Reading & Writing - Journal of the Literacy Association of South Africa
ISSN: (Online) 2308-1422, (Print) 2079-8245

Intermediate Phase learner performance in English: A quantitative analysis

Authors:
Bongiwe Mtambo[1]
Lindiwe Tshuma[2]

Affiliations:
[1]Department of African Languages and Linguistics, Faculty of Humanities, University of Witwatersrand, Johannesburg, South Africa

[2]Teaching and Learning Unit, Faculty of Humanities, University of the Witwatersrand, Johannesburg, South Africa

Corresponding author:
Bongiwe Mtambo,
florencemtambo@gmail.com

Dates:
Received: 27 Mar. 2023
Accepted: 23 June 2023
Published: 13 Oct. 2023

How to cite this article:
Mtambo, B. & Tshuma, L., 2023, 'Intermediate Phase learner performance in English: A quantitative analysis', *Reading & Writing* 14(1), a430. https://doi.org/10.4102/rw.v14i1.430

Background: According to the Progress in International Reading Literacy Study (PIRLS, 2006 with 87%, 2011 with 82%, 2016 with 78%, 2021 with 81%), an international reading comprehension assessment conducted at the Grade 4 level, South African learners perform very poorly in reading comprehension, even when reading in their African home languages.

Objectives: To analyse learner performance in the Intermediate Phase (IP) focusing on English First Additional Language (EFAL) before and after the implementation of the Primary School Reading Improvement Programme (PSRIP) in Johannesburg West (JW) district. The study aims to analyse EFAL learning gains obtained during the pilot phase of the PSRIP in JW district.

Method: Quantitative data (learner performance in EFAL) was collected from South Africa-School Administration and Management System (SA-SAMS) in six schools in JW. Learner performance marks from Term 1 before PSRIP was implemented and from Term 4 after PSRIP implementation were analysed quantitatively using System Analysis Program Development (SAP) data and analytics solutions.

Results: Learner performance analysis based on the DBE pass rates indicates positive outcomes, learner performance increased in 3 out of 6 schools; however, based on the PSRIP pass rates, only 2 out of 6 schools managed to get 90% of their learners obtaining at least 50% in EFAL after PSRIP was introduced.

Conclusion: Implementation of PSRIP affected learner performance positively; however, more support is needed to meet the PSRIP targets.

Contribution: Based on these findings, there is a need to further investigate how (if at all) the PSRIP strategies can be used in other languages that are taught at IP level. Study results will inform language in education policies. Furthermore, the Department of Basic Education's reading campaigns may adopt the benefits of the PSRIP in improving literacy development in other South African languages including the indigenous languages.

Keywords: Literacy campaigns, Reading strategies; PSRIP; integrated Literacy Development model, Reading awareness.

Introduction

It is a good starting point in the prioritisation of access and internationalisation to ensure that all South African learners from urban to rural settlements receive adequate and the same high-quality instruction in English, whether as a Home Language (HL) or a First Additional Language (FAL), across the board from the beginning of school, regardless of the language selected to be the language of learning and teaching. It seems obvious that learners will need to embrace the goal of being 'global citizens' if they are to benefit fully from the 21st-century skills set.

The Department of Basic Education (DBE) has been trying to improve the quality of education by implementing different approaches or programmes to support learning in schools, but it seems that the innovation is focusing more on the English language than on African languages. This paper is a small portion of a bigger study investigating whether learning gains (if any) from the English programmes can be useful in improving the teaching of African languages. The Gauteng province selected some schools to pilot the Primary School Reading Improvement Programme (PSRIP) at the Intermediate Phase (IP) level, which is Grades 4–6, in English; and in this paper, the researcher intends to investigate learner performances before and after the implementation of the PSRIP in 2021.

Note: Special Collection: Rethinking literacy and pedagogic agency in the 4IR.

Background of the study

South Africa has twelve official languages. According to Howie *et al*. (2017), the Progress in International Reading Literacy Study (PIRLS) results – 2006 (87%), 2011 (82%), 2016 (78%) and 2021 (81%) – indicated a steady decline in performance for five African languages (isiNdebele, Sepedi, Sesotho, Tshivenda and Xitsonga between 2006 and 2016. Despite the fact that the languages were the lowest performing in the PIRLS 2011 study, there was an improvement in the PIRLS 2021 study. The PIRLS 2021 study was conducted across 43 countries, with South Africa being the only country south of the Sahara; two other countries from the continent are Egypt and Morocco.

South African education authorities have realised that learners experience barriers when it comes to reading, even in their HLs; that is why the DBE and Public Library and Information Services Bill (DAC 2012) have promoted various campaigns and awareness programmes (Drop All and Read, Read to Lead and EGRA) to help children and learners to be able to read in South Africa. The PSRIP is one of these programmes piloted in schools to improve reading skills. The PSRIP's aim is to improve the quality of teaching and learning in public schools. The aim of this research is to analyse the IP English First additional language (EFAL) learning gains during the PSRIP pilot phase in Johannesburg West district.

Research question

The key question this study sought to answer is: What are the learning gains (if any) achieved in IP EFAL after implementing the PSRIP in selected schools in Johannesburg West district?

The sub-questions are:

- *What is IP learners' EFAL performance before the implementation of the PSRIP in selected schools in Johannesburg West district?*
- *What is IP learners' EFAL performance after the implementation of the PSRIP in selected schools in Johannesburg West district?*
- *How different is the EFAL learner performance before and after the implementation of the PSRIP in selected schools in Johannesburg West district?*

The following sections review literature on the importance of measuring learning gains; reading campaigns conducted in South Africa, Southern Africa, and globally; and the Integrated Literacy Development Model; before providing the study findings and making recommendations.

The importance of measuring learning gains

A learning gain is an improvement in knowledge, skills, work-readiness and personal development made by students during their time spent in higher education (Howson 2017). According to the Higher Education Funding Council for England (HEFCE), a learning gain represents the distance travelled by a student in terms of skills, competencies, knowledge and development. While these two definitions shed more light on learning gains within the higher education context, the current study focuses on learning gains achieved at primary school level after the implementation of a literacy development programme, PSRIP. In this study, learning gains are measured to ascertain whether the IP learners have acquired the reading skills promoted by the programme. Within the South African context, research has been conducted to measure growth in oral reading fluency (ORF). The greatest growth in ORF seems to occur in the early school years between Grades 1 and 4. Oral reading fluency is useful in learning languages (Spaull, Pretorius & Mohohlwane 2020) and seems to receive more attention in Grades 1 and 4 than in the IP grades. Teachers pay more attention to the lower grades and assume that in Grades 5 and 6 learners already know how to read, while they actually still need help.

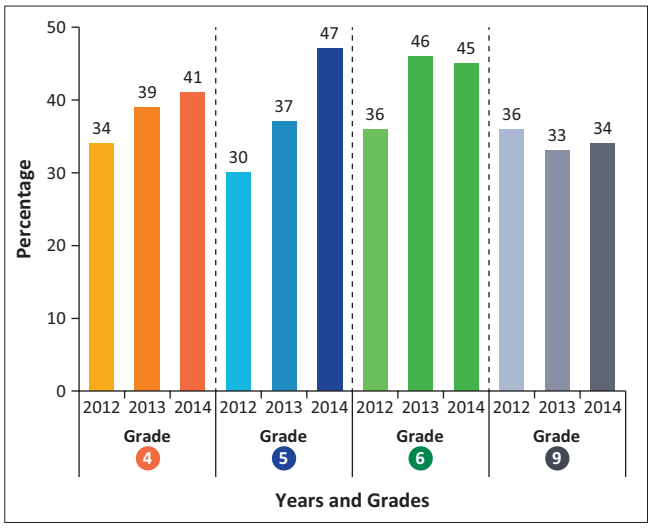
Learning gains are usually measured quantitatively using standardised tests. The study uses learners' marks to measure the degree of improvement in the learners' marks after the PSRIP. The study's goal is to provide readers with an overview of best practices with the purpose of developing accurate ethically conducted research that is relevant to learning gains. Important decisions are taken based on research findings; results influence education policy decisions, the targeting of reading awareness with appropriate resources, educational strategy, technological advances and decisions about practice.

In South Africa learner gains are measured by the National Curriculum Statement (NCS) through seven keys achievement indicators: 1 = 0–29.99 (not achieved), 2 = 30–39.99 (elementary achievement), 3 = 40–49.99 (moderate achievement), 4 = 50–59.99 (adequate achievement), 5 = 60–69.99 (substantial achievement), 6 = 70–79.99 (meritorious achievement) and 7 = 80–100 (outstanding achievement) (DBE 2012).

Literacy challenges in South Africa

While there is no direct link in the methods used to derive and calculate NCS achievement indicators, Annual National Assessment (ANA) and the PIRLS scores, both local and international assessments reveal literacy challenges in South Africa. Figure 1 presents EFAL results between 2012 and 2014 based on the ANA.

The First Additional Language (FAL) refers to a language which is not a mother tongue but which is used for certain communicative functions in a society (DBE 2012). English is the language of learning and teaching from Grade 4 up to tertiary level for approximately 90% of South African learners; thus, the language is used for a specific communicative function. While EFAL plays such a crucial function, ANA results for EFAL between 2012 and 2014 as presented in Figure 1 indicate a need to address foundational learning at primary school level. At grade 4 level, there was a steady increase in EFAL pass rate from 34% to 41% while in Grade 5, the increase was from 30% to 47% across the three years. While these marks indicate FAL learner performance approximately five years before the introduction of the PSRIP in South Africa, the marks are a cause of great concern and there is therefore a need to continuously measure learning gains in EFAL.



Source: NECT, 2016, *First additional language*, National Education Collaboration Trust, Centurion

FIGURE 1: Annual National Assessment Results: English First additional language – 2012, 2013 and 2014.

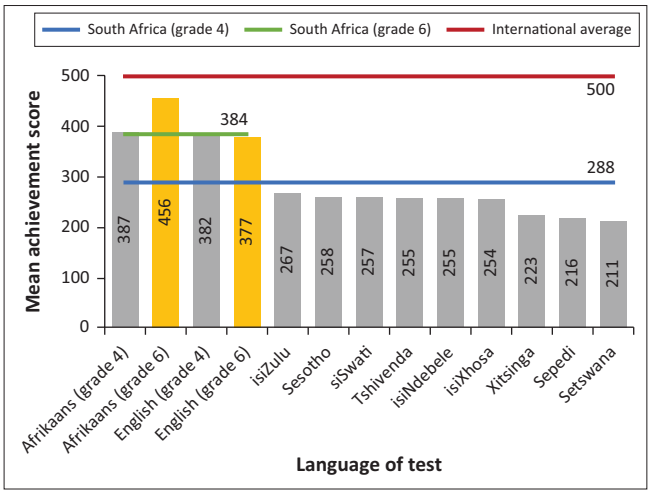


FIGURE 2: Grade 4 and 6 2023 Progress in International Reading Literacy Study achievement by language of test.

Results from PIRLS 2021 reveal that both the Grade 4 and Grade 6 learners' average reading scores are below the international average of 500 (see Figure 2).

Based on the PIRLS scoring system, Figure 2 indicates that the overall Grade 4 average is pegged at 288, while the overall Grade 6 average is pegged at 384. At Grade 4 level, tests administered in Afrikaans and English were higher than the national average, while tests taken in African languages were below the average; however, all the scores are below the international average. According to Oberholzer (2005), reading is a cornerstone of a child's success at school and throughout life. Vaughn, Bos and Schum (2000) point out that learners who struggle to read or to master reading concepts in the elementary school years (early grades) are often discouraged in the world of school and eventually drop out without mastering basic skills. Naketsane (2019) states that, if learners do not have a solid foundation in their HL and in a FAL, they may not cope with the demands of the Grade 4 curriculum.

TABLE 1: Percentages of learners who cannot read for meaning at age 10.

Country	% children who cannot read for meaning at age 10	% children below minimum proficiency level	Primary school expenditure per child (USD)
Botswana	48	44	1,620
Cameroon	77	76	196
Mauritius	40	38	3,480
South Africa	80	78	2,416
Uganda	83	81	99
Bangladesh	57	55	249
India	55	54	481
Malaysia	13	12	4,842
Pakistan	75	65	372
Singapore	3	3	16,021
Sri Lanka	15	14	915
Finland	3	2	9,485
Ireland	2	2	8,334

Source: Mawoyo, M. & Vally, Z., 2020, *Improving education outcomes in low- and middle-income countries: Outcomes-based contracting and early grade literacy*, Johannesburg.

The PIRLS and ANA studies reveal that Grade 6 learners are incapable of reading and answering questions based on a text. Since some of the studies indicate that there is a relationship between reading, writing and academic performance, this is an issue that cannot be ignored (Lumadi 2016). The implementation of the PSRIP could be the solution to the problem of reading English and other African languages at the IP level.

Reading campaigns: Southern Africa

The national assessments on reading have resulted in some literacy development initiatives in sub-Saharan Africa. However, a number of countries worldwide are still facing reading challenges, as indicated in Table 1.

Veii (2005) has done research on reading and states:

> Overall, the findings indicated that first and second language reading skills were best predicted by first language verbal comprehension and second language phonological processing. The findings supported both hypotheses, with the results showing that literacy acquisition was faster in Herero with its transparent orthography than in English with its opaque orthography. (p. 30)

However, their reading skills would not equal those of a bilingual learner, as South African learners are largely bilingual or multilingual. According to Chebanne (2016:165), research participants in Namibia also spoke the languages Barolong and Bangologa. Such programmes and techniques can be applied in South Africa and compared with strategies for teaching languages and developing literacy across the curriculum, such as the PSRIP.

Reading campaigns: South Africa

In South Africa, the DBE has successfully implemented a range of structured pedagogical interventions such as the Gauteng Primary Literacy and Mathematics Strategy (GPLMS) in schools, the PSRIP, Drop All and Read in Gauteng schools, and Early Grade Reading Study (EGRS) in North West and Mpumalanga. The aim of these programmes

is to fulfil the DBE's vision and mission to improve teachers' content knowledge, increase the number of early graders who can fluently read and write in HL and EFAL, and improve the instructional practices and learners' outcomes (De Clercq & Shalem 2015; Kotze, Fleish & Taylor 2019).

There is no 'one-size-fits-all' approach; reading benchmarks are specific to languages or language families. In order to reduce inequalities in literacy, it is important for teachers in developing countries to be aware of appropriate reading benchmarks in different languages (Spaull et al. 2020).

The Early Grade Reading Research Indaba held in 2022 (DBE 2022) revealed some facts about reading and some solutions to the problem which is faced by a number of African countries. DBE (2022) reported that other countries have been successful in applying the following three principles:

- Orient all elements of the education system towards achieving literacy (Sobral and Ceará, Brazil).
- Provide teachers and students with all the tools they need to succeed (Kenya).
- Provide teachers and students with the environment they need to succeed (India and Zambia).

The first principle is crucial, however, the second and third principle seem sound enough but they are rather generalised and lack practical value.

South African education authorities have recognised the problem of reading in the early grade years and have taken an initiative to promote reading as much as it can. Table 2 presents reading campaigns implemented in South Africa between 2000 and 2022:

The National Reading Coalition (NRC) pulls all the micro-reading initiatives together as part of a national effort; hence, the PSRIP is housed at the National Education Collaboration Trust (NECT). The Early Grade Reading Research Indaba conference proposed that the time is ripe for the NECT to choose one programme and give it time to be adopted by teachers and learners before introducing a new one. With so many programmes in place, the DBE might find it difficult to track the progress of the programmes and to track whether they are working or not. The DBE has to allow each programme to be implemented for at least 5 years before implementing the next programme. The new programme should be informed by information derived from the previous programme. Many programmes in a year can cause confusion among the teachers. Considering that different reading programmes follow different reading strategies, teachers may not be able to choose between the various programmes implemented simultaneously. The inception of the PSRIP partly accommodated these concerns by building on already existing programmes. According to Chetty and Groome (2022), at its inception the PSRIP had:

> … [*T*]he benefit of building on the experience of a number of large-scale efforts at improving reading in the early grades, including Foundations for Learning Campaign 2008-2011 (DBE); the Gauteng Primary Language and Mathematics Strategy (GPLMS) and the Programme for Improvement of Learning Outcomes (PILO) (2022:66).

While PSRIP is commended for leveraging on already existing interventions, a lot more still needs to be done to establish the learning gains achieved from the PSRIP.

TABLE 2: Reading campaigns in South Africa (2000–2022).

Campaign	Year/s	Languages	Phase	Province
Funda Wande Eastern Cape	2015	IsiXhosa	-	EC
Room to Read (RtR)	2006	Xitsonga, Sepedi	FP	EC, LP, MP, GP
Word Works	2005	-	-	EC, GP, KZN, WC
Save the Children	2016	Sepedi	-	FS
Molteno Institute for Language and Learning	1974–2008	isiZulu, Sepedi, Setswana	-	GP, EC, LP, FS, NW, MP
National reading strategy, Department of Education	2008	-	FP	-
WCED literacy and numeracy strategy	2006–2016	-	IP	WC
The Foundations for Learning campaign, Department of Education	2008	-	FP and IP	All provinces
Western Cape 'living labs' schools	2015	-	FP	WC
Magic Classroom Collective (MCC)	2009	IsiXhosa	IP and FP	EC
Zenex literacy project (ZENLIT), Zenex Foundation	2014–2019	IsiZulu and English	FP	KZN
Program to Improve Learning Outcomes (PILO)	2020	-	FP	KZN, FS, GP, NC
Learning for the Living Project; Read, Education And Develop (READ), Educational Trust	2000–2004	-	FP	All provinces
Gauteng Primary Literacy and Mathematics Strategy (GPLMS)	2010–2014	English, IsiZulu	IP	GP, KZN
Reading Catch-Up Programme (RCUP)	2012–2014	English	FP and IP	GP
Early Grade Reading Study (EGRS) I	2015–2917	Setswana	FP	NW
Reading Support Project (RSP)	2019–2020	Setswana and English	FP	-
Early Grade Reading Study (EGRS) II	2017–2019	-	IP	-
Funda Wande Coaching Intervention	2019–2022	isiXhosa	FP	-
Funda Wande Teacher Assistant and Learner Workbook Intervention	2021–2023	-	FP	LP
Story powered schools – Nal'ibali	2016–2019	-	-	EC, KZN, LP, NW, and MP
Integrated sector programme on reading	2019–2024	PSRIP-English EGRA-9 languages	FP-IP	GP

Source: Adapted from JET Education Services, DNA Economics & Bertha Centre, 2020, *Education outcomes fund South Africa scoping study: Scoping report*, JET

PSRIP, Primary School Reading Improvement Programme; WCED, Western Cape Education Department; EGRA, Early Grade Reading Assessment; FP, Foundation Phase; IP, Intermediate Phase; EC, Eastern Cape; LP, Limpopo; MP, Mpumalanga; GP, Gauteng; KZN, KwaZulu-Natal; WC, Western Cape; FS, Free State; NW, North-West.

Theoretical framing

The study is guided by aspects of the Integrated Model for Literacy Development (Pretorius 2014). An integrated model of literacy development promotes the development of various skills among adult learners with low literacy skills using an integrated educational intervention approach (Lurette 2011). Thus, the skills that the theoretical framework developed can be used by learners when reading and their marks may increase because they now know how to read.

The key features of the integrated literacy model are five core components that correspond to Scarborough's Reading Rope and current best practices in training educators to effectively teach reading and improve learners' literacy outcomes. These components include oral language; word recognition; English Language and Arts (ELA) comprehension; writing and assessment.

The assessment component measures early reading using relevant reading tests. The Integrated Literacy Development model is significant in this study because of these components. The model also emphasises the need for language development to be initiated at the preschool level, followed by formal learning in the classroom, where certain conditions such as balanced instruction, access to reading material, motivating learners to read and provision of opportunities to read under the supervision of a competent teacher, should be met. The focus of the theory on reading makes it relevant for the current study. Once literacy is developed through the application of these five components, academic performance should improve (Pretorius 2014).

Methodology

This study follows a quantitative approach. Quantitative data (learner marks) were collected and analysed quantitatively. Creswell and Cresswell (2017) state that:

> Quantitative research is a means for testing the objective theory by examining the relationship among variable. These variables can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures (p. 250).

The study used statistical analytical procedures to calculate the difference in the learners' marks per school before and after the implementation of the PSRIP. The study adopted a quantitative approach because of its appropriateness in analysing learning gains through measurable learner performance. Data were collected in six schools. Permission to collect the data was granted by the Department of Education, Johannesburg West district, and the university issued an ethics approval letter.

The South African School Administration and Management System (SA-SAMS) is a freely available electronic platform that aims to assist schools with administration and reporting, including the systematic recording of learner performance scores. Its most recent update in 2021 produced SA-SAMS 21.1.1, a version which incorporated revisions of the Annual Teaching Plans (ATPs), Programs of Assessment (POAs) and amendments to Section 4 of the Curriculum and Assessment Policy Statements (CAPS). In this study, learners' marks for Terms 1 and 4 in 2021 were sourced from SA-SAMS. The learner marks were comprised of continuous assessment tasks and formal assessments, which included oral, grammar and creative writing activities. All learner activities were assessed and recorded by the teachers, and overall performance marks were captured on SA-SAMS. The quantitative data (learner EFAL performance marks) were analysed quantitatively using System Analysis Program Development (SAP) data and analytics solutions.

Research site

The study was conducted in Johannesburg West district in Gauteng. The district was selected because one of the researchers is a teacher in Johannesburg West district where the PSRIP was piloted. The six participating schools are in quintile 1. The learners who participated in this study reside in the vicinities of the respective schools and mostly speak the same language, isiZulu, with some learners speaking IsiXhosa and Sesotho.

Table 3 indicates the number of learners in the six schools that were selected for this study. The learners are learning English as a First Additional Language (FAL). All the selected learners are from grades 4, 5 and 6 at the IP level. The study selected one grade per school.

Findings

The key finding of this research is that there was an improvement in learner performance in three out of the six participating schools in between January and December 2021. This increase can be attributed to a number of factors: the schools have dedicated teachers and all the necessary tools to implement the PSRIP, and the learners adapted well to the programme. There was a decline in performance in one school after the introduction of the PSRIP. This decline can be attributed to factors such as the teachers not having enough training on how to implement the programme, the school had insufficient tools to implement the programme and, possibly, there were many learners with barriers in literacy. There was no change in performance in two schools. It is noteworthy that the two schools maintained 100% pass rate (based on DBE Assessment Protocol) in Terms 1 and 4. It remains unestablished whether PSRIP added any value in the two schools.

Finding 1: Learner performance before Primary School Reading Improvement Program implementation

Research sub-question 1: *What is IP learners' English FAL performance before the implementation of the PSRIP in Johannesburg West District?* The average pass rate of the six selected schools based on the National Protocol for Assessment (DBE, 2012) was **94**% before the implementation of the PSRIP.

In Term 1, across the six schools, 7% (n = 30) of the learners obtained Levels 1 and 2, which are considered a fail based on the Nation Protocol for Assessment. Seventeen percent (n = 80) of the learners obtained Level 3, 16% (n = 76) obtained Level 4, 14% (n = 63) obtained Level 5, 23% (n = 108) obtained Level 6, and 23% (n = 105) obtained Level 7.

The aim of the Drop All and Read programme in Gauteng schools and the EGRS in North West and Mpumalanga is to fulfil the DBE's vision and mission to improve teachers' content knowledge; increase the number of early graders who can read and write fluently in HL and EFAL and improve the instructional practices and learners' outcomes (De Clercq & Shalem 2015; Kotze et al. 2019).

While there could be a number of reasons why 7% of the learners obtained fail marks, according to this study, one of the reasons was possibly because the learners had not been introduced to the PSRIP reading strategies. There is a possibility that the learners were used to certain types of reading material and strategies, which might be different from the PSRIP. Term 1 of 2021 was the period before the PSRIP was piloted and the teachers and learners had not yet fully integrated the PSRIP strategies; we can thus assume that is why the result was low.

TABLE 3: Study participants according to schools and grades.

Johannesburg West (JW) district				
Participant		# of learner participants	Subject	Year of participation
School	Grade			
S1	4	85	English FAL	2021
S2	6	47	English FAL	2021
S3	5	60	English FAL	2021
S4	6	147	English FAL	2021
S5	4	70	English FAL	2021
S6	5	53	English FAL	2021

FAL, First Additional Language; #, number.

Finding 2: Learner performance after Primary School Reading Improvement Program implementation

Research sub-question 2: *What is IP learners' English FAL performance after the implementation of the PSRIP?* The average pass rate of the six selected schools based on DBE's National Protocol for Assessment was 97% after the implementation of the PSRIP.

In Term 4, across the six schools, 3, 4% (n = 16) of the learners obtained Levels 1 and 2, which is considered as a fail mark. Six percent (n = 28) obtained Level 3, 21% (n = 97) obtained Level 4, 23% (n = 106) obtained Level 5, 26% (n = 118) obtained Level 6, and 21% (n = 97) obtained Level 7.

Term 4 results increased possibly because the PSRIP was implemented and showed positive results. However, according to the statistical analysis; 3, 4% (n = 16) learners were not promoted and 96, 6% (n = 446) were promoted. One of the guidelines for determining a learner's progression from Grade 4 to 6 in IP is a moderate achievement (Level 3) (40%–49%) in the second required official language at First Additional Language level (DBE, 2012); as seen in Tables 4 and 5. Promotion refers to:

> … [*T*]he movement of a learner from one grade to the next when that learner meets the minimum required level of achievement per subject in a particular grade, as well as complying with the promotion requirements of that grade as contemplated in the policy document (DBE 2012: xi)

Thus, the learners who were not promoted did not meet the minimum requirements to progress to the next grade.

TABLE 4: Intermediate Phase English First Additional Language learner performance before the implementation of the Primary School Reading Improvement Programme.

School	Performance level							No. of learners sampled	DBE Pass Rate
	0% – 29%	30% – 39%	40% – 49%	50% – 59%	60% – 69%	70% – 79%	80% – 100%		
S1	1	11	7	17	19	20	10	85	86%
S2	0	0	4	14	10	16	3	47	100%
S3	0	3	4	11	9	18	15	60	95%
S4	7	2	26	21	14	35	42	147	94%
S5	1	5	5	6	3	16	34	70	91%
S6	0	0	34	7	8	3	1	53	100%
Total number of learners:	**9**	**21**	**80**	**76**	**63**	**108**	**105**	**462**	**Average 94%**

DBE, Department of Basic Education.

TABLE 5: Intermediate Phase English First Additional Language learner performance after the implementation of the Primary School Reading Improvement Programme.

School	Performance level							No. of learners sampled	DBE Pass Rate
	0% – 29%	30% – 39%	40% – 49%	50% – 59%	60% – 69%	70% – 79%	80% – 100%		
S1	6	3	2	9	28	18	19	85	89%
S2	0	0	4	6	8	16	13	47	100%
S3	3	2	4	7	18	16	10	60	92%
S4	0	1	4	35	27	38	42	147	99%
S5	0	1	8	6	16	26	13	70	99%
S6	0	0	6	34	9	4	0	53	100%
Total	**9**	**7**	**28**	**97**	**106**	**118**	**97**	**462**	**Average**
%	**1.9**	**1.5**	**6**	**21**	**23**	**26**	**21**		**97%**

DBE, Department of Basic Education.

TABLE 6: English First Additional Language learner performance in Term 1 and Term 4.

School	Grade	No. of learners sampled	Average per school		Variance	
			T1 (%)	T4 (%)	Increase (%)	Decrease (%)
S1	4	85	86	89	3	-
S2	6	47	100	100	-	-
S3	5	60	95	92	-	3
S4	6	147	94	99	5	-
S5	4	70	91	99	8	-
S6	5	53	100	100	-	-

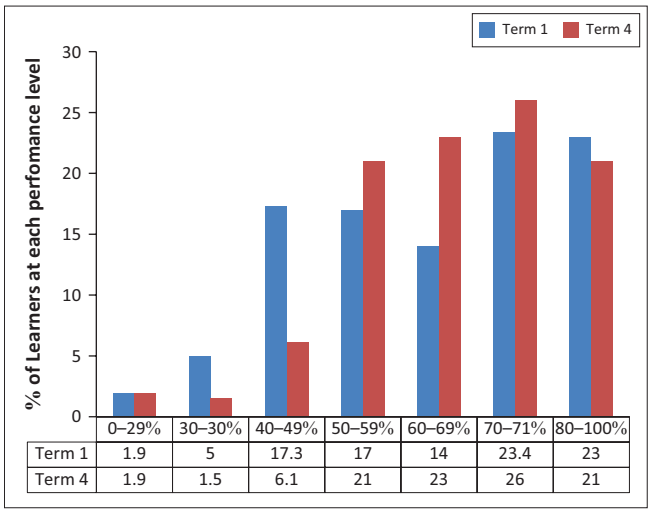
Finding 3: Variance in English First Additional Language learner performance before and after the implementation of the Primary School Reading Improvement Program

Research sub-question 3: *How different is the English FAL learners' performance before and after the implementation of the PSRIP in Johannesburg West District?* The average of the six selected schools based on DBE's National Protocol for Assessment was 94% before and 97% after the implementation of the PSRIP, thus, the variance is 3%.

Table 6 shows that the learners' marks in schools before the PSRIP was implemented were low, but after the PSRIP was implemented the learners' marks showed an increase, indicating the PSRIP produced a positive outcome.

Table 6 shows the average learners' marks for six schools and the outcome is that Term 1 scores are lower than those for Term 4; thus, learners' marks improved in the schools where the PSRIP was piloted. The average shows that there was a rise in the learners' performance in three schools (S1, S4 and S5): The learners' marks in S1 increased by 3% and in S4 increased by 5% while S5 recorded the highest increase of 8%. In S2 and S6 learners' performance did not change; the schools maintained a 100% pass rate across the two terms. There was a decline in S3 after the PSRIP was introduced, the learners' marks declined by 3%. Figure 3 compares EFAL learner performance before and after the PSRIP implementation.

As indicated in Figure 3, when compared to learner performance results before the implementation of the PSRIP, term one results revealed that 7% of the learners scored between Levels 1–2. By term four, only 5% of the learners were placed in these lower levels. During the 4th Term, the number of learners in performance Levels 3-7 was significantly higher. This further confirms that there were some learning gains in the selected six schools.



	0–29%	30–30%	40–49%	50–59%	60–69%	70–71%	80–100%
Term 1	1.9	5	17.3	17	14	23.4	23
Term 4	1.9	1.5	6.1	21	23	26	21

FIGURE 3: EFAL learner performance levels in Term 1 compared to Term 4.

Discussion

The statistical analysis results provide crucial information on learning gains obtained from the pilot phase of the PSRIP. When learners' results are explained by performance levels, the readers, teachers and the DBE will understand the pass rates. The school analysis shows that EFAL learner performance in two schools (S2 and S6) was constant, in another school (S3) it declined, while it increased in three schools (S1, S4 and S5). Thus, the PSRIP yielded positive results in three of the six schools. In the light of these findings, the study can answer the question: What were the learning gains of piloting the PSRIP in Johannesburg West district? The results show an increase in the learners' marks and fewer learners who failed, meaning the PSRIP does lead to positive outcomes in learner marks, and ultimately the school and the district performance.

Chetty and Groome (2022) state that the PSRIP is a structured learning programme designed to teach EFAL at the IP level in a South African context. The programme is Curriculum and Assessment Policy Statements (CAPS) aligned, and assessment tasks are also aligned with the CAPS. This study's aim was to analyse the IP English First additional language (EFAL) learning gains during the PSRIP pilot phase in Johannesburg West district. According to NECT (2016).

For this IP EFAL programme, a routine has been designed to effectively teach each component of language in a 10-h cycle that extends across 2 weeks. Within this routine, selected pedagogies, or 'core methodologies' have been included to teach different aspects of literacy and language.

According to Polkinghorne, Roushan and Taylor (2017), evaluating learning gains is one of the yardsticks for measuring teacher excellence. The teachers are expected to follow the PSRIP routine; not following it means that the learners are being robbed of the chance to improve their reading skills and general performance.

The PSRIP content and assessments are aligned with the South African curriculum, CAPS. In the selected Johannesburg West schools, the PSRIP provided a positive outcome in Term 4 in four out of six schools. Teachers have to understand the PSRIP and how it should be presented so that the learners can understand the themes and link them with what they are reading. The teacher support provided by EFAL subject advisors should be strategic in the implementation of the PSRIP.

Mismatch between PSRIP and District's expected learner performance

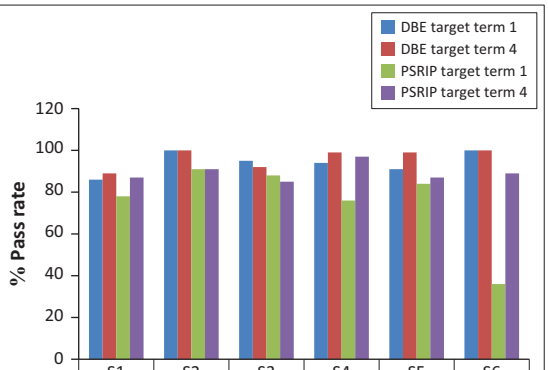
The PSRIP is committed to ensuring that 90% of learners pass mathematics, science, and languages with at least 50% (NECT 2016). While the analysis of learner performance based on DBE's National Protocol for Assessment indicates an improvement in EFAL, it is noteworthy to further analyse the results based on targets set by the PSRIP. Table 7 presents Term 1 learner performance levels and indicates whether each school met the DBE and PSRIP set targets.

Based on the PIRLS scoring system, Figure 2 indicates that the overall Grade 4 average is pegged at 288, while the overall Grade 6 average is pegged at 384. At Grade 4 level, tests administered in Afrikaans and English were higher than the national average, while tests taken in African languages were below the average; however, all the scores are below the international average. According to Oberholzer (2005), reading is a cornerstone of a child's success at school and throughout life. Vaughn, Bos and Schum (2000) point out that learners who struggle to read or to master reading concepts in the elementary school years (early grades) are often discouraged in the world of school and eventually drop out without mastering basic skills. Naketsane (2019) states that, if learners do not have a solid foundation in their HL and in a FAL, they may not cope with the demands of the Grade 4 curriculum.

The PIRLS and ANA studies reveal that Grade 6 learners are incapable of reading and answering questions based on a text. Since some of the studies indicate that there is a relationship between reading, writing and academic performance, this is an issue that cannot be ignored (Lumadi 2016). The implementation of the PSRIP could be the solution to the problem of reading English and other African languages at the IP level.

In Term 1 all the selected schools had more than 50% of their learners achieving at least Level 3 (a pass mark according to the DBE National Protocol for Assessment). The six schools' pass rates ranged from 86% to 100%. However, based on the PSRIP targets of having 90% of the learners passing with at least 50%, only one school, S2 met this target by obtaining a pass rate of 91%. S6 obtained the lowest pass rate of 36%. Considering that Table 7 presents Term 1 marks, the results are not surprising because the PSRIP had not been implemented. It is commendable that the S2 and S6 were already meeting the PSRIP target even before its implementation, and possibly should not have been included in the PSRIP. Although it is a cause of slight concern, the observation raises questions on the selection criteria for participation in the PSRIP. Table 8 presents Term 4 learner performance levels and indicates whether each school achieved the DBE and PSRIP set targets.

In Term 4 all the selected schools still had more than 50% of their learners achieving at least Level 3 based on the DBE



	S1	S2	S3	S4	S5	S6
DBE target term 1	86%	100%	95%	94%	91%	100%
DBE target term 4	89%	100%	92%	99%	99%	100%
PSRIP target term 1	78%	91%	88%	76%	84%	36%
PSRIP target term 4	87%	91%	85%	97%	87%	89%

DBE, Department of Basic Education; PSRIP, Primary School Reading Improvement Programme.

FIGURE 4: EFAL DBE pass rates compared to PSRIP pass rates: Term 1 and Term 4.

National Protocol for Assessment. The six schools' pass rate ranged from 89% to 100%. However, based on the PSRIP targets of having 90% of the learners passing with at least 50%, only two schools, S2 (91%) and S4 (97%) met this target while four schools did not. Figure 3 compares Term 1 and Term 4 pass rates based on the DBE and PSRIP set targets.

According to Figure 4, S1 did not meet the PSRIP targets a year after the program's implementation, however the pass rate improved from 78% to 87%. School 2 met the PSRP targets by having 91% of its learners obtaining at least 50% in EFAL. Considering that the school was already meeting the PSRIP targets before the program's implementation, it would appear that the implementation of the program may not have made any difference to the school's pass rate. School 3 did not meet the PSRIP targets and its pass rate decreased from 88% to 85%; and this decrease is a cause of concern. In S4, the PSRIP target was met at 97%; a 21% increase from the 76% achieved in Term 1. In S5, the PSRIP target was not met; however, there was a 3% increase from 84% to 87%. While S6 missed the PSRIP target by 1%, the school achieved the most significant increase from 36% in Term 1 to 89% in Term 4. It can be inferred that S6 benefitted the most from the implementation of the PSRIP. The schools that met the PSRIP targets are S2, and S4. In this case, in can be inferred that despite the challenges faced by the teachers (shortage of paper and ink to make copies for worksheets), the PSRIP did produce a positive outcome to literacy development and learners' marks in two out of the six selected schools.

Limitations of the study

The researcher could not access the specific breakdown of oral assessment marks separated from the language and creative writing assessment marks. The learners' marks were available as cumulative end-of-term marks. Accessing specific marks would have allowed for further investigation into the different language skills taught in IP EFAL classrooms.

TABLE 7: Intermediate Phase EFAL learner performance before the implementation of the Primary School Reading Improvement Programme: DBE Vs PSRIP pass rates.

School	Performance level							# of learners sampled	DBE Pass Rate (%)	PSRIP Pass Rate (%)
	0% – 29%	30% – 39%	40% – 49%	50% – 59%	60% – 69%	70% – 79%	80% – 100%			
S1	1	11	7	17	19	20	10	85	86%	78%
S2	0	0	4	14	10	16	3	47	100%	91%
S3	0	3	4	11	9	18	15	60	95%	88%
S4	7	2	26	21	14	35	42	147	94%	76%
S5	1	5	5	6	3	16	34	70	91%	84%
S6	0	0	34	7	8	3	1	53	100%	36%
Total	**9**	**21**	**80**	**76**	**63**	**108**	**105**	**462**	**94%**	**76%**
%	**1.9**	**5**	**17.3**	**17**	**14**	**23.4**	**23**	**-**	**-**	**-**

TABLE 8: Intermediate Phase English FAL learner performance after the implementation of the Primary School Reading Improvement Programme: DBE Vs PSRIP pass rates.

School	Performance level							# of learners sampled	DBE Pass Rate (%)	PSRIP Pass Rate (%)
	0% – 29%	30% – 39%	40% – 49%	50% – 59%	60% – 69%	70% – 79%	80% – 100%			
S1	6	3	2	9	28	18	19	85	89%	87%
S2	0	0	4	6	8	16	13	47	100%	91%
S3	3	2	4	7	18	16	10	60	92%	85%
S4	0	1	4	35	27	38	42	147	99%	97%
S5	0	1	8	6	16	26	13	70	99%	87%
S6	0	0	6	34	9	4	0	53	100%	89%
Total	**9**	**7**	**28**	**97**	**106**	**118**	**97**	**462**	**97%**	**90%**
%	**1.9**	**1.5**	**6.1**	**21**	**23**	**26**	**21**	**-**	**-**	**-**

Recommendations

Recommendation 1

In Term 1, the study found that 30 learners were not promoted and 432 were promoted. There is no 'one-size-fits-all' approach; reading benchmarks are specific to languages or language families. In order to reduce inequalities in literacy, it is important for teachers in developing countries to be aware of the appropriate reading benchmarks in different languages (Spaull et al. 2020). The study recommends that teachers must be cognisant of the age and grade-appropriate learners' literacy levels. The teachers must also be cognisant of different learners' specific literacy development needs so that the PSRIP content is scaffolded accordingly. In addition to encouraging teachers to analyse assessment items to find out which topics the learners are struggling with and providing the necessary support for these areas, there is a need for teachers' professional development specifically targeting literacy development at primary school level.

Recommendation 2

In Term 4, 16 learners were not promoted and 446 were promoted. Since some previous studies indicate that there is a relationship between reading, writing, and academic performance (Lumadi 2016), this is, therefore, not an issue that cannot be ignored. According to Kim and Davidson (2019):

> … [S]tructured pedagogy has been proven to positively impact learning outcomes because 'it offers learners evidence-based, effective learning opportunities to practise and acquire core skills' – and when the principles of structured pedagogy are applied to reading instruction, learners have 'ample opportunities to become experts in essential tasks' – ultimately becoming skilled readers. (2019:2)

The study recommends that schools that did not achieve 60% should be provided with the additional support targeting structured pedagogy, based on the identified barriers to learning English. If all the skills promoted by the PSRIP (reading, writing and language) are developed, learners would improve their literacy levels and general performance across different content areas.

While the first two recommendations rely heavily on teacher support, Chetty & Groome (2022) state that subject advisors are often overstretched and under-resourced. Relying on school-based support provided by departmental heads may also be similarly ineffective as departmental heads in under-resourced schools often have their own classes to teach. This leaves university teacher education departments as alternative sources of teacher development through their pre- and in-service programs. Further research is required to establish the learning gains achieved through the PSRIP (in all the participating districts), and if significant, establish ways of promoting PSRIP strategies en masse.

Recommendation 3

The study found that the learners' marks in two schools increased by 5% and in two schools increased by 7%, but in two schools the learners' marks decreased: in one school the marks decreased by 4%, while in another school the marks decreased by 7%. Just like any normal distribution, it is evident that while some schools have embraced the PSRIP reading improvement strategies, some still have not. Those that have not, may take a very long time to (or, may never) achieve any learning gains from the PSRIP intervention. The onus is on all change managers (school principals, district officials and curriculum developers) to close gaps in the implementation of the PSRIP so that the percentage of

schools with positive outcomes from PSRIP increases. There are learners in these schools whose overall performance in academics is pinned on their ability to read. If the learners have serious reading barriers, such learners should be referred to relevant special needs schools to receive the appropriate support. The current PSRIP strategies could be further developed to cater for learners with reading barriers.

Conclusion

The study focused on the analysis of learner performance in IP EFAL before and after the implementation of the PSRIP in JW district. The aim was to find out what the learning gains of piloting the PSRIP in JW district were and to find the difference between the learners' marks before and after the PSRIP was piloted in schools in 2021.

The data were collected using the quantitative method and analysed quantitatively. The data were collected in six schools for 462 learners in total. The learners' marks were analysed using SAP software and the results showed that before the PSRIP was implemented the learners achieved low marks in four schools but after the implementation of the PSRIP the learners' marks from the six schools that participated increased from 64% to 66%. Since primary school learners in South Africa face reading challenges in both English and African languages, further research is needed to investigate the learning gains that could be achieved when PSRIP is implemented in other African languages taught at the intermediate phase level. Study results will inform language in education policies and the DBE's reading campaigns may adopt the benefits of the PSRIP in improving literacy development in other South African languages including the indigenous languages.

Acknowledgements

This research would not have been possible without the selected six schools in the Johannesburg West District that participated in the PSRIP.

Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

B.M. developed the first draft of the article, contributed to the literature review, description of the research site, limitations and recommendations. L.T. contributed by reviewing the subsequent drafts, including the theoretical framework, methodology and discussion of findings.

Ethical considerations

The study used statistical procedures to calculate the difference in the learners' marks per school before and after the implementation of the PSRIP. The study selected the quantitative approach because of its appropriateness in analysing learning gains through learner performance. Data were collected in six schools. Permission to collect the data was granted by the Department of Education, Johannesburg West district and an ethics approval letter was granted by the University of the Witwatersrand, protocol number H22/01/14.

Funding information

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Data availability

The data that support the findings of this study are available from the corresponding author, B.M., upon reasonable request.

Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency.

References

Chebanne, A., 2016, *Botswana notes and records, 2016*, vol. 48, A special issue on humanities at UB and Botswana's 50 years of independence (2016), pp. 160–175, Botswana Society, Gaborone.

Chetty, D. & Groome, P., 2022, *Professional development to strengthen early grade reading: Lessons from the Primary School Reading Improvement Programme (PSRIP)*, INTERVENTIONS, 64, Oxford University Press, South Africa.

Creswell, J.W. & Creswell, J.D., 2017, *Research design: Qualitative, quantitative, and mixed methods approaches*, Sage, Los Angeles.

De Clercq, F. & Shalem, Y., 2015, 'Teacher knowledge and professional development', in M. Felix & P. Martin (eds.), *Twenty years of education transformation in Gauteng 1994 to 2014*, pp. 129–147, African Minds, Gauteng Department of Education, Pretoria.

Department of Basic Education (DBE), 2012, *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R – 12*, Department of Basic Education, Pretoria.

Howie, S.J., Combrinck, C., Roux, K., Tshele, M., Mokoena, G.M. & McLeod Palane, N., 2017, *PIRLS literacy 2016 progress in international reading literacy study 2016: South African children's reading literacy achievement*, Centre for Evaluation and Assessment, Pretoria.

Howson, C.B.K., 2017, *Evaluation of HEFCE's learning gain pilot projects: Year 1 report*, Higher Education Funding Council for England, London.

JET Education Services, DNA Economics & Bertha Centre, 2020, *Education outcomes fund South Africa scoping study: Scoping report*, JET, Cape Town.

Kim, Y.-S.G. & Davidson, M., 2019, *Promoting successful literacy acquisition through structured pedagogy: Global Reading Network Critical Topics Series*, Prepared by University Research Co., LLC. (URC) under the Reading within Reach (REACH) initiative for USAID's Building Evidence and Supporting Innovation to Improve Primary Grade Assistance for the Office of Education (E3/ED), viewed 23 July 2023, from www.edu-links.org.

Kotze, J., Fleisch, B. & Taylor, S., 2019, 'Alternative forms of early grade instructional coaching: Emerging evidence from field experiments in South Africa', *International Journal of Educational Development* 66, 203–213. https://doi.org/10.1016/j.ijedudev.2018.09.004

Lumadi, T.Z., 2016, 'Teaching strategies that teachers use to improve reading and writing in English as first additional language: A case study', unpublished dissertation, University of Limpopo.

Lurette, D., 2011, *Towards an integrated model to support the literacy development of Francophones in Canada*, Réseau pour le développement de l'alphabétismeet des compétences (RESDAC), Ontario, Ottawa.

Mawoyo, M. & Vally, Z., 2020, 'Improving Education Outcomes in Low- and Middle-Income Countries: Outcomes-Based Contracting and Early Grade Literacy', *Journal of Learning for Development* 7(3), 334–348. https://jl4d.org/index.php/ejl4d/article/view/468

Naketsane, M., 2019, 'Language transition and epistemic access: The teaching and learning of English as first additional language in the foundation phase', unpublished dissertation, University of the Western Cape.

NECT, 2016, *First additional language*, National Education Collaboration Trust, Centurion.

Oberholzer, B., 2005, 'The relationship between reading difficulties and academic performance among a group of Foundation Phase learners', *Journal of Higher Education* 16(3), 196–206.

Piper, B. & Zuilkowski, S.S., 2015, 'Assessing reading fluency in Kenya: Oral or silent assessment?', *International Review of Education* 61(2), 153–171. https://doi.org/10.1007/s11159-015-9470-4

Polkinghorne, M., Roushan, G. & Taylor, J., 2017, 'Evaluating student learning gain: An alternative perspective', in *Higher Education Academy (HEA) surveys conference 2017*, Manchester Conference Centre, England, May 11, 2017.

Pretorius, E.J., 2014, 'Supporting transition or playing catch-up in Grade 4? Implications for standards in education and training', unpublished dissertation, University of the Free State.

Pretorius, E.J., 2018, *Reading in the African languages*, Department of Linguistics and Modern Languages, UNISA, Cape Town.

Pretorius, E.J. & Spaull, N., 2016, *Exploring relationships between oral reading fluency and reading comprehension amongst English second language readers in South Africa*, Springer Science+Business Media, Dordrecht.

Spaull, N., Pretorius, E. & Mohohlwane, N., 2020, 'Investigating the comprehension iceberg: Developing empirical benchmarks for early-grade reading in agglutinating African languages', *South African Journal of Childhood Education* 10(1), a773. https://doi.org/10.4102/sajce.v10i1.773

Vaughn, S., Bos, C.S. & Schumm, J.S., 2000, *Teaching exceptional, diverse, and at-risk students in the general education classroom*, 2nd edn., Allyn & Bacon, Boston, MA.

Veii, K.R., 2005, *Innovations and developments in psychology and education: Do literacy*, viewed 21 July 2023, from https://www.politicsweb.co.za/documents/pirls-2016-78-of-grade-4s-cant-read-properly--up.