523	0.568	0.581	0.640
	$p$	=0.015*	=0.007*	=0.006*	=0.002*

\*Indicates a statistically significant correlation.

The deletion and blending of phonemes subskills of PhA had a significant positive correlation with reading, spelling and reading comprehension. The segmentation of the phonemes subskill of PhA, however, only showed significant positive correlations with reading and reading comprehension. Learners should understand that words are constructed by blending phonemes (e.g.

forming 'cat' by blending /k/, /æ/ and /t/), and by understanding the segmentation of phonemes, learners can understand that words can be segmented into individual phonemes (e.g. segmenting 'cat' into /k/, /æ/ and /t/) (Le Roux et al., 2017). Difficulties in these subskills of PhA influence the decoding (reading) and encoding (spelling) abilities of a learner. Well-developed PhA skills allow



**Table 6.** Correlations ( $r$ ) and the corresponding  $p$ -values ( $p$ ) for P-G knowledge measured in January and phoneme-grapheme knowledge, reading, spelling and reading comprehension scores measured in June.

JANUARY			JUNE				
			P-G knowledge	Reading		Spelling	Reading comprehension
			YARC	YARC: EWR	OMRT	UCT spelling test	GORT-4
TOPEL	P-G	$r$	0.896	0.683	0.716	0.714	0.609
	knowledge	$p$	<0.001*	=0.001*	<0.001*	<0.001*	=0.003*
PAT-2	P-G	$r$	0.554	0.665	0.692	0.655	0.607
	knowledge	$p$	=0.009*	=0.001*	=0.001*	=0.001*	=0.004*

\*Indicates a statistically significant correlation.

learners to blend, segment, delete or replace specific phonemes in words to create new words.

### *Phoneme-grapheme knowledge and reading, spelling and reading comprehension*

Table 6 shows the correlations, and the corresponding  $p$ -values, between the P-G knowledge from January and June as assessed by the TOPEL and YARC respectively. Table 6 also shows the correlations, and the corresponding  $p$ -values, between the phoneme-grapheme results obtained in January and the reading, spelling and reading comprehension results.

P-G knowledge results obtained in January were found to have a significant positive correlation with reading, spelling and reading comprehension. Additionally, P-G knowledge results obtained in January were found to correlate significantly and positively with P-G knowledge results obtained in June. Using the results from the PAT-2, it was noted that many learners were unable to recognise the 21 consonants of the alphabet. The learners' poor ability to recognise the letters of the alphabet explains the low results of the phoneme-grapheme subsection as well as the low scores of the reading and spelling tests. If learners are unable to identify the basic letters of the alphabet they will not be able to decode or

encode phoneme blends. Without adequate print experience, learners struggle to realise that individual phonemes construct words (Melhuish et al., 2008).

### **Limitations and future directions**

Repetition of the study using a larger sample size with the inclusion of a control group consisting of EL1 learners would be beneficial. The tests used are all Western measures which may have included pictures or words that were unfamiliar or culturally/linguistically inappropriate to the South African learners (e.g. stamp; jumper). Although SES was not considered in this study, it is an important factor and its effect on the acquisition of PA skills and thus literacy acquisition should be considered. Previous studies (e.g. O'Carroll, 2011) have indicated the negative impact that a low SES can have on print knowledge, for example. The impact that SES plays specifically on PA should be investigated. SES is a factor that should be considered in all countries. For example, one-third of Australia's citizens live in rural or remote locations (Australian Bureau of Statistics, 2014). These people are often isolated from quality education and healthcare services, including allied health professionals such as Speech-Language Pathologists (SLPs),

who work with early literacy and literacy delays/disorders.

## Implications

The current research provides insight into the extent to which early literacy skills predict literacy skills. With the small percentage of learners entering school with sufficient early literacy skills, the low level of later literacy is to be expected (Howie et al., 2017). For ideal educational progress basic reading, writing and numeracy skills must be in place when entering Grade 1 (Atmore, 2013). This implies that early literacy skills must be emphasised during the preschool years, especially in the EL2 classroom. EL2 learners often hail from different communities, cultures and demographics than their L1 peers. These contextual differences affect literacy development (Rohde, 2015) and should be kept in mind when literacy curricula are developed.

Classroom-based early intervention programmes have been implemented in certain schools in Australia in an effort to improve educational outcomes for vulnerable children. These early intervention programmes are aimed at improving oral language and literacy skills of pre- and primary school learners. The programmes are implemented by teachers and teacher assistants (Moore & Hammond, 2010).

## Conclusion

This study contributes to the growing body of work that looks at learners from different backgrounds who attend school in the L2. There has been an increase in the number of young learners worldwide who are developing language and literacy skills in more than one language or in a language that is not their L1 (Kuo et al., 2016).

We accept the alternative hypothesis: that early literacy skills of Grade 1 EL2 learners obtained at the beginning of the year would

correlate with the later literacy skills obtained after two terms in Grade 1.

Sufficient early literacy skills will provide a foundation for future literacy success. The age at which EL2 learners receive instruction in English plays an important role in literacy competency (Le Roux et al., 2017). Preschool is considered to be the best time for literacy instruction in EL2 learners, especially concerning PhA input (Goodrich et al., 2017; Le Roux et al., 2017; Lessing & De Witt, 2016). The context of literacy development has an influence on the success of literacy skills acquisition (Rohde, 2015). An enriched Grade R curriculum can play a key role in closing gaps for EL2 children or those who come from print-poor environments. Classroom-based interdisciplinary early intervention programmes can be implemented in order to improve the language and literacy skills of EL2 preschool children. Parents or caregivers of young EL2 learners should be actively involved in developing early literacy skills in the young learner even before the reception year (Tayob & Moonsamy, 2018). Teacher training should focus on the importance of embedding PA and PhA skills in the foundation phase especially where the L2 is the medium of instruction (Wium & Louw, 2011). If stakeholders could become aware of the fact that EL2 learners often do not have sufficient early literacy skills to cope with the literacy requirements in Grade 1, more attention could be focused on this group of EL2 learners in Grade R.

In conclusion, language proficiency and early literacy skills, particularly PA, provide the foundation for future academic achievement. Vulnerable L2 learners should have access to high-quality preschool language environments that will foster their language and literacy development.

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## References

- Alcock, K. J., Ngorosho, D. S., & Jukes, M. C. H. (2018). Reading and phonological awareness in Africa. *Journal of Learning Disabilities, 51*(5), 463–472. doi:10.1177/0022219417728051
- Atmore, E. (2013). Early childhood development in South Africa – progress since the end of apartheid. *International Journal of Early Years Education, 21*(2–3), 152–162. doi:10.1080/09669760.2013.832941
- Australian Bureau of Statistics. (2014). Regional population growth, Australia 2012–13 (cat. no. 3218.0). Retrieved from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3218.02012-13>
- Bekker, I. (2009). The vowels of South African English (Unpublished doctoral dissertation). North-West University, Potchefstroom.
- Bernthal, J. E., Bankson, N. W., & Flipsen, P. (2013). *Articulation and phonological disorders: Speech sound disorders in children* (7th ed.). Pearson.
- Bialystok, E., & Craik, F. I. M. (2010). Cognitive and linguistic processing in the bilingual mind. *Current Directions in Psychological Science, 19*(1), 19–23. doi:10.1177/0963721409358571
- Bialystok, E., Luk, G., Peets, K. F., & Yang, S. (2010). Receptive vocabulary differences in monolingual and bilingual children. *Bilingualism: Language and Cognition, 13*(3), 525–531. doi:10.1017/S1366728909990423
- Boyer, K. (2017). The relationship between vocabulary and reading comprehension in third grade students who are English language learners and reading below grade level (Unpublished master's thesis). Goucher College, Baltimore, MD.
- Corriveau, K. H., Goswami, U., & Thomson, J. M. (2010). Auditory processing and early literacy skills in a preschool and kindergarten population. *Journal of Learning Disabilities, 43*(4), 369–382. doi:10.1177/0022219410369071
- Department of Basic Education. (2014a). *Revised National Curriculum statement grades R–9 (Schools): Teacher's guide for the development of learning programmes*. Department of Education of South Africa.
- Department of Basic Education. (2014b). The Annual National Assessment of 2014, Diagnostic report Foundation phase mathematics and home language. Retrieved from <http://www.education.gov.za/LinkClick.aspx?fileticket=G130FwwR9Ak%3D&tabid=569&mid=2131>
- Fox, M. (2001). *Reading magic: Why reading aloud to our children will change their lives forever*. Harcourt.
- Geertsema, S., & Le Roux, M. (2014). Engels addisionele taaleerders: Ondersteuning vir fonologiese bewustheidsuitvalle. *Tydskrif Vir Geesteswetenskappe, 54*(1), 96–110.
- Goodrich, J. M., Lonigan, C. J., & Farver, J. A. (2017). Impacts of a literacy-focused preschool curriculum on the early literacy skills of language-minority children. *Early Childhood Research Quarterly, 40*, 13–24. doi:10.1016/j.ecresq.2017.02.001
- Hoff, E., Core, C., Place, S., Rumiche, R., Señor, M., & Parra, M. (2012). Dual language exposure and early bilingual development. *Journal of Child Language, 39*(1), 1–27. doi:10.1017/S0305000910000759
- Howie, S., Combrink, C., Roux, K., Tshele, M., Mokoena, G. M., & McLeod Palane, N. (2017). PIRLS Literacy 2016: South African Highlights Report. Retrieved from [http://www.up.ac.za/media/shared/164/ZP\\_Files/pirls-literacy-2016-hl-report-3.zp136320.pdf](http://www.up.ac.za/media/shared/164/ZP_Files/pirls-literacy-2016-hl-report-3.zp136320.pdf)
- Hulme, C., Stothard, S. E., Clark, P., Bowyer-Crane, C., Harrington, A., Truelove, E., & Snowling, M. J. (2009). *York assessment of reading for comprehension - early reading*. GL Assessment.
- Huo, S., & Wang, S. (2017). The effectiveness of phonological-based instruction in English as a foreign language students at primary school level: A research synthesis. *Frontiers in Education, 2*, 1–13. doi:10.3389/feduc.2017.00015
- Janssen, C., Segers, E., McQueen, J. M., & Verhoeven, L. (2015). Lexical specificity training effects

- in second language learners. *Language Learning*, 65(2), 358–389. doi:10.1111/lang.12102
- Johnson, A. P. (2017). National reading panel: The big 5+ 5 pillars of reading instruction. Retrieved from <https://cornerstone.lib.mnsu.edu/sped-fac-pubs/49>
- Jordaan, H. (2011). Semantic processing skills of Grade 1 English language learners in two educational contexts. *South African Journal of Education*, 31(4), 518–534.
- Koda, K. (2007). Reading and language learning: Crosslinguistic constraints on second language reading development. *Language Learning*, 57(1), 1–44. doi:10.1111/j.1467-9922.2007.00397.x
- Kuo, L. J., Uchikoshi, Y., Kim, T. J., & Yang, X. (2016). Bilingualism and phonological awareness: Re-examining theories of cross-language transfer and structural sensitivity. *Contemporary Educational Psychology*, 46, 1–9. doi:10.1016/j.cedpsych.2016.03.002
- Le Roux, M. (2016). An acoustic investigation of English vowels as produced by English L1 and Setswana L1 foundation phase learners (Unpublished doctoral dissertation), University of Pretoria, South Africa.
- Le Roux, M., Geertsema, S., Jordaan, H., & Prinsloo, D. (2017). Phonemic awareness of English second language learners. *South African Journal of Communication Disorders*, 64(1), 1–9. doi:10.4102/sajcd.v64i1.164
- Leedy, P. D., & Ormrod, J. E. (2015). *Practical research: Planning and design* (11th ed.). Pearson Education Limited.
- Lessing, A., & De Witt, M. (2016). The influence of a school readiness program on the language and phonological awareness skills of preschool children in rural areas of South Africa. *Australasian Journal of Early Childhood*, 41(1), 106–114.
- Lonigan, C. J., Wagner, R. K., Torgesen, J. K., & Rashotte, C. A. (2007). *Test of preschool early literacy*. Pro-Ed.
- Lund, E., Werfel, K. L., & Schuele, C. M. (2015). Phonological awareness and vocabulary performance of monolingual and bilingual preschool children with hearing loss. *Child Language Teaching and Therapy*, 31(1), 85–100. doi:10.1177/0265659014531261
- Melhuish, E., Phan, M., Sylva, K., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2008). Effects of the home learning environment and preschool center experience upon literacy and numeracy development in early primary school. *Journal of Social Issues*, 64(1), 95–114. doi:10.1111/j.1540-4560.2008.00550.x
- Moore, W., & Hammond, L. (2010). Using education assistants to help pave the road to literacy: Supporting oral language, letter-sound knowledge and phonemic awareness in the pre-primary year. *Australian Journal of Learning Difficulties*, 16(2), 85–110.
- O'Carroll, S. (2011). An exploratory study of early letter-sound knowledge in a low socio-economic context in South Africa. *Reading and Writing*, 1(2), 7–26. doi:10.4102/rw.v2i1.10
- Pretorius, E. J., & Spaull, N. (2016). Exploring relationships between oral reading fluency and reading comprehension amongst English second language readers in South Africa. *Reading and Writing*, 29(7), 1449–1471. doi:10.1007/s1145-016-9645-9
- Prinsloo, C., & Heugh, K. (2013). The role of language and literacy in preparing South African learners for educational success: Lessons learnt from a classroom study in Limpopo province. HSRC Policy Brief, March.
- Robertson, C., & Salter, W. (2007). *The Phonological Awareness Test 2*. LinguiSystems Incorporated.
- Rohde, L. (2015). The comprehensive emergent literacy model: Early literacy in context. *Sage Open*, 5(1), 1–11. doi:10.1177/2158244015577664
- Seeff-Gabriel, B. (2003). Phonological processing: A platform for assisting second-language learners with English spelling. *Child Language Teaching and Therapy*, 19(3), 291–310. doi:10.1191/0265659003ct2560a
- Suggate, S., Schaughency, E., McAnally, H., & Reese, E. (2018). From infancy to adolescence: The longitudinal links between vocabulary, early literacy skills, oral narrative, and reading comprehension. *Cognitive Development*, 47, 82–95. doi:10.1016/j.cogdev.2018.04.005

- Tayob, F., & Moonsamy, S. (2018). Caregivers' reading practices to promote literacy in a South African children's home: Experiences and perceptions. *South African Journal of Communication Disorders*, 65(1), a559. doi:10.4102/sajcd.v65i1.559
- Transvaal Education Department (1987). One-minute Reading Test.
- University of Cape Town. (1985). UCT Spelling Test.
- Webb, V., Lafon, M., & Pare, P. (2010). Bantu languages in education in South Africa: An overview. Ongekho akekho! – the absentee owner. *The Language Learning Journal*, 38(3), 273–292. doi:10.1080/09571730903208389
- Wiederholt, J. L., & Bryant, B. R. (2001). *Gray oral reading test—Fourth edition (GORT-4)*. AGS Publishing.
- Wium, A., & Louw, B. (2011). Teacher support – an exploration of how foundation-phase teachers facilitate language skills. *South African Journal of Communication Disorders*, 58(2), a30. doi:10.4102/sajcd.v58i2.30