



The Education Triple Cocktail

– *Brahm Fleisch* (Professor of Education, University of Witwaterstrand)

How can we achieve the President's goal of ensuring that all 10 year olds can read for meaning by 2030? We now have the scientific knowledge of how to do it. This knowledge is built on research conducted in South Africa by our top South African educational researchers.

The education 'Triple Cocktail': Over the past ten years, South African researchers developed a robust intervention model geared to improving learning outcomes system-wide in the early grades in disadvantaged schools. Together with the research from Kenya and India, there is a growing international recognition that what has become known as the 'education triple cocktail' or 'structured pedagogic programme' model is best practice in government-led large-scale early grade learning interventions across the Global South. The model includes (1) the provision of lesson plans and other related curriculum guidance, (2) appropriate learning materials (phonics, graded readers, storybooks, mathematics manipulatives etc.) and (3) high quality and ongoing professional support including centralized just-in-time training and, crucially, onsite instructional coaching and support in the classroom. Given that onsite classroom visits are not cheap, the triple cocktail requires additional resources than are currently available to schools, but not exorbitantly so. Importantly, this is the only approach for which we have evidence of sustained improvements in reading and mathematics outcomes over time. Like the triple-cocktail drug regiment for people with HIV/AIDS, the education triple cocktail has the potential to fundamentally change the course of early grade reading performance in South Africa.

First large-scale implementation in Gauteng (GPLMS): The research programme on this intervention model began with the design and implementation of the Gauteng Primary Literacy and Mathematics Strategy (GPLMS) in 2010 under MEC Barbara Creecy. The intervention showed that Grade 3 learning profiles in reading and mathematics improved significantly. Working at scale in over 800 Quintile 1-3 schools in Gauteng, this government-led intervention demonstrated the feasibility and effectiveness of implementing the model by provincial departments of education.

Positive results in North West and Mpumalanga (EGRS 1 & 2): But would the GPLMS approach work in other provinces? Using a randomized control trial in studies that involve large groups of schools, the GPLMS approach was tested in two additional provinces. Dr Stephen Taylor, Director of Research in the Department of Basic Education, led the scientific study of this South African intervention model in the North West (in Setswana) and later in Mpumalanga (in English as First Additional Language). The results of these studies consistently showed the positive impact of the model on learning outcomes in Foundation Phase reading. The largest effects were found in intervention arms that included regular onsite classroom visits by an instructional coach.

The 'Triple Cocktail' becomes the new standard in SA: The basic model is now the standard practice in large-scale interventions in South Africa. In particular, Funda Wandé (Eastern Cape), PILO (KZN) and the NECT (various) have adopted versions of the 'educational triple cocktail'. Peer-reviewed articles that have appeared in the top scientific journals show that the model works across provinces, with different service providers and in the three Foundation Phase subjects, that is, Home Language, English as the First Additional Language, and Mathematics. The research shows that the South African model is scalable and

affordable (can work across an entire province and can be paid for from within provincial budgets) and with impact that is sustainable. Although the 'dosage' of coaching varies across programs, international research is clear that without regular onsite visits by a coach, learning outcomes do not improve.

What are the next steps?

In the change journey, researchers have done their part to provide a scientifically sound change model. The next steps involve translating research into action at-scale across the education system. The first and most important insight for this is that we need to have a 10-year plan. International experience shows that turning around any education system takes at least eight years (Michael Fullan).

We have the scientific evidence of an effective implementation model that works at-scale in South African schools. Implementation requires us to do the next steps:

- 1. Set achievable targets, made public and regularly reported on.** The president has set the overall goal of all 10 year olds reading for meaning by 2030. But to make this work, we need actual publicly started targets stating upfront where we are at present and where we hope to be at regular intervals in the journey towards 2030. Senior government officials need to take ownership and be held accountable for achieving the targets. That said, transparency and honesty in moving forward would ensure genuine public engagement in the change journey.
- 2. Measure gains in learning that is simple, cheap, quick and trustworthy.** One of the most urgent challenges is to ensure we have an accurate and meaningful measurement of early grade reading, something that does not currently exist. These must be simple, low-cost, rapid, independent and credible. It must be meaningful for parents who observe their children reading, teachers in classrooms, principals, district officials and higher level government managers. Although teachers should be empowered and equipped to administer their own assessments of reading, there is also a need for an external (independent) measure of reading at the Grade 2 or Grade 3 level.
- 3. Ensure that all Foundation Phase classrooms are equipped with a minimum set of resources.** Teachers cannot teach reading without a minimum set of resources. We do not need to come up with an entirely new list of resources. The Foundations For Learning Government Gazette (promulgated under Minister Pandor) made explicit the resources needed in every Foundation Phase classroom. Only one of the ten or so resources required (the DBE Workbooks) were actually made available to all schools. It is critical to ensure that all children receive anthologies of graded readers in their home language, phonics flashcards etc. and have access to classroom libraries, Big Books etc.
- 4. Establish effective implementation teams in all provincial departments with the highest authority. The tasks of the teams are to keep implementation on track, maintain a positive stance, remain focused on key strategies while managing other interests.** If any substantive change is to take root in early grade reading, it must be led and managed by the provincial departments of education. Given the silos that often exists between different branches and directorates within provincial departments, it will be necessary to appoint powerful implementation teams empowered with the mandate from political and executive leadership.
- 5. Align NGO service providers working in the early grade reading space.** One of the assets that exists in the education sector in South Africa is the many dedicated organisations in civil society. These include donors, funders, aid agencies, local community groups and education NGOs. To ensure that their contribution is optimally mobilized and does not result in duplication and incoherence, strong efforts need to be made to ensure effective coordination, sharing of resources and common approaches to measurement and evaluation.

References:

Besharati, N. A., Fleisch, B., & Tsotsotso, K. (2021). Interventions to improve learner achievement in South Africa: A systematic meta-analysis. *Systematic Reviews of Research in Basic Education in South Africa*, 27.

Cilliers, J., Fleisch, B., Kotzé, N. M., Taylor, S., & Thulare, T. (2022). Can Virtual Replace In-person Coaching? Experimental Evidence on Teacher Professional Development and Student Learning. *Journal of Development Economics*.

Cilliers, J., Fleisch, B., Kotze, J., Mohohlwane, M., & Taylor, S. (forthcoming). The sustainability of early grade education interventions: Do learning gains and improved teacher practices persist? *Economics of Education Review*.

Cilliers, J., Fleisch, B., Prinsloo, C., & Taylor, S. (2020). How to improve teaching practice? An experimental comparison of centralized training and in-classroom coaching. *Journal of Human Resources*, 55(3), 926–962.

Fleisch, B. (2016). System-wide improvement at the instructional core: Changing reading teaching in South Africa. *Journal of Educational Change*, 17(4), 437–451.

Fleisch, B. (2018). *The education triple cocktail: System-wide instructional reform in South Africa*. UCT Press/Juta and Company (Pty) Ltd.

Fleisch, B., Kotzé, J., Mohohlwane, N., & Taylor, S. (2020). Lessons from large-scale reading studies for initial and continuous teacher development. In *Glimpses into Primary School Teacher Education in South Africa* (pp. 39–55). Routledge.

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.



Learning to Read is a Basic Human Right & Enshrined in the Constitution

– André Gaum (SAHRC Commissioner for Education)

The right to a basic education is immediately realisable. One of the fundamental rights enshrined in South Africa's Constitution is: "Everyone has the right to a basic education". This right is a special right and different from many other Constitutional rights because it is 'immediately realisable', that is, there is no inherent qualification to the right to a basic education.

For the SAHRC, the right to read and write is a minimum core outcome. The South African Human Rights Commission (the Commission), a Chapter 9 institution established to strengthen constitutional democracy in South Africa, has a unit dedicated to education. The unit has since its inception conducted a wide range of research and consultations on the meaning of the right to a basic education. For the Commission, the ability to read and write, is one of the most important minimum 'core' outcomes with respect to the right to a basic education. The Commission therefore welcomes President Ramaphosa's 2019 State of the Nation Address (SONA) which identifies a key priority for 2030 as all children should be able to 'read for meaning' by the age of 10.

The instantiation of the Right to Read and Write in September 2021. To better understand the concrete implications of reading for meaning, the Commission established a Section 11 Committee consisting of child rights experts and experts in reading in all South African languages. The Committee was tasked with developing a document on the minimum reading norms in the home languages of children in South Africa. The document, The Right to Read and Write, was launched at the Constitutional Court in September 2021, and provides the following definition of reading: "Every child in South Africa has the right to read at a basic level, in their home language, by the age of 10. That is to say, they can read and understand a short and simple text and answer 80% of the literal and straight-forward inferential questions they are asked based on that text." The minimum reading norms adopted in the document are adapted from the Progress in International Reading Literacy Study (PIRLS), an international assessment and research project designed to measure reading achievement.

A minimum set of resources is needed if we are to ensure all children learn to read. The Right to Read and Write also argues that a necessary, although not sufficient, condition for children reading and writing with meaning by the age of 10, is access to a minimum set of appropriate Learning and Teaching Support Materials (LTSM). In the Right to Read and Write document, there is a proposal for the minimum number and type of LTSM for each of Grades 1, 2 and 3. This includes books in the home language for every Foundation Phase class and for every Foundation Phase learner. These books are available, many are Open Access, and they can be delivered through existing distribution channels at relatively low cost.

At the launch of The Right to Read and Write, the Commission called on government and civil society to embrace the right to read and write, and to support efforts to achieve the right to read for all South African children.

The Commission therefore welcomes the establishment of the South African Reading Panel as an important impetus to the attainment of the right to a basic education and government's stated aim for children to read for meaning by the age of 10 by 2030.

In particular, the Commission calls on the Reading Panel to support the provision of a minimum LTSM package in every Foundation Phase classroom. This is an immediately realisable step towards the 2030 goal of all children reading for meaning by the age of 10.



Reading instruction in early grade classrooms

– Ursula Hoadley (UCT)

The focus of this note: The focus in this note is on issues relating to reading at the level of the classroom. What aspects of reading instruction, reading teachers and reading pedagogy require our attention to ensure that all children in South Africa learn to read for meaning by the age of 10 by 2030? The note draws on Hoadley (2018); Hoadley and Boyd (forthcoming) and Ramadiro and Porteus (2017).

1. What are we doing right as a country?

Curriculum policy: South Africa has had a stable curriculum, the Curriculum and Assessment Policy (CAPS), for 10 years which has prioritized reading in the timetabling of instructional activities in the Foundation Phase. In 2012, CAPS introduced an explicit, balanced approach to reading focusing on international best practice and attention to the five pillars of reading. Supplanting a ‘whole language’ curriculum which left teachers without clear direction in the direct teaching of reading, the five pillars specify precisely the components that need to be covered in teaching learners to read: phonics and phonemic awareness; vocabulary; fluency; comprehension and oral language development. The CAPS introduced more structure indicating time to be spent on different activities, and mandated different types of reading, like read alouds, group guided reading, shared, paired and independent reading. In 2020 the Department of Basic Education (DBE) published the National Reading Framework for the Teaching of Reading in African Languages in the Foundation Phase. The Framework recognises that reading methodologies must be aligned with the distinctive linguistic features of African languages. It unpacks the teaching of decoding skills (phonological awareness, phonics) and dense morphology that pose challenges for young children in the early stages of learning to read in African languages.

Improved resources: Since 2011 the DBE has supplied all learners from Grade R to Grade 3 with ‘Rainbow’ workbooks in all 11 official languages. These comprise curriculum-aligned, systematic sets of colourful worksheets with accompanying fiction and non-fiction text to support the teaching of reading. The workbooks have become widely used by teachers, in many classrooms constituting the primary learning and teaching resource material (LTSM). Crucially, the workbooks introduced more text into classrooms, particularly those where there was a shortage or absence of appropriate text in learners’ home languages.

There have also been many initiatives that have placed early grade readers in classrooms, created classroom libraries and established and resourced school libraries. In many of these initiatives the focus has been on increasing the availability of text in African languages. For example, the Vula Bula anthologies (appropriately sequenced in terms of the linguistic demands of reading in different African languages, comprising 200 illustrated colour pages with 16 – 20 stories each at different grade levels) were provided to every Grade 1 to 3 learner in the Eastern Cape in 2019 and 2020.

Structured pedagogy reading programmes: The last decade has seen wide-scale implementation of a number of structured pedagogy programmes aimed at the improvement of early grade reading. Some

notable programmes have included the Early Grade Reading Study, National Education Coalition Trust, the Jika iMfundo programme and Funda Wandu. These programmes provide a combination of scripted lesson plans, coaching and training and learning materials. The programmes provide teachers with daily instructional routines that offer the potential for more purposeful and predictable reading instruction over time. They structure learning around engagement with text and focus on the development of the key components of learning to read mentioned above.

2. What are we doing wrong as a country?

Monitoring and supporting teachers: Daily reading and the adherence to productive instructional routines requires appropriate classroom-based monitoring and support. Monitoring of teachers' work in the classroom is generally conducted through checking learner exercise books and workbooks to assess coverage. This kind of monitoring does not ascertain whether or not reading is happening in classrooms, especially whether learners are provided with opportunities to read on their own. Shared, paired and group guided reading is not monitored. Thus there is no way of ensuring that the crucial mechanism through which learners learn to read (by reading) happens on a daily basis. In addition, HODs and subject advisors do not spend time observing teachers and teaching with them in order to model good practice and support teachers to engage in these practices in their lessons.

Low expectations: Teachers have low expectations of their learners and especially the ability of less able learners to read. Weaker learners are frequently ignored or treated as incapable of learning. Overall, lessons and especially classroom discussions aimed at oral language development are pitched at a very low cognitive level, introducing little new and challenging content. The focus of reading instruction is on low levels of text decoding, with less attention paid to these as a basis from which to develop comprehension.

Time wastage: Loss of instructional time occurs at a number of levels. The first is teacher absenteeism from school. The second is teacher absenteeism from the classroom during instructional hours. Thirdly, the very slow and seemingly intransigent pace at which learning happens in classrooms contributes to weak curriculum coverage. Inefficient practices, such as the marking of learner books during class time, phonic drills and copy-writing, crowd out time for reading comprehension and meaningful writing activities.

Books in the home: There are two sites of acquisition for learning to read: the school and the home. Most learners are exposed to very little text in the home and few opportunities to engage with books, especially story books, outside of school hours. The responsibility for developing reading thus falls wholly to the teacher. Learners require more exposure to text and more opportunities to practice reading than what is made available during school hours.

Teachers' reading practices: There have been a small number of studies of teachers own reading practices which indicate that early grade reading teachers do not read for pleasure themselves. It is difficult for teachers to teach reading for meaning or to prioritise reading if they do not read themselves. A lack of reading impacts teachers' own literacy levels, their vocabulary, appreciation of genre and knowledge of text structure as well as their distinguishing between spoken language and written text. These all affect the quality of reading instruction, including at the early grade levels.

3. What needs to change (and how might that happen) if we are to reach the goal of all children reading for meaning by age 10 by 2030?

Provision, support and monitoring of texts for reading: Although there have been improvements in the availability of texts there remain insufficient texts in many classrooms to ensure that learners

read enough. In addition, where texts are made available these are often not used. Appropriate ways of monitoring the actual use of a range of texts in classrooms need to be found. Teachers need support in organising and managing the plethora of graded reading series, levels and types to ensure quality instruction.

Better understanding of local pedagogies: Although CAPS prescribes a range of reading methodologies, a narrow range are actually deployed in classrooms. We don't yet know what successful reading pedagogy in the majority of South African schooling contexts looks like. Certain prescribed forms, like group guided reading, simply do not take root in classrooms. There is a need to conceive and demonstrate a successful pedagogy that engenders learning in these specific contexts.

Text in the home: Learners need to be given age-appropriate texts to take home to optimise exposure to text out of school and enhance the possibilities for reading with caregivers, siblings and neighbours.

Teacher preparation: Initial teacher education needs to focus on preparing teachers for reading instruction in contexts that represent the majority of classrooms, that articulate with the contextual affordances and constraints and language resources of these classrooms. In addition, teacher preparation should focus on teachers' own reading and foster reading as a regular and pleasurable activity that is about retrieving meaning from text.

References

Hoadley, U. (2018). *Pedagogy in poverty: Lessons from twenty years of curriculum reform in South Africa*. London: Routledge.

Hoadley, U. & Boyd, C. (forthcoming). *Reading Instruction in South African classrooms, 2010–2020*. In: Pretorius, E. & Spaul, N. *Early Grade Reading and Writing*. Cape Town: Oxford University Press.

Ramadiro, B. & Porteus, K. (2017) *Foundation phase matters: Language and learning in South African rural classrooms*. East London: The Magic Classroom Collective Press.



Early Grade Reading

– Godwin Khosa & Dhianaraj Chetty
(National Education Collaboration Trust (NECT))

A. Introduction

The challenges South Africa faces with early grade reading are reflected in the 2016 PIRLS³⁶ study which found that 78% of Grade 4 learners could not read for meaning. The findings of the PIRLS report are well-known in the education sector. In the interest of building further evidence in this regard, the NECT undertook two evaluations of the state of reading in schools, linked to the PSRIP programme (see Table 3 below), and two rapid surveys towards the end of 2021 to establish the extent to which this challenge could have been exacerbated by the limited schooling that followed the COVID-19 pandemic. The two surveys involved samples of 100 and 114 schools randomly sampled from across the country. Table 1 presents the findings.

Table 1: NECT Evaluation Findings

PROJECT	KEY FINDINGS
RAPID SURVEY 1 (Aug 2021)	<ul style="list-style-type: none">• 42% of Grade 3 teachers experienced challenges in delivering the recovery curriculum• 53% of teachers completed the Terms 1 and 2 recovery ATPs
RAPID SURVEY 2 (Nov 2021)	<ul style="list-style-type: none">• 65% of schools were on a traditional timetable• 30% of schools on rotation (of some form)• 74% of schools wished to return to traditional timetabling 2022• 68% of respondents acknowledged learning losses• Estimated 30% – 38% of work completed in Maths (overall for Grades 3 & 6)• Estimated 29% of work completed in EFAL (overall for Grades 3 & 6)

The surveys concluded that schools need more focused support for curriculum recovery and that the NECT has a strategic role to play in this regard.

B. National Reading Coalition (NRC)

In 2019, the NECT launched the National Reading Coalition (NRC) to network efforts aimed at addressing the numerous connected blockages to reading improvement. Interventions are clustered around six value chain areas: continuing professional teacher development, access to reading resources, community support, initial teacher education, policy, and research, monitoring and evaluation. These value chain areas promote and support the system to implement the DBE's National Reading Plan to achieve the

36 Howie, S.J., Combrinck, C., Roux, K., Tshela, M., Mokoena, G.M., & McLeod Palane, N. (2016). PIRLS Literacy 2016: South African Highlights Report. Centre for Evaluation and Assessment, Faculty of Education, University of Pretoria.

national target and outcomes, through multi-year initiatives.

The NECT has spearheaded the implementation of several early grade reading interventions.

2.1. Continuing Professional Teacher Development

- a. The Primary School Reading Improvement Programme (PSRIP) seeks to improve the teaching of reading in primary schools through capacitating subject advisors, enhancing teachers' pedagogical practices in the teaching of reading, and monitoring the gains made. It involves the development and provision of structured learning programmes (SLPs), the training of subject advisors as master trainers, and twice-yearly teacher training. The PSRIP's change theory is that reading improves across the primary school through enhanced the capabilities of subject advisors and teachers in teaching reading and through the provision of resources. PSRIP EFAL reach is detailed in Table 2.

Table 2: Primary School Reading Improvement Programme (PSRIP) EFAL

PROJECT	FP & IP EFAL	SCHOOLS	9 318 (4 198 FP and 5 120 IP) Approximately 50% of all primary schools
YEARS	2018 to 2021	TEACHERS	23 790 FP and 13 277 IP
PROVINCE(S)	GP, MP, FS, WC, NC, WC, LP, EC and MP	LANGUAGE(S)	ENGLISH FIRST ADDITIONAL LANGUAGE
PARTNERS	DBE and ETDP-SETA	GRADES	1 – 6
SUBJECT ADVISORS	562 (341 FP and 221 IP)		

Due to 2019 PSRIP successes (see Table 3 below), the Head of Education Departments Committee (HEDCOM) adopted the programme as the national sector approach to the teaching of reading.

Table 3: NECT Evaluation Findings

EVALUATION	KEY FINDINGS			
PSRIP (2019) Learner Baseline – 15 215 learners in 412 schools	<p>General findings:</p> <ul style="list-style-type: none"> • 24% increase in subject advisors' and 16% increase in teachers' understanding of the reading policies and methodologies needed to successfully teach reading • 21% increase in reading comprehension scores for Grades 2 and 3 over 8 months <p>Learners were tested on letter sound recognition, word recognition, oral reading of a text and reading comprehension to ascertain their grade-appropriate oral reading skills. The following results were found:</p> <ul style="list-style-type: none"> • Grade 3 learners read 43.8 correct words per minute • Grade 4 learners read 48.3 correct words per minute 			
PSRIP (2020) Exploratory Study – 2 976 learners in 124 schools	Grades	Baseline (2019)	Study (2020)	Difference
	3	43.8	40.6	-3.2
	4	48.3	44.6	-3.7

Working initially in EFAL from 2018, the PSRIP has recently included a Foundation Phase home language pilot in its design. The PSRIP HL follows the same approach and structure as the PSRIP EFAL described above. The reach of the PSRIP HL pilot is detailed in *Table 4*.

Table 4: Primary School Reading Improvement Programme (PSRIP) HL

PROJECT	Foundation Phase HL	SCHOOLS	102
YEARS	2021	TEACHERS	1008
PROVINCE(S)	NC, MP, FS, GP, LP, EC, NW, KZN	LANGUAGE(S)	Afrikaans, IsiZulu, IsiXhosa, Siswati, IsiNdebele, Xitsonga, Sesotho, Setswana, Sepedi and Tshivenda
PARTNERS	DBE	GRADES	1 – 3
SUBJECT ADVISORS	40		

The PSRIP HL has the potential of reaching all primary schools (approximately 20 000) and approximately 200 000 language teachers and their learners.

- b. The purpose of the Comprehension Across the Curriculum (CATC) was to upskill teachers to better teach reading comprehension skills across the curriculum. It was conceived of to form part of the teacher support programme during the COVID-19 period. The CATC’s change theory is that teachers who are exposed to well-researched critical thinking processes and reading comprehension strategies would acquire critical and creative thinking around the COVID-19 challenges, and ultimately improve critical thinking and reading comprehension in schools. The reach of the CATC is detailed in Table 5.

Table 5: Comprehension Across the Curriculum (CATC)

FOCUS	All subjects	TEACHERS	10,1000
YEARS	2020 to 2021	LANGUAGE(S)	English
PROVINCE(S)	GP, MP, FS, WC, NC, WC, LP, EC, MP	GRADES	1 – 12
PARTNERS	DBE and ETDP-SETA		

- c. The purpose of the Comprehension Across the Curriculum (CATC) was to upskill teachers to better teach reading comprehension skills across the curriculum. It was conceived of to form part of the teacher support programme during the COVID-19 period. The CATC’s change theory is that teachers who are exposed to well-researched critical thinking processes and reading comprehension strategies would acquire critical and creative thinking around the COVID-19 challenges, and ultimately improve critical thinking and reading comprehension in schools. The reach of the CATC is detailed in *Table 5*.

Table 6: Competency Based Learning Programme (CLP)

PROJECT	SLP with literacy education and competency -development	SCHOOLS	11
YEARS	2 years (2020 and 2021)	TEACHERS	41
PROVINCE(S)	Gauteng and Limpopo	LANGUAGE(S)	English, Sepedi and Setswana
PARTNERS	University of Johannesburg, Centre for Curriculum Redesign (CCR) and Class Act Educational Services	GRADES	Grade 1
SUBJECT ADVISORS	2		

The PSRIP HL has the potential of reaching all primary schools (approximately 20 000) and approximately 200 000 language teachers and their learners.

Initial evaluation results indicated that, as in all projects, COVID-19 exacerbated the challenges CLP teachers faced in 2021. It was demonstrated that while teachers’ pedagogical content knowledge in relation to literacy improved, they required more time to grasp an understanding of the competencies.

B2. Access to Reading Resources

The NRC implemented several initiatives aimed at providing schools and communities with reading resources. For example, collection boxes were placed at shopping malls, provincial offices, universities and churches in Gauteng, Mpumalanga, Limpopo, North West and Eastern Cape. This resulted in 32,000 books being collected and distributed to 24 NRC circuits. Room to Read donated 20 000 primary school English books to schools in Limpopo. 21 Foundation Phase storybooks were written by 10 NECT District Change Agents in 2021. These books were originally written in Siswati, Tshivenda, Xitsonga, IsiXhosa and Sepedi. They were versioned into additional languages resulting in a total of 168 Foundation Phase stories developed and distributed to schools in the NRC circuits. The storybooks are currently being compressed into WhatsApp format so they can be more easily shared with parents, teachers, principals and circuit managers across the country. The provision of readers is one of the most difficult elements to implement. It is a costly exercise more so given the number of learners involved. Compressed reading materials presented via electronic platforms present some potential.

The DBE, EU, UNICEF and NECT are working in partnership in the Reals-SA Project to address the negative impact the COVID-19 pandemic has had on education in South Africa. With relevance to early grade reading, the project’s change theory is that providing reading resources to schools, involving parents in at home reading and broadcasting reading programmes on community radio increases South African children’s interest in reading and leads to improved reading outcomes. The Reals-SA project targets include 650 quintile 1 to 3 primary schools, 290 000 learners, 66 000 parents and 4 600 teachers in Limpopo, KwaZulu-Natal and the Eastern Cape. Reals-SA will also provide 230 000 story books to the schools.

B3. Community Support

Central to the community work of the NRC is collaboration with reading stakeholder partners. This collaborative strategy was given effect through supporting the DBE with Phase 1 (2020/2021) and Phase 2 (2021/2022) of the reading champions programme which aims to support reading promotion and youth empowerment. The NECT works with provinces and literacy partners² to source, train, deploy and support 50 000 youth to primary schools across the country to support reading. The objectives of the programme are to instill a love of reading across the nation, pursue reading outcomes disrupted by COVID-19 that have resulted in the need for recovery, and to provide support to teachers who are overwhelmed with catch-up and learner welfare.

In addition, the President's initiative to get South Africans in the spirit of reading gathered momentum in 2021 through the establishment of the monthly Virtual Reading Club (VRC). Participation was encouraged across individuals from all walks of life and across all ages to attend the club's meetings which will continue throughout 2022. Also, in 2021 the NECT updated and circulated curriculum trackers to account for the DBE's revised ATPs and the learning losses experienced due to COVID-19. The teacher trackers are envisaged to reach all teachers in schools. In 2022 household versions of the trackers will be developed to involve parents more in their children's schooling through at home learning.

B4. Initial Teacher Education

In partnership with DHET, the DBE has begun the process of supporting the Centres for African Language Teaching (CALTs) in previously marginalised languages. With a focus on Tshivenda, the NECT plans to establish a strategic monitoring and evaluation partnership with the University of Venda to document gains and lessons learnt during the early implementation stage.

B5. Policy

Professor Leketi Makalela is a professor of language and literacy education and the founding Director of the Hub for Multilingual Education and Literacies at the University of the Witwatersrand. He has developed a language brief for the NECT and DBE detailing how national policy supports the teaching of reading in schools as well as instances where misinterpretation leads to confusion at school and classroom levels. Professor Makalela also provides technical support in the development of a Language in Education Policy Unit at the DBE. This unit, funded by the Old Mutual Foundation and supported by the NECT, will ensure that each school adopts a language policy that operates within the prescripts of the Constitution, legislation and policy frameworks that promote multilingualism. The aim of the unit is to ensure that African Languages are developed to the level of usage as languages of learning and teaching beyond Grade 3.

B6. Research, Monitoring and Evaluation

NECT has conducted a series of evaluations and organised quality assurance activities to contribute to evidence regarding the improvement of reading. The findings relevant to early grade reading largely point to several process, systems, teacher-skills and behaviours, and resourcing requirements needed to improve reading.

37 Funda Wande (EC), READ Education Trust (FS), Nal'ibali (GP), The LEARN Project (KZN), Room to Read (LP), Pen Reach (MP), A Better Africa Foundation (NC and WC) and Activate Leadership (NW)



Learning losses due to the COVID- pandemic

– Janeli Kotze, Gabrielle Wills, Cally Ardington, Stephen Taylor, Nompumelelo Mohohlwane and Carol-Nuga Deliwe

What are we doing right as a country: Over the past ten years, South Africa has experienced a renewed momentum regarding the importance of reading outcomes in improving the overall educational outcomes of children, and subsequently their later life outcomes. This increased focus has been accompanied by a significant increase in the prevalence of quantitative studies evaluating new and innovative interventions that will lead to improved reading outcomes. Similarly, the recent undertaking of the development of reading benchmarks in the African Languages is adding to our understanding of learning trajectories in reading outcomes and the expectations we should have of children in different grades. An unforeseen benefit of the plethora of data emanating from these research studies on reading outcomes has been the opportunity it created for the measurement of the impact of the COVID pandemic on learning losses.

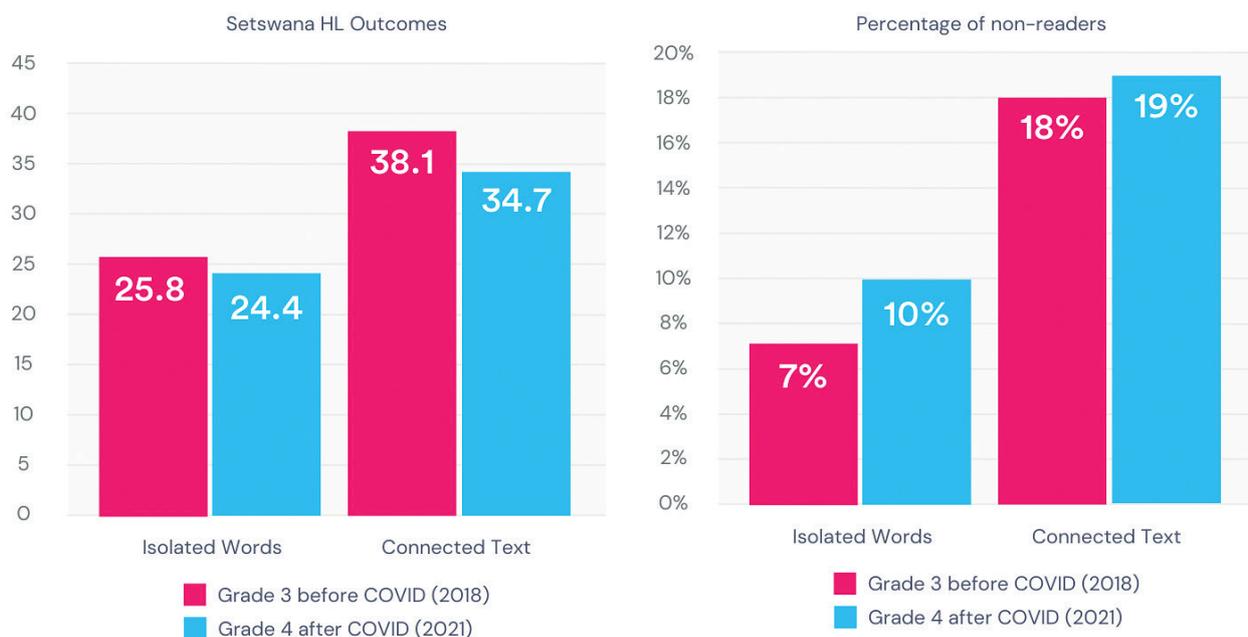
Impact of the COVID pandemic on reading outcomes: The graphs below use the data from the various reading assessments that were conducted in the North West province to determine the learning losses that were experienced in early grade reading over 2020 and 2021. The data from the Early Grade Reading Study (EGRS) and the subsequent Reading Support Programme that was continued in the schools that participated in the EGRS. In 2018, a group of 2,063 Grade 3 learners and a group of 3,178 Grade 4 learners were assessed in their Setswana Home Language (HL) reading outcomes. In 2021, the DBE again assessed a group of 3,239 Grade 3 and 3,367 Grade 4 learners in the same schools using very similar reading assessments. Given that the same Home Language word reading task and oral reading fluency (ORF) passage was used across the years, it is possible to compare the reading performance of the Grade 4 learners who were affected by the pandemic (Grade 4 in 2021) with the reading performance of the Grade 3 and Grade 4 learners before the pandemic (2018). It further also allows us to calculate both how far learners have fallen behind, as well as how much learning was lost in 2020 and 2021.

(Figure 1) below compares the reading outcomes of the Grade 3 learners pre-COVID (in 2018) with the Grade 4 learners who were affected by the COVID-pandemic. It shows that the Grade 4 learners in 2021 read, on average, 1.4 words less in a minute than the Grade 3 learners who were in the same schools in 2018. In the oral reading fluency task the Grade 4 learners read, on average, 3.4 words less in a minute than the Grade 3 learners. This signifies that the lost schooling during 2020 and 2021 has resulted in more than a year's worth of lost learning.³⁸

(Figure 2) further shows that the percentage of non-readers, or learners who could not read a single word correctly, are higher among the Grade 4 learners in 2021 than what it was with the Grade 3 learners in 2018. Again, it is important to note that this is among learners in the same schools, and we have no reason to believe (other than the pandemic) that the Grade 4 learners in 2021 would be inherently weaker than the Grade 3 learners in 2018. In 2021, 10% of the Grade 4 learners could not read a single word correctly in the HL word reading task (where the first six words did not include more than three letters), compared to 7% of Grade 3 learners in 2018.

³⁸ When considering Home Language word reading it is 127% of a year of learning lost, and for Home Language oral reading fluency it is 131% of a year of learning lost.

Figure 1a & 1b: Comparing the reading outcomes of the pre-COVID Grade 3 learners with the post-COVID Grade 4 learners



How to respond to learning losses: Early on in the pandemic, we quickly realized that the loss of schooling will inevitably lead to the loss of learning (Gustafsson & Nuga-Deliwe, 2020). What we did not predict is the extended duration of the loss of teaching time not only in 2020, but throughout 2021 as well. During the third term of 2021, we saw that more than half of schools were still implementing rotational timetables to comply with social-distancing regulations. The analysis presented here clearly demonstrates the terrible extent of learning losses that have been incurred. Although similar data does not exist for other subjects and grades, there is no reason to expect learning losses to be limited to reading in the early grades. In fact, some might argue that losses in mathematics could be larger and more enduring given the way new topics build upon previous concepts.

The Department of Basic Education initially revised the Annual Teaching Plans (ATPs) to guide teachers on covering the curriculum despite the significant loss in teaching time. However, the revised ATPs do not guide teachers on how to remediate the lost learning that has been experienced over the past two years. This, however, seems to be a global problem, with many countries not having clear answers on how to remediate the shocks in learning outcomes brought about by the pandemic.

South Africa has by no doubt experienced a major setback in reaching the goal of all children reading for meaning by age 10 by 2030, and at this point, there is no clear understanding of what interventions work in catching up the learning lost. Three areas that now require urgent attention include:

1. Developing and implementing a scalable programme that can support teachers in remediating the significant learning losses;
2. Structured pedagogy has shown very promising results in improving learning outcomes before the pandemic, and we need to better understand how learning plans need to be adapted to take into account the performance levels of learners currently, but also the increased variance of learner proficiency within one classroom; and
3. Develop strategies to help teachers teach in classrooms with learners who differ vastly in their performance levels and are far behind curriculum expectations.



Connecting the dots: The relationship between school infrastructure and learning

– Noncedo Madubedube, Elizabeth Biney & Jane Borman
(all Equal Education)



Children who do not master basic concepts in the first few years of primary schooling are at a perpetual disadvantage.³⁹

Introduction:

The 2016 Progress in International Reading Literacy Study (PIRLS) revealed that after four years of schooling, a devastating 78% of South African learners cannot read for meaning. A precarious foundation results in weak learning outcomes in the later schooling years.

There are a number of factors that contribute to the basic education sector's weak foundation phase, and these are often linked to what takes place inside the classroom. But, what if that classroom is overcrowded? And the taps are dry and the toilets are unsafe? What about the state of the infrastructure of so many of our schools not being conducive for quality teaching and learning? The Department of Basic Education (DBE) and provincial education departments (PEDs) have failed to ensure that our schools have the basics: a reliable supply of water and electricity, enough classrooms, and decent toilets. Our government has been achingly slow in fulfilling its legal and moral duties.

Learning inside of broken schools

School infrastructure—the physical learning space or building, its quality, maintenance and management—is critical in schooling outcomes and a key component in ensuring the provision of quality education because structured teaching and learning primarily occur within a physical context, the school environment (Barrett et al., 2019; Khumalo & Mji, 2014). Therefore, the condition of school infrastructure, i.e. the physical structure of schools as well as related facilities and services, can either foster or impede the teaching and learning processes (Khumalo & Mji, 2014).

That being said, information on how school infrastructure affects children's learning outcomes is scanty at best. This lag is problematic because many of the factors that determine the health and safety of the physical learning environment also significantly affect learning (Barrett et al., 2019).

Limitations notwithstanding, emerging literature has identified the quality of school infrastructure as important for educational outcomes as other factors like access, quality of teachers, or individual and household/community factors (Chaudhury et al., 2004; Murillo & Román, 2011). The broad consensus is that the physical condition of schools is strongly linked to learning outcomes, affecting how and

³⁹ This advisory note has been drafted by Equal Education's research department

This advisory note is an extract of Equal Education's draft research paper on the impact of school infrastructure on learning outcomes (please do not cite)

what is taught in schools, as well as how learners receive, participate and achieve expected academic performance.

Empirical evidence from across the United States shows that school infrastructure has a direct relationship with academic performance, with quality infrastructure improving learners' performance or achievement in standardised tests (see e.g. Bullock, 2007; Duran-Narucki, 2008; Hughes, 2006; Tanner, 2009).

Developing contexts have also documented similar positive links between good school infrastructure and academic performance. For instance, in a study of 95,000 third-grade and 91,000 sixth-grade learners from 16 countries in Latin America, Murillo and Román (2011) found that the availability of basic infrastructure and services (water, electricity, sewage) and didactic facilities (sports installations, labs, libraries), in the school do affect the achievement of primary education students in Latin America, albeit to varying degrees. Similar findings are emerging in the South African context (Banda & Kirunda, 2005; Ndebele, 2014).

The school infrastructure law

The DBE has acknowledged the importance of infrastructure in enabling teaching and learning. In its report on "25 Year Review of Progress in the Basic Education Sector" it states:



The development of children is influenced by the physical and social environments they find themselves in. In the education sector, school infrastructure is important in facilitating the delivery of education and creating an atmosphere conducive for learning.

To achieve school infrastructure priorities, the Minister for Basic Education promulgated the 2013 Regulations Relating to Minimum Uniform Norms and Standards for Public School Infrastructure (Norms and Standards for School Infrastructure). She did this after being taken to court by Equal Education (EE). As the primary legal framework regulating the provision of infrastructure in South African public schools, the Norms and Standards for Public School Infrastructure set out the national guidelines for the equitable provision of basic infrastructure and services to schools within specific, legally binding timeframes.

Since EE secured the promulgation of the Norms and Standards, thousands of schools have received water, electricity and decent toilets, and hundreds of schools made of inappropriate materials, such as mud and asbestos, have been replaced. However, access to dignified and safe infrastructure is still highly uneven in South Africa – with rural and township schools bearing the brunt of historic inequalities.

Show us the money!

EE's engagements with education departments, and our analysis of school infrastructure data and delivery, show that the departments still struggle with the basics such as accurate and accessible data, clear and coordinated planning, as well as making sure that the implementing agents and contractors that build schools on behalf of government are held accountable. National and provincial governments are also not putting enough money toward building and fixing our schools.

Despite positive statements from the government on the need for progressive pro-poor funding towards the education sector, a worrying trend of deprioritisation of basic education funding has emerged over the years as National Treasury has introduced austerity budgeting.

Austerity budgeting was already a concern before the emergence of the COVID-19 pandemic, as South Africa was experiencing systemic underinvestment in key social and economic sectors. Over the years,

the Budget Justice Coalition, Equal Education and other civil society actors have outlined the impact of lower allocations on the education sector and questioned the rationale for implementing austerity budgeting.

COVID-19 dramatically accelerated the trend as a result of the pandemic's impact on government's finances and spending. COVID-19 forced government to revise their 2020/2021 budget and take the exceptional step of tabling a Supplementary Budget in June 2020. The 2020 Supplementary Budget made major changes to departmental funding as government not only had to fund COVID-19 relief measures, but also decided which departments should be prioritised in this new environment. Basic Education was considered a donor department. This means that the sector received no additional support to help with the COVID-19 costs and instead experienced several funding cuts (as will be outlined below). This has forced the DBE, PEDs, and schools themselves to reallocate their already overstretched budgets. A consequence of this is schools being unable to maintain and upgrade dilapidated or dangerous infrastructure, and being unable to purchase school furniture or other teaching and learning support materials.

The trend of decreasing basic education funding is not just an overarching issue but is also experienced at the programme level, especially school infrastructure. Despite national government placing renewed priority on school infrastructure – through the introduction of conditional grants such as the School Infrastructure Backlogs Grant (SIBG) and the Education Infrastructure Grant (EIG) – funding has seen a decrease in recent years.

The cuts to infrastructure budgets directly affect the ability of schools to meet the minimum norms and standards for school infrastructure as many rely on this funding to provide safe structures, sanitation, water and electricity. This inability of the DBE to meet its legal obligation is unacceptable. Our government should ensure all provinces have sufficient funds to meet the Norms and Standards for Public School Infrastructure as a matter of urgency.

Conclusion:

Our advocacy around the Norms and Standards for Public School Infrastructure, recognises that safe and proper school infrastructure is a critical part of ensuring quality education, along with other important factors such as teacher training and support, curriculum, textbooks, school safety and scholar transport. The failure to comply with the Norms and Standards for Public School Infrastructure undermines the right to education. Minister Motshekga and the Education MECs must ensure that this right is realised!



What PILO has learned about implementing systemic improvement in reading

– Mary Metcalfe (PILO)

I have been asked to provide an overview of the various PILO initiatives and evaluations that focus on reading. This requires an explanation of PILO's work at the Foundation Phase since reading interventions are predicated on the design principles of our work at scale.

What does PILO do?

1. PILO was established to design and test programmatic and systemic interventions aimed at improving learning outcomes on scale.
2. Whilst improving reading and numeracy is fundamental to all learning improvement, our focus is on understanding and testing what is needed in the system of support across all grades/ subjects. These systems of support are pre-requisites for any system improvement
3. PILO designs for implementation within the system, by the system, not as an outside intervention. An evaluation is currently underway to deepen understanding of challenges of 'embedding'. The system is accustomed to accommodating external interventions with little system involvement and consequent minimal incorporation into system practices (many interventions are resourced at a costing that is not available in the system). A core principle of design has been costing for replication at scale
4. PILO has worked at the scale of a district since inception (2015⁴⁵). This has been an exceptional learning experience as it is at this scale that the challenges in the ecosystem of support become visible
5. The primary focus is on leadership and management at school and district level, with a focus on routines of support for teaching and learning (the instructional core)
6. The work has drawn from change management. For adoption, teachers must believe that what is proposed will help them with the challenges they face, and what they are given is filtered through what they already do and believe works. The change programme was run as a campaign *Jika imfundo* with the active support of stakeholders (e.g. teacher unions)
7. Extensive investment was made in Foundation Phase (FP) teaching and learning material and pedagogic support. In other Grades the key practices of planning teaching, monitoring learning, reflecting, collaborating and adjusting teaching plans were supported by helping teachers align CAPS/ ATP to approved textbooks and lesson plans were not provided.

45 PILO 'tried at-scale' in 1 200 schools in 2 districts in KZN from 2015–2017. The scale has increased with a decrease in external support as the Districts/ Province assume greater responsibility. The KZN work has been largely funded by the NECT. PILO has also worked at scale in Gauteng, Free State and is currently supporting the DBE in Mpumalanga, and in incorporating learning as part of improving the national framework for implementation of the Curriculum

What PILO has done in Foundation Phase Literacy in KZN⁴⁶

1. All FP teachers in the 4 800 KZN schools with FP have been provided with lesson plans, CAPS Planners and Trackers⁴⁷, graded readers, posters, and big books in both isiZulu (FL) and English (FAL). This material stresses the acquisition of reading in the first language (isiZulu) and provides a structured programme in phonics as well as structured opportunities to read for meaning, with appropriate text, in both languages. This material is now available to be replenished by schools from within the provincial LTSM procurement process.
2. FP curriculum advisers were supported in the design and delivery of FP Languages Teacher Development workshops and material. All of the material is available as Open Educational Resources. Participants' Handout and Facilitator's Guides are available for a range of main topics⁴⁸
 1. The workshops were delivered by the Advisers and attended by FP Department Heads (DH) and a lead teacher from all schools in the province once a term for the first 3 terms. The intention was to develop the DH as an instructional leader.
 2. PILO is partnering with VVOB (Flemish support agency) to sustain the initial Jika iMfundo FP reading intervention in the VVOB support to the KZN reading strategy.

Learnings: Improving reading

1. **Reading material for learners is critical:** FP classes are generally not reading-rich environments. Interventions must put quality books in the hands of learners – at school and at home.
2. **Lesson Plans can create a framework for improving the teaching of reading:** Lesson Plans are an important tool to guide teachers through new and unfamiliar practices, but are not a script. Their use must be supported by individual and collaborative professional reflection (on the basis of evidence) on what worked, and what might be done differently.
3. **There is a dearth of support for changing teacher practices within the system from outside of schools:**
 - i. There is little support for teachers grappling with adjusting teaching to the needs of learners. Few provinces have sufficient FP advisers to provide timely and relevant support. The table below shows the current ratio of FP advisers to schools in KZN. Funding constraints mean that this is unlikely to change, nor could the provincial budget accommodate additional 'coaches'.

# of Districts with this ratio	# Number of Schools to be supported by a single FP advisor
2	<100
3	101 – 150
6	151– 200
1	>200

* The number of FP teachers per school can vary from 1 to ± 9 (generally a minimum of 3 per school). In 6 districts, an FP is responsible for between 151 and 200 schools, and thus up to 600 teachers.

- ii. There is little use of data to segment of teacher needs, and to provide support that is targeted to these needs. Training is generic.

⁴⁶ PILO also worked on Foundation Phase Maths on the same principles and model, and work was done with intermediate phase reading.

⁴⁷ The activities of *planning teaching and tracking learning* are not compliance activities, but reciprocally informative.

⁴⁸ Assessment in the Lesson Plans (LP); SA-SAMS; Teaching language structures in the LP; Home Language phonics; Phonemic awareness and phonics; EFAL Phonics (Writing and reading and EFAL); language structures using posters; using the African Storybook resources; Shared reading in isiZulu; Songs and rhymes in EFAL; Teaching 'Grammar' (both languages); Writing; Editing writing (both languages); Reading; Group Guided Reading (GGR); Paired and Independent reading; Reflection on the use of lesson plans; Differentiation strategies; Differentiation in GGR; Assessing learners for GGR groups; and developing a grade timetable.

iii. Resource constraints (device, data, Wi-Fi) limit access to on-line resources/ training

4. Support for changing teacher practices from *within schools* is critical

iv. The professional community within the school is the first immediate support available and this must be strengthened

v. Opportunities for school-based reflection to adjust teaching on the basis of evidence of learning must happen within teaching teams, and SMT must support this by scheduling collaborative time. FP teachers and the HoD teach the whole day.

vi. Adviser support for FP teams at school level has to shift away from compliance monitoring to being in touch with learning

5. The importance of improving assessment to guide teaching

vii. Brahm Fleisch argues that schools need regular external benchmarking information to guide school-based reflection, and system learning. I agree.

6. Evaluation

The NECT led an evaluation process which was completed in FP schools in KZN after the first year of implementation. This has not yet been made public. PILO has been informed that: there was evidence of positive changes in curriculum planning and management practices within schools; learners in treatment districts wrote more and tackled more complex work than comparison groups; the impact findings suggested that the learning programme contributed to better learner performance; and the programme was highly integrated into the work of the district office.



Collectively moving towards the same goal

– Nangamso Mtsatse (*Funde Wandé*)

When I think about South Africa’s early grade reading outcomes, the first thing that comes to mind is a quote by Steve Bantu Biko: “A community is easily divided when their perceptions of the same thing are different”. I accepted the invitation to be part of the National Reading Panel to help avoid exactly this. I believe this initiative has significant potential to align people from different walks of life and experiences to unpack the problem together, recommend sustainable solutions and monitor progress towards achieving the country’s 2030 goal, as laid out by President Ramaphosa in the 2019 SONA address. The fact that, after 28 years of democracy, South Africa is still undergoing a literacy crisis is no longer a point of debate. This is a crisis that needs to be dealt with immediate effect, as literacy rates have tangible repercussions for societal issues such as poverty, crime and unemployment. Bold government policies are required to ensure that we are not still here in 50 or even 100 years, as current projections indicate. That said, not all has been dark in the education system. It is essential for society and the sector to acknowledge the progress made over the last two decades, such as achieving access to free primary education and a centralised curriculum.

The advisory note to the 2030 National Reading Panel reflects the reading outcomes of the last two decades. These views are based on professional judgment and involvement in medium- to large-scale interventions implemented by Funda Wandé and partners.

What are we doing right as a country?

- 1. All children in SA have access to primary education:** The South African Schools Act 84 of 1996 states compulsory school attendance for learners up to grade 9. Learners from the poorest communities can access free education in quintile 1 – 3 schools and be given basic school stationery such as exercise books, pencils etc.
- 2. The National School Nutrition Programme:** During the 2019 – 2020 period, 9 275 481 learners received two meals a day. This accounts for 79% of learners in no-fee paying primary and secondary schools. The programme is the foundation to social assistance and poverty mitigation that contributes to a meaningful school experience.
- 3. Reading for Meaning declared an apex priority:** In the SONA 2019 address, the President declared improving literacy and numeracy outcomes as a top priority for the Basic Education department. In the Basic Education Lekgotla in 2020, President Ramaphosa also said, “Reading is not a portion of education...it is education!” Improving reading outcomes has been set as a sector goal in the 2018–2021 Annual Performance Plans.
- 4. Involvement in large-scale international studies:** South Africa participates in international literacy assessments such as PIRLS and SACMEQ. Our participation ensures we measure our curriculum output at global standards and allows the sector to measure learner progress over time. The results are made available to the public and are widely discussed. Analysis of the PIRLS results shows that

South Africa made substantial progress in reading achievement between 2011 and 2016 (Gustafsson 2020).

5. **South African large-scale studies:** There has been an increase in medium and large-scale studies that have provided evidence-based research in understanding how learners learn to read for meaning and the types of sustainable interventions that have potential to be taken up by the government, such as the Early Grade Reading Study (EGRS), Gauteng Primary Languages and Mathematics Strategy (GPLMS) and the Funda Wande programmes in the Eastern Cape, Western Cape and Limpopo.
6. **National Reading Framework for the Teaching of Reading in African Languages in the Foundation Phase:** The curriculum has been revised to best suit African languages' scope and sequencing, context, and linguistic structure.
7. **DBE Workbooks:** Every learner in a public school receives two colour printed exercise workbooks for each learning subject every year.
8. **Presidential Youth Employment initiative (PYEI):** The deployment of unemployed youth as education assistants and reading champions to assist teachers in improving learning outcomes.
9. **PrimTED (support by DHET):** The development of knowledge and practice standards for teaching reading in the Foundation Phase (FP) and Intermediate Phase (IP). DHET has set up Centres for African Language Teaching (CALTs) at UJ, UWC, Sol Plaatje University and NWU. The CALT at UJ has been actively developing a set of teaching resources in isiZulu and Sesotho. The CALTs have bursaries for students to register for postgraduate degrees.
10. **Development of National Reading Benchmarks:** The development of reading norms and benchmarks in Nguni languages, with further language groups currently under development. If implemented, teachers will track reading progress and remediate as per curriculum requirements.

What are we doing wrong as a country?

1. **Learner repetition:** Although all children have access to schooling, many repeat grades and drop out – their inability to read plays a large part in this.
2. **Grade R and ECD as a wasted opportunity:** Research shows that Grade R is currently a wasted year for children in non-fee-paying schools, due to low quality, which widens the gap between learners in fee-paying and non-fee-paying schools (Van der Berg et al. 2014). This is a wasted opportunity for laying the foundations for literacy. Grade R teachers get paid far less than other FP teachers and do not have the same status as teachers in other grades.
3. **Teacher Content Knowledge:** In general, Foundation Phase Teachers (including Grade R teachers) have very little conceptual knowledge of how children learn to read. This creates a barrier against making sound judgments about pedagogy. Many teachers do not use research-based methods for teaching and assessing reading; we don't have sufficient research on the best practices for teaching decoding in African languages.
4. **Systematic assessment:** We do not monitor progress throughout the learners' schooling career. Assessments are only done in grade 12, the school-leaving grade. Only the Western Cape province administers systematic assessments to all children in grades 3, 6 and 9.
5. **Rotational Timetable:** Schools continue to implement rotational timetabling, resulting in severe learning losses (Ardington, 2021 and Sheperd & Mohohlwane, 2021).
6. **Building expertise and leadership in the early literacy field:** As a country, we are not building expertise and leadership in the early literacy field.
7. **Lack of accountability in the education system:** Districts, schools, principals and teachers are not held accountable for learner performance.

What needs to change if we are to reach the goal of all children reading for meaning by age ten by 2030?

- 1. Anthologies of graded readers:** Access to an anthology of graded readers in the Foundation Phase has positive effects on reading performance in the Eastern Cape (Ardington & Spaull. Forthcoming). With the immediate introduction of anthologies for the FP across all provinces, the cost would be approximately ±R7.50 per anthology.
- 2. The dual crisis – using unemployed youth to improve learning outcomes:** Permanent employment of Reading Champions and Education Assistants in quintile 1 – 3 schools.
- 3. Large classroom sizes:** Decrease class sizes! Approximately 57% of grades 3 and 6 schools have more than 40 learners per class (School Monitoring Survey, 2017). The policy states that the class size should be 35 learners. Research shows that large class sizes is a binding constraint to effective teaching and learning (Van der Berg et al., 2016; Hoadley, 2018; Taylor, 2017).
- 4. Budget and expenditure:** Decreasing the actual per-learner education expenditure won't improve primary schools' learning outcomes. Fiscally prioritise primary schools; only 31% of the DBE budget gets allocated to primary schools (grades R – 7).
- 5. Accountability:** Incorporate the Integrated Quality Management System (IQMS) with learner performance.
- 6. In-service teacher training:** Rhodes University, in collaboration with Funda Wandé, have designed an accredited course in early literacy teaching: the Advanced Certificate in Foundation Phase Literacy Teaching. The course has been rolled out to subject advisors, HODs and teachers in the Eastern Cape, Limpopo and Western Cape. Ideally, at least all subject advisors should take the course. The course has been said to be the gold standard by PrimTED, CHE and DHET, and recommendations suggest the course should be adopted widely. The Harvard Graduate School of Education reviewed the course, and the resulting report stated that *“Designing a robust and well-conceived course to support professional learning on the part of foundation phase teachers is the first aspect of a successful learning tool. Having the foundation phase teachers use the course to change their instructional practice is the important second aspect of this endeavour”*.
- 7. Prioritisation of the Core Curriculum:** CAPS curriculum needs to prioritise fundamental skills required to learn how to read.



Changing Demographics and Teacher Quality

– Johan Muller (Emeritus Professor of Curriculum, University of Cape Town)

South African educational authorities have, mostly but not always justifiably, been blamed for the poor state of schooling outcomes. Not everything is a simple consequence of poor policy or inadequate implementation. This briefing note takes a look at one such factor which arises in the broader demographic environment of the country.

While we now know how to teach reading, we do not know how to retrain existing teachers to an acceptable level: It is common cause that a) the single greatest factor inhibiting improving reading proficiencies is the parlous state of teacher knowledge regarding how to do it successfully, despite the fact that the underlying dynamics of how to do it are by now well established in the research literature; b) that the majority of teacher training institutions, at least the ones training the overwhelming bulk of our teachers, are still not teaching prospective teachers how to teach reading, as Nick Taylor's research has shown; and c) that while small scale interventions are often effective, we do not yet have a model for how to re-train the over 200 000 existing primary school teachers to an acceptable level of competence.

Improving teacher quality by closing unviable 'tiny' schools: Back to demographics: all modernising societies see a shift in people from outlying areas, usually rural, towards larger centres where opportunities are expected to be better. South Africa is no exception. An important segment of this movement is the school-going sub-population. This has led in turn to a densification of some school communities and growth of school sizes and a reciprocal dramatic decline in enrolment of others, where school sizes are shrinking. With this demographic shift comes inefficiencies, but also opportunities when considering the task of achieving 100% reading proficiency for all learners by age 10. For example, over 900 schools in the Eastern Cape have less than 100 learners. At least half of these are reported to have no or unsuitable sanitation⁴⁵. The inefficiency is principally that many shrinking schools dwindle to pupil numbers such that the small number of teachers teach multiple grades, they lose experienced staff by virtue of the same centrifugal movement and become expensive to maintain as viable educational institutions. Attempts by local authorities to close these inefficient state investments have met with resistance from a range of interest groups.

Use cost-savings from closing 'tiny' schools to fund transport and selective early retirement: An opportunity lies in a national effort to address the large number of small schools in the country. Such an effort will free up considerable resources for implementing a nation-wide systemic strategy. This will involve at least some of the following: a) persuading parents that their children are entitled to schooling by right, but not necessarily in a school nearby, on the grounds that they will in all likelihood receive a higher quality of schooling in better resourced schooling environments; b) arranging efficient transport for the children to school – such transport is already a reality in most provinces; c) transfer teachers to larger schools which are invariably closer to their homes and will reduce transport costs; d) offering attractive early retirement packages to teachers particularly those in the Foundation Phase and not

proficient at teaching reading.

Economies of scale will make new investments in teacher re-training possible: The greatest challenge will lie in devising a strategy that has systemic effects so as to approach the proficiency target set, but that is not a central focus of this note. The gains of closing small schools lie in a) cutting down on investment inefficiencies and freeing up resources for either more teachers in classes or for teacher re-training initiatives; b) reducing the teacher numbers for re-training; c) concentrating teachers in schools which will have better resources, better economies of scale, and a better trained teaching corps as well as stronger learners through internal selection dynamics. The learning gains will in all likelihood improve and be further enhanced when teachers are inducted into reading strategies.

'Stacking' reforms to make the most of incoming teacher demographic changes: In addition to demographic changes related to urbanisation, new research suggests that as many as half of all teachers will retire in the next 10 years. This unprecedented demographic change will also present opportunities to ensure that new incoming teachers are selected on merit and trained adequately. 'Stacking' these reforms – i.e. implementing them as a package of reforms rather than individually – will make them both more politically palatable, and also more effective since they would be harnessed towards the same goal: reading for meaning.

In short, demographic shifts offer opportunities for South African schooling to get more on the front foot to approach the national push required to achieve the reading proficiency target.



What are we doing right and what needs to change?

– Prof Vuyokazi Nomlomo (University of Zululand)

1. What are we doing right?

The dismantling of the numerous racially categorised schooling systems was one of the main achievements of South Africa after 1994. This was no mean feat.

South Africa has to be commended for her vision, and democratic educational policy frameworks that aim at enhancing inclusive and quality education post-apartheid. The National Development Plan 2030, for example, is a long-term vision to reduce inequalities and poverty in South Africa. This demonstrates the government's awareness of the value of education in alleviating poverty and advancing socio-economic growth and good health. However, when it comes to implementation, we are still far behind our vision.

Efforts have been made to support literacy teaching and learning over the past two decades of democracy. Collaboration with strategic partners to conduct large and small-scale projects to enhance early literacy and mathematics teaching and learning in basic education is commendable. Reading with meaning is prioritized as a key element of South Africa's vision to have literate citizens who are able to participate actively and meaningfully in socio-economic developments of this country.

2. What needs to change?

While good progress has been made in certain areas of education that include curriculum renewal, there are still glaring inequalities along racial and socio-economic status lines. Our schools are not diverse enough. Rural and township schools remain largely Black, accommodating essentially only home language speakers of African languages. And urban and suburban schools continue to have very few teachers who are home language speakers of African languages. Despite numerous attempts at curriculum renewal, equal access to educational opportunities remains a dream for many. This was starkly highlighted during the COVID-19 pandemic.

Many children in the Foundation and Intermediate Phases cannot read with meaning, and some read below the accepted grade level, even in their own home languages (Howie, et al., 2008; Pretorius & Klapwijk, 2016). The Progress in International Reading Literacy (PIRLS) and Annual National Assessment (ANA) results attest to this problem which is attributed to inadequate teacher training, inappropriate teaching pedagogies, and lack of parental involvement (Howie, et al., 2008; Meiklejohn, et al., 2021).

Coordination and targeting of intervention programs: A number of literacy intervention programmes have been conducted in the various provinces, but they are ad hoc and not well coordinated with regard to their impact on learners' reading abilities (Meiklejohn, et al., 2021). In addition, many literacy intervention programmes often target urban and semi-urban or township schools, and this exacerbates the disadvantage of rural children who are already marginalized with regard to access to adequate infrastructure and teaching and learning resources.

The Language of Learning and Teaching (LOLT) remains a barrier in children's learning, especially when they transition to English LOLT in Grade 4 (Milligan, et al., 2020; Nomlomo, 2014). Why must they transition to English at Grade 4 level? Research by educationists such as Bamgbose (2005), Cummins (2007) and others indicates that it is far better for learners to continue with the home language as medium, at least till the end of Grade 6. The Incremental Introduction of African Languages (IIAL) initiative is an attempt to make African languages accessible to all learners, but it seems that it has not been sufficiently implemented and has yet to flourish. It would help if all teachers were sufficiently proficient in an African language so that they could assist all the learners in their classes.

The Language of Learning and Teaching (LOLT) remains a barrier in children's learning, especially when they transition to English LOLT in Grade 4 (Milligan, et al., 2020; Nomlomo, 2014). Why must they transition to English at Grade 4 level? Research by educationists such as Bamgbose (2005), Cummins (2007) and others indicates that it is far better for learners to continue with the home language as medium, at least till the end of Grade 6. The Incremental Introduction of African Languages (IIAL) initiative is an attempt to make African languages accessible to all learners, but it seems that it has not been sufficiently implemented and has yet to flourish. It would help if all teachers were sufficiently proficient in an African language so that they could assist all the learners in their classes.

Recommendations:

The following are recommendations that could enhance children's reading for meaning by 2030:

- 1. Investing in school and community reading programmes** that should be well-coordinated, monitored and evaluated for their impact. This exercise should be done both at provincial and national levels, and adequate financial and human resources have to be provided.
- 2. Strengthening teacher professional development** with regard to the teaching of early reading in all South African languages. The teaching of reading in African languages should be targeted as there is still reliance on Western pedagogies in the teaching of reading.
- 3. The current initiatives of the Department of Higher Education and Training (DHET)** with regard to the establishment of Centres for African Language Teaching (CALTs) at different universities should be supported and sustained. These centres should be developed into research hubs for the teaching and learning of early literacy in African languages.
- 4. As far as researching reading instruction in African languages is concerned,** it will be crucial to have reading intervention programmes and large-scale longitudinal projects to enhance the development of early literacy in these languages and how they can be used as valuable tools in the transition to English LOLT – whenever it happens.
- 5. The possibility of prolonging the use of learners' home languages as LOLT up to at least the end of the Intermediate Phase,** with extra support for the teaching and learning of English as an additional language should be seriously considered. I refer you here to the successful longitudinal study done by the LOITASA Project in the Western Cape over a period of 10 years – 2002–2012 (Brock-Utne, Desai, Qorro & Pitman 2010).
- 6. Partnering with universities to ensure that the teacher education curricula prioritize the teaching of early reading in different languages,** and foster multilingual pedagogies and biliteracy.
- 7. Developing African languages for academic purposes and social inclusion.** Making African languages compulsory at school level for all learners who are English and Afrikaans speaking has long been debated in conferences without any resolution. This debate has to be resurrected.
- 8. Effective implementation of IIAL should be prioritized** to ensure that all South African learners have access to African languages. As the DBE is promoting it so actively, it makes sense to look at this policy afresh.
- 9. Strengthening strategic collaboration with different stakeholders** such as parents, community leaders and activists, government officials, academics, and NGOs on how to respond to the literacy crisis in a collective and effective manner.

References:

- Bamgbose, A. (2005). Mother tongue education: Lessons from Yoruba experience. In Brock- Utne, B. and Hopson, R.K. (eds.). *Language of Instruction for African Emancipation: Focus on postcolonial contexts and considerations*. Cape Town: CASAS.
- Brock-Utne, B., Desai, Z., Qorro, M. & Pittman, A. (2010). *Language of Instruction in Tanzania and South Africa – Highlights from a Project*. Rotterdam: SENSE Publishers.
- Cummins, J. (2007). Rethinking monolingual instructional strategies in multilingual classrooms: *Canadian Journal of Applied Linguistics*. 10(2): 221 – 240.
- Howie, S., Combrinck, C.M., Roux, K. Tshele, M. & Mokoena, G.N. (2017). *PIRLS Literacy Study 2016: South African Children’s Reading Literacy Achievement*. Pretoria: Centre for Evaluation and Assessment.
- Meiklejohn, C., Westaway, L. Westaway, A.F.H. & Long, K.A. (2021). A review of South African primary school literacy from 2005 – 2020. *South African Journal of Childhood Education*. 11(1):
- Milligan, L.O., Desai, Z. & Benson, C. (2020). A critical exploration of how language of instruction choices affect education equity. In Wulff, A. (ed.). *Grading Goal Four: Tensions, threats and opportunities in the Sustainable Development Goal on Quality Education*. Leiden: Brill Publishers, 116 – 134.
- Nomlomo, V. (2014). Reflections on the use of an African Language in Science Teaching and Learning in the Intermediate Phase: A case study in two Western Cape Primary Schools. *Alternations*. 13: 209 – 235.
- Pretorius, E.J. & Klapwijk, N.M. (2016). Reading comprehension in South African Schools: Are teachers getting it, getting it right? *Per Linguam*. 32(1): 1 – 20.



Factors shown by research to support and enhance reading comprehension

– Prof Lilli Pretorius (UNISA)

Preamble

Reading is a complex phenomenon. Improving the reading performance of thousands of individual learners across grades take time, improvement is incremental and learners vary in terms of where, how well and how fast they change, depending on where they were when improvement attempts started.

Likewise, education systems are complex organisations. Improving performance requires thousands of schools and teachers to change the way they do things. Teachers vary in terms of their willingness to change and where, how well and how fast they change, depending on where they were when improvement attempts started (their knowledge, dispositions, attitudes to teaching/learning, etc.).

Expecting too many changes on too many fronts too soon sets everyone up for failure. The goals and targets for change must be realistic and appropriate to the specific education context.

The South African (henceforth SA) education sector has eight years (2022–2030) to bring about improvements in reading performance such that by 2030 every 10-year-old child is expected to be able to read with meaning. This is a broad aspirational goal. How might it be broken down into manageable chunks and achievable targets?

This advisory note provides a broad framework and rationale about what routes to follow and why, in order to have a reasonable chance of achieving this goal. This advisory note does not provide a detailed roadmap for such a journey.

Factors shown by research to support and enhance reading comprehension

Reading comprehension (henceforth RC) is complex, multi-layered and multifaceted. Readers vary in terms of the learning milieu in which they find themselves, the instructional methods to which they are exposed, the skills they bring to the reading process, and the effort, persistence, accuracy and thoroughness they put into it. Reading research over four decades has found the following to be important factors in helping children learn to read for meaning:

- *Oral language proficiency in the language in which children learn to read impacts reading development. Children vary in their oral language proficiency (in Home Language or FAL); the stronger it is, the easier they learn to read and the more likely they will understand what they read.*
- *Explicit and systematic phonics instruction helps children crack the written or alphabetic code and develop decoding skills that are necessary (but on their own not sufficient) to enable comprehension.*
- *Developing reading and writing skills in tandem, in ways that reinforce mutual development.*
- *Exposing children to shared storybook reading from an early age helps build familiarity with the*

“story world” of books, develops narrative processing skills, builds up their linguistic as well as general knowledge and engages their interest in reading.

- *Having easy access to books/texts at different levels and opportunities to practice early reading skills on a daily basis and develop normative reading habits are both critical factors in building RC.*
- *Once children have developed decoding skills to enable them to read texts independently, their ability to understand texts on their own varies greatly. Explicit instruction in comprehension strategies improves RC and helps learners engage more deeply with texts.*
- *Having teachers ask an array of questions that include literal, inferential, integrative and evaluative questions helps learners engage more deeply with texts.*
- *Explicit instruction in text structure, genre conventions (e.g. narratives versus information texts) and how to read visuals in texts improves RC and helps learners engage more deeply with texts.*
- *The development of strong reading skills in the HL support reading in other languages.*

Attempts to improve reading performance need to take all these factors into account in some way or another.

Skilled decoders are likely to have better comprehension than less skilled decoders, just as children with more storybook, vocabulary or world knowledge are likely to perform better on comprehension measures than those with less knowledge in these domains. Similarly, better working memory, more inference generation, greater use of monitoring and other comprehension strategies all enhance RC.

Teacher training is critical, especially in the Foundation Phase, as this is when foundational reading and meaning making skills are developed and formative reading attitudes and habits formed. Teachers who lack content and pedagogical content knowledge about reading and its development, and who are themselves not skilled readers, can seriously impede learners’ early reading trajectories.

1. What are we doing right as a country?

There are many factors currently in place which, in principle, can help to inform, guide, support and strengthen the education sector in achieving better reading outcomes.

- African languages serve as the LoLT in Foundation Phase in 75% of primary schools in SA, providing a 3-year window of opportunity for developing reading skills in the HL which not only serves as a good basis for future learning but can also support reading in English.
- The President in his 2019 SONA address made the achievement of reading for meaning by age 10 a national priority, thus providing much needed top down leadership. In addition, the DBE has consistently made early reading literacy a priority in its policy documents.
- The existing curriculum (CAPS 2011) provides quite detailed, specific guidelines for reading instruction. Although there are aspects of CAPS that could be revised and finetuned, it is an improvement on the inappropriate imported post-1994 curriculum that preceded it.
- Specific attention has been given to the teaching of early reading in African languages in the National framework for the teaching of reading in African Languages in the Foundation Phase (2020), a corollary to CAPS.
- The Research Coordination, Monitoring and Evaluation directorate within the DBE provides leadership and highly competent research skills, and has initiated large scale early literacy interventions from which large, longitudinal datasets have been built up in different African languages on an array of early foundational literacy skills and from which benchmarks and threshold can be determined for different language groups.
- Funda Wande is a leading NGO in pioneering evidence-based in-service teacher training in early

literacy development in the African languages and EFAL. SIRP (from UJ) has also developed course material in isiZulu and Sesotho for BEd courses related to reading instruction in Foundation Phase.

- *There are many more print resources in African languages in SA than in other African countries. There are several experienced NGOs (Wordworks, Nal'ibali) that are active in the field of early literacy that provide training and print resources in the African languages, as well as sets of graded readers, guidelines for using them and word frequency lists (The Molteno Institute).*
- *An invaluable body of research literature on economics and education has also been generated by Resep (University of Stellenbosch).*
- *A lot more research on early literacy is being undertaken, especially in the African languages, and by speakers of African languages, that broadens and deepens our understanding of reading in them.*
- *SA has by now accumulated very large literacy databanks on different aspects of reading (decoding, fluency and RC) across nearly all SA languages: PIRLS (RC in all languages in Grade 4; RC in English, Afrikaans and Zulu in Grade 5); the Nguni and Sotho languages (foundational reading Grade 1-5); ESL (Grades 1-5), and currently data sets on Afrikaans, Venda and Tsonga are also being collected. These are invaluable data sources that help inform, monitor and guide policy and practice, and help deepen our understanding of how reading develops in various languages over time in the SA context, in less than ideal educational contexts that differ from the more affluent Eurocentric contexts of the global North.*
- *The Right to Read and Write document (2021), prepared by a formally constituted sub-committee of the South African Human Rights Commission, provides a legal framework as well an assessment framework for supporting children's right to be taught to read with meaning by age 10.*

2. What are we getting wrong as a country?

Schooling systems are complex and multi-layered, they have a history, and there are many contributory factors that lead to high or low performance, and that can affect attempts to improve performance.

The SA schooling system has an extremely weak Foundation Phase. PIRLS distinguishes four RC benchmarks which reflect different levels of reading comprehension ability, viz. Advanced (+625 points); High (550-624); Intermediate (475-549) and Low (400-474). Readers at the Low International Benchmark (LIB) display 'basic' reading comprehension skills, i.e. when reading on their own these readers can generally answer some of the questions, usually relating to explicitly stated information in the text, and some questions requiring straightforward inferences. These are the so-called 'easy' questions. In 2016 PIRLS, 78% of SA learners could not read for meaning at this basic level (as opposed to 4% internationally). **This indicates that learners enter Intermediate Phase hardly able to read.** Even high performing schools produce readers who cannot properly engage with texts at a deeper level. Only 0.2% of SA learners could read at the Advanced benchmark (compared to 10% internationally), and only 2% reached the High benchmark (compared to 37% internationally). Our 'good' readers (those at the 75th percentile) are reading at the same level as weak readers (those at the 25th percentile) in high performing countries. Learners who get off to a bad reading start tend to remain poor readers.

- The best reform models depend on implementation; in the Foundation Phase, there is a gap between policy and implementation. Superficial compliance hardly qualifies as implementation.
- There is a lack of a common understanding and shared vision of what reading success in different languages looks like in the Foundation Phase. This results in low teacher expectations, lack of clarity regarding what constitutes effective classroom practices and the normalisation of mediocrity in learner performance.
- There is a lack of consequence management in the education sector at national and provincial level (ineffective school governance, corruption, poor implementation of the curriculum, inadequate management and utilisation of print resources, etc) which affects literacy performance in schools.

- Highly complex yet reliable organisations such as the aviation industry are geared to avoid catastrophic failures. Given the critical role of reading in educational and life success, education systems should be alert to potential catastrophic lapses in critical learning/teaching phases of schooling, but such awareness is lacking (e.g. having Grade 1 learners who have minimal knowledge of letter-sounds after a full year of schooling amounts to an early catastrophic failure in the Foundation Phase, yet most principals, Foundation Phase HODs and teachers are currently unlikely to even be aware of this early faultline (and how to recognise it) in reading development).
- Attempts to improve reading performance are hampered by poor teacher training, past and present, resulting in poor content and pedagogical content knowledge about early literacy and its development. There is great variation and inconsistency in the way tertiary institutions currently train Foundation Phase teachers. Although establishing foundational reading skills would seem to be a fundamental premise in training Foundation Phase teachers, there is paradoxically a disdain for code-based reading skills in some education approaches that privilege meaning above all in the written medium.

3. What needs to change (and how might that happen) if we are to reach the goal of all children reading for meaning by age 10 by 2030?

The Foundation Phase needs to be strengthened. **Context** and the notion of **thresholds** in reading development are important factors to consider when making decisions about how best to do so.

Context is important. Reading performance and decisions about how best to improve it are relative. As PIRLS results show, RC performance and its patterns of distribution in high income countries is vastly different from those in middle and low income countries. SA education stakeholders need to be aware of prevailing realities and make informed decisions about the way forward for now, based on available SA evidence.

A **threshold**⁴⁵ is a skill level below which potential meaning making processes cannot really operate. RC manifests in different ways and to different degree if thresholds are met, but comprehension hardly occurs, if at all, below the threshold. Thresholds are important for moving decoding skills along the developmental trajectory and include mastery of letter-sound knowledge to enable word reading, and oral reading fluency (ORF) that reaches an accuracy and speed threshold to enable the allocation of memory and attentional resources to meaning making during reading.

Current SA realities

- When PIRLS results below the basic LIB level are disaggregated, the following pattern of reading performance emerges, characterised by degrees of weak RC ability:

Figure 1: Disaggregating reading performance in SA (PIRLS 2016)⁴⁶

LIB	400 - 475	22%
Below LIB	< 399	78%
Just below LIB: Weak	390 - 399	5%
Very weak	300 - < 390	32%
Extremely Weak	< 299	42%

⁴⁵ Technically, benchmarks refer to normative goals that most children should meet, while thresholds refer to minimal performance levels, below which further progress in reading is difficult to achieve.

⁴⁶ Pretorius & Roux (pending). Digging deeper into the surface: What can readers' responses to 'easier' questions tell us about emerging reading comprehension performance?

Given the strong research evidence worldwide that skilled decoders perform better in reading comprehension than less skilled decoders, the SA profile of very poor reading performance below the LIB suggests that the decoding skills necessary (albeit not sufficient) for RC are not yet in place.

- The large Nguni and Sotho datasets provide direct evidence of poor decoding skills among SA learners. Ardington et al. (2021) found that a minimum fluency threshold of 20wcpm enabled Nguni learners to read words slightly more accurately and less effortfully. Learners in Grade 2 or older reading below that threshold were in a non-comprehension zone. A minimum ORF threshold for Grade 2 learners was thus proposed. By the end of Grade 3, many learners (ranging from 24–47%, depending on the sample) had not managed to reach this minimum Grade 2 fluency threshold, while less than half had reached the Grade 3 fluency benchmark of 35 wcpm (cf. Ardington et al. 2021, Fig. 8). These results (derived from a dataset of 12,000 learners) provide strong evidence that the majority of learners go into Grade 4 with poorly developed decoding skills which puts them at high risk of RC failure.

How best to change reading comprehension (RC) performance in the current context?

Reading developmental is incremental. Extremely weak readers in an education system don't suddenly jump from being non-readers to intermediate or advanced readers.

Converging evidence indicates that poor decoding skills in Foundation Phase seem to be a major determinant of poor reading performance for the majority of SA learners at this point in time. This requires urgent and targeted attention – without subtracting instructional time and attention from RC.

Decoding skills are finite, they can be taught quickly and to high mastery levels, so improving decoding skills will be low hanging fruit that show gains in performance, boost motivation and build greater confidence in the education sector.

SA needs a two pronged approach that will cater to learners (and schools) performing at different levels:

- i. Shifting the large numbers of **extremely** weak and **very** weak readers to the next level, viz. to weak readers who are able to read at a basic level (similar to the LIB). This is done by strengthening their decoding skills to reach or exceed threshold levels;
- ii. Shifting readers who can read fluently and are already performing at or above a basic level to higher levels of RC ability through explicit RC instructional methods.

Approach (i) does NOT mean that instructional time should only be spent on decoding. On the contrary, a balanced approach to reading in the Foundation Phase needs to be maintained, with attention given to all aspects of language and literacy development as specified by CAPS. The reform shift occurs more at an awareness, assessment and monitoring level of foundational decoding skills (Are any red lights flashing? If so, target the skill and teach it to mastery level). Regular assessment and monitoring of specific decoding skills at different grades should take place throughout FP to ensure that large numbers of learners do not fall below decoding thresholds, e.g. achieving recommended benchmarks for letter-sound knowledge in Grade 1; ensuring learners achieve or exceed the recommended minimum fluency threshold in Grade 2 and can at least answer literal and some inferential questions in RC; ensuring that Grade 3 learners achieve or exceed the recommended Grade 3 fluency benchmarks and can answer not only literal and some inferential questions, but also integrative and evaluative questions in formal RC assessments.

Approach (ii) requires that in schools where decoding thresholds are met, attention should be given to the assessment and monitoring of RC abilities to ensure that learners are challenged to higher and deeper levels of RC. Instructional focus should be on explicit teaching, modelling and application of RC strategies and other methods that have a proven research track record of enhancing meaning making while reading and talking about texts. This is fleshed out in a bit more detail in Table 2 in the Appendix.

Approach (ii) requires that in schools where decoding thresholds are met, attention should be given to the assessment and monitoring of RC abilities to ensure that learners are challenged to higher and deeper levels of RC. Instructional focus should be on explicit teaching, modelling and application of RC strategies and other methods that have a proven research track record of enhancing meaning making while reading and talking about texts. This is fleshed out in a bit more detail in Table 2 in the Appendix.

Such an approach would require teachers to be provided with quick and easy assessment tools to monitor decoding skills, guidelines for how to interpret the results, identify learners who are struggling to develop decoding skills, and how to help them get back on track.

Similarly, teachers would need to be provided with exemplars of grade appropriate RC assessments (of appropriate length, with a variety of RC questions that tap different levels of RC, using different question formats), a marking rubric, guidelines on how to interpret the results, identify learners who are struggling to read at a basic level, and how to help them improve their RC using explicit RC instructional approaches.

A two-pronged approach like this would make the 2030 goal more achievable. For monitoring purposes, the general goal of reading for meaning would need to be reframed along more specific lines, for example (just examples...):

- By 2030, 10-year-old children at the 50th percentile are expected to achieve or exceed Grade 3 fluency benchmarks in the respective language in which they did Foundation Phase;*
- By 2030, 10-year-old children at the 50th percentile are expected to read for meaning at a basic level in formal RC assessments, i.e. they will be able to correctly answer questions that require the location of explicitly stated information in texts and possibly also questions that require the making of straightforward inferences.*
- By 2030, 10-year-old children at the 75th percentile or above are expected to exceed Grade 3 fluency benchmarks and read for meaning at deeper levels of comprehension (e.g. display intermediate, high or advanced levels of RC)*

Appendix: Table 2: Targets across the grades and reading levels

	Learners	Teachers
Grade 1	<p>By the end of Grade 1, the majority of learners should be able to know at least 40 letters correct per minute (LCPM) and be able to blend letter-sounds in the Home Language. This threshold holds for all SA languages.</p>	<p>Grade 1 teachers made aware of this benchmark threshold, why it is important for subsequent reading development, how best to teach phonics, be given easy-to-use tools to assess letter-sound knowledge, guidelines on how to interpret the results and how to adapt instruction accordingly. Teachers should be held accountable if their learners do not meet this threshold.</p> <p>Teachers should continue to develop language, writing, vocabulary and reading comprehension as required by CAPS. Shared storybook reading should remain a compulsory instructional method for modelling meaning making processes and strategies in texts and to nurture reading for pleasure.</p> <p>Every Grade 1 teacher should have a functional reading corner in his/her classroom.</p>
Grade 2	<p>By the end of Grade 2, all learners should be able to:</p> <ul style="list-style-type: none"> read at a minimal oral fluency rate as specified for the different language groups. display basic reading comprehension abilities by answering, minimally, literal and straightforward inferencing questions correctly in a formal reading comprehension assessment 	<p>Grade 2 teachers should be made aware of the Oral Reading Fluency (ORF) threshold, why it is important for subsequent reading development, how best to strengthen it, be given easy-to-use tools to assess it, guidelines on how to interpret the results (according to language group) and how to adapt instruction accordingly. Teachers should be held accountable if their learners do not meet this threshold.</p> <p>Grade 2 teachers should be made aware of the four different levels of comprehension, be able to recognise the differences between them, and ask a range of questions in class. They should be shown how to teach reading comprehension in more explicit ways, and explicitly show readers how to find answers in the text to different questions. They should be given exemplars of well-designed reading comprehension texts, appropriate to Grade 2 in terms of text length and difficulty.</p> <p>Teachers should continue to develop language, writing, vocabulary and reading comprehension as required by CAPS. Shared storybook reading should remain a compulsory instructional method for modelling meaning making processes and strategies in texts and to nurture reading for pleasure.</p> <p>Every Grade 2 teacher should have a functional reading corner in his/her classroom.</p>
Grade 3	<p>By the end of Grade 3, most learners should be able to:</p> <ul style="list-style-type: none"> achieve or exceed the Grade 3 oral reading fluency benchmark as specified for the different language groups; display basic reading comprehension abilities by answering, minimally, literal and straightforward inferencing questions correctly in a formal reading comprehension assessment. A number of Grade 3 learners should also be able to achieve more advanced reading comprehension levels by correctly answering integrative and evaluative questions. 	<p>As in Grade 2 except appropriate for Grade 3 in terms of text length and difficulty.</p> <p>Every Grade 3 teacher should have a functional reading corner in his/her classroom.</p>

What knowledge and skills do teachers need to teach reading?

– *Nick Taylor* (Senior Researcher, JET Education)

We South Africans are a truly perverse lot, and no more strongly does this national characteristic exhibit than in the field of teacher education. On one hand, we put young people, during their most receptive school-leaving years, through four years of a full-time Bachelor of Education (B.Ed) study, during which time they can do no better than master 50% of the primary school maths curriculum (much of which they knew anyway) and fail to learn how to teach reading. The Minimum Requirements for Teacher Education Qualifications (MRTEQ) states unequivocally that all teachers of grades 1–6 learners should know how to teach mathematics, languages and the art of reading. Clearly, these teachers, through no fault of their own, are not equipped to teach the primary school curriculum. Then, we take these qualified but incompetent teachers and, for the rest of their lives, we spend hundreds of millions on in-service training (CPD) annually playing catch-up!

Up to 4 or 5 years ago, everyone seemed to know about the poor preparation of our graduate teachers, except the constituency responsible for the situation, the university Education Faculties and Schools of Education. Thankfully the situation is changing, with teacher educators beginning to wake up to the enormity of the task they are currently not addressing anywhere near adequately. A first question in constructing an appropriate curriculum for teacher preparation is to describe the kinds of knowledge and skills required to teach reading effectively, which is what I attempt to do below.

Disciplinary or subject content knowledge is the conceptual spine of any subject. In the case of reading comprehension a teacher can be said to have mastery of the discipline if she is able to provide appropriate answers to items at all four levels of the PIRLS Framework (Table 1). The second type of knowledge required for good teaching is pedagogical content knowledge (PCK), which includes an understanding of how reading should be taught. It includes understanding both how to diagnose the reasons why a struggling learner is unable to read, and how to remediate such blockages. Finally, it is one thing to know how to teach but quite another being able to teach effectively with real children in actual classrooms. A teacher who possesses pedagogical competence is able to mobilise disciplinary knowledge and PCK into a set of classroom routines through which learners learn to climb the PIRLS ladder of reading comprehension. How much and what kinds of disciplinary knowledge and PCK do teachers require in order to teach effectively? I examine this question in terms of the PIRLS Assessment Framework which identifies a number of reading literacy processes at four levels of cognitive complexity (Table 1).

Table 1: Four levels of reading comprehension in the PIRLS Framework

International Benchmark	Processes of reading comprehension	SA Scores (%)		International Median (%)
		Teachers (using SACMEQ 2007, see Taylor, forthcoming)	Learners (using PIRLS 2016)	
Advanced (AIB)	Evaluate and critique content and textual elements	36%	0%	10%
High (HIB)	Interpret and integrate ideas and information	37%	2%	47%
Intermediate (IIB)	Make straightforward inferences	54%	8%	82%
Low (LIB)	Locate and retrieve explicitly stated information	73%	22%	96%

Prereading: the importance of oral proficiency

Although the ability to speak is almost ubiquitous, the speech resources of children become inequitably distributed as they grow. This is where middle-class advantage begins: from birth, educated parents continuously speak to their children in certain ways, systematically building their oral cognitive academic literacy proficiency (CALP), thus enabling them to make a smooth transition to the higher levels of reading ability. Less well-educated parents tend to speak mainly in basic interpersonal communication (BIC) mode. Teachers cannot do much about what linguistic resources their charges bring to school, but they can apply themselves to building learners’ vocabulary at pre-school and early grade levels, such as reading aloud to the class daily, explaining key words, and leading class discussions which develop learners’ syntactic repertoires. Success with such routines requires teachers to know the lists of high frequency words to be learnt at each reading level in the relevant language, how to source the books and stories containing these words, formulating appropriate explanations, keeping track of words taught, and assessing student progress.

Low International Benchmark (LIB): Locate information explicitly stated

Reading at the LIB requires an immediate understanding of the text. Little or no inferring or interpreting is involved. Reading tasks that may exemplify this type of text processing include identifying information; looking for specific ideas, words or phrases; identifying the setting of a story (e.g., time, place); and finding the main idea. In the area of disciplinary knowledge, evidence from SACMEQ teacher tests indicate that about a quarter of SA Grade 6 teachers do not function competently at this level.

Regarding the PCK that may help teachers to guide their learners onto the LIB, research indicates that acquiring the ability to recognise words requires practice with letters and sounds from kindergarten and continuing into the early grades, with explicit instruction and practice in spelling-sound correspondences and strategies for focusing on print in identifying unknown words. An explicit focus on learning key phonemes as tools to assist in recognising words is important. The oral word-building repertoires described above are continued and extended into writing. The teacher needs to be skilled at quick assessment of key skills and able to diagnose blockages and devise remedial exercises during the course of her daily routine.

Intermediate International Benchmark (IIB): Make Straightforward Inferences

Attainment of the IIB is dependent on readers constructing meaning from text, making inferences about ideas or information not explicitly stated. Regarding the disciplinary knowledge required by teachers to assist their learners to attain the IIB, nearly half of SA Grade 6 language teachers are not adept at this level, and we would not expect early grade teachers to be any better educated.

The PCK demands of teachers at this level would be to focus oral and written exercises around more challenging cognitive tasks involving inference, generalisation, main point of a text and relationships between characters. A systematic study of selected literature has been demonstrated to develop comprehension skills. Leading classroom exercises of this kind would require teachers to select suitable texts, and set tasks at the appropriate level and, most important, to assess and explain to learners the appropriateness of their answers. Since these processes depend on the teacher's own linguistic competence, the higher learners progress up the Framework the more important teacher disciplinary knowledge is in formulating effective classroom strategies.

High International Benchmark (HIB): Interpret and Integrate Ideas and Information

As readers interpret and integrate ideas and information in the text, they make connections that are not only implicit, but that may be open to some interpretation based on their own perspective. Just over one-third of SACMEQ Grade 6 language teachers exhibit proficiency at this level, severely inhibiting the ability of most teachers to convey to learners these levels of textual meaning.

Advanced International Benchmark (AIB): Examine and Evaluate Content, Language, and Textual Elements

As readers examine and evaluate the content, language, and elements of the text, the focus shifts from constructing meaning to critically considering the text itself. The teacher's own disciplinary knowledge becomes paramount in enabling her to point out how any text uses syntactical and rhetorical devices to convey meaning.

Conclusion

Given the focus of attention and long hours of study required to adequately master an ordered body of knowledge, acquiring a solid foundation of disciplinary knowledge is best done during the intensive period of full-time study afforded by Initial Teacher Education (ITE). On the other hand, pedagogical competence is best honed in the classroom once teachers enter service. The theoretical considerations and empirical evidence which contribute to the development of PCK are also best encountered systematically during ITE, but they immediately become subject to confirmation, refutation and elaboration once tested in the classroom. All of this requires that, in order for teachers to maintain a productive relationship between pedagogical theory and practice, they are not only highly competent in disciplinary knowledge and PCK, but also schooled in a research approach to their own teaching.

References

- Biemiller, A. (2012). Teaching vocabulary in the primary grades: Vocabulary instruction needed. In Baumann, J. and Kame'enui, E. (Eds.) *Reading Vocabulary: Research to Practice* (Second). Guilford Press.
- Mullis, I., Martin, M., Foy, P., & Hooper, M. (2017). *PIRLS 2016: International Results in Reading*. TIMSS & PIRLS International Study Center.
- Mullis, I., Martin, M., Kennedy, A., Trong, K., & Sainsbury, M. (2009). *PIRLS 2011 Assessment Framework*. International Association for the Evaluation of Educational Achievement.
- Snow, C., & Juel, C. (2005). Teaching Children to Read: What Do We Know about How to Do It? In Snowling, M. and Hulme, C. (Eds). *The Science of Reading: A Handbook*. (pp. 501–520). Blackwell Publishing Ltd.
- Taylor, N. (forthcoming). The PIRLS Assessment Framework: Implications for teacher education, in van Staden, S. (Ed.) *Tracking changes in reading literacy achievement over time: A developing context perspective*. Leiden: Brill Publishers.



Measuring what Matters

– *Servaas van der Berg* (Resep, Stellenbosch University)

What are we doing right?

Participation in international assessments in the past two decades has made South Africans more aware of the weak state of the education system and the low quality of education in most schools. Regular information on educational performance from participating in PIRLS (on reading and literacy in Grade 4), SACMEQ (reading and mathematics in Grade 6) and TIMSS (Mathematics and Science performance in both Grade 5 and Grade 9) has also allowed us to measure progress, albeit from a low base.

Policy stability in education for a number of years, in particular with regard to the CAPS curriculum framework, may have contributed to gradual educational improvement.

Prioritisation of reading: President Ramaphosa's SONA speech in 2019 elevated reading for meaning by age 10 to the level of a foundational goal. This raised the salience of reading as an indicator of progress and the foundation phase's importance within schools.

What are we doing wrong as a country?

Unlike many of its neighbours, South Africa has no common (systemic) assessment in primary school. Countries in the region have admittedly been reducing the stakes of what used to be Primary School Leaving Examinations. But because these were historically so important, much attention is still paid by parents and communities to how individual schools perform in such tests, even if they no longer determine secondary schools access. South Africa has no such common system-wide assessments; the Annual National Assessments (ANAs) in 2014 were the last attempt at introducing such measures. The lack of common assessments means that parents, teachers and indeed learners themselves get no consistent feedback on learner performance relative to their peers. For the many learners performing at low levels, school-based assessments are in any event all high stake, as they determine progression to the next grade. Due to repetition at earlier grades, more than half of Grade 10 learners are over-aged and one in five at least three years over-aged.

The inconsistency in school-based assessments means that parents and children receive noisy signals about learner performance, which provides little usable information, but also that criteria for advancing to the next grade vary greatly among schools and grades.

Currently we have no systematic measurement of how many children can read in individual primary schools: Despite the ostensible importance of the goal that children should be able to read for meaning by age 10, as spelt out by President Ramaphosa, there has been no attempt by the education authorities, national or provincial, to follow this up with systematic measurement of how many children and in what provinces, education districts, quintiles and schools can read for meaning. Such measurement is needed both to understand the extent of the problem and to provide benchmarks for systematically measuring improvement.

There has been no encouragement of a reading culture. In the 2013 SACMEQ test, nearly 80% of grade 6 learners were in households containing fewer than 20 books; only one in eight were in households with more than 40 books. Furthermore, many of the books would not be appropriate for children, most would not be available in their home language, and in most households, there is little example of reading as a regular activity.

What needs to change to reach the goal of all children reading for meaning by age 10 by 2030?

Newly proposed sample-based national assessments will not function as an accountability tool:

The DBE is currently instituting a new sample-based national assessment to replace the Annual National Assessments in Grades 3, 6 and 9. This will provide a regularly updated picture of progress with reading at a systemic level, and a large sample size will also allow progress to be measured at provincial level. Though useful for policy makers at system level, this will not provide information at the level of the school and classroom as the ANAs did. It will thus not function as an accountability tool.

The need for common assessments per grade. Common assessments within groups of schools have become more common in recent years, with marking within schools by the teachers themselves. This is to be encouraged, but still does not provide enough systematic and consistent information for learners and parents. Introducing a single national assessment of home language (and in higher grades also first additional language) for each grade in one term, to replace the internal assessment for that term, could still serve as an important feedback mechanism on reading comprehension (even if marked by teachers themselves, leading perhaps to greater variation in marking than is optimal). Schools should then provide a report card to parents, containing their child's performance in this assessment, as well as the performance of the class, school, district and quintile. Such a national assessment would also make teachers more aware of the standard expected of them; some analysts believe that the Annual National Assessments may have contributed to such greater awareness among teachers and of how to assess. Moreover, for learners this assessment would not be high stakes, though it may strengthen accountability.

Emphasising reading fluency as a necessary (and easily measurable) component of reading: Now that there is broad consensus on the importance of learning to read, this should be measured throughout the system. One way of doing so is to emphasise reading fluency:

- **Reading competitions:** Hold reading fluency competitions and provide awards for good reading performance within the school for each grade. (Awards by gender could also be considered.)
- **Principals and SMTs:** Require principals or another member of the senior management team to regularly test reading fluency of a random selection of five learners per class in grades 1 to 4, and to give monthly feedback to teachers and to the SMT. This would give content to the instructional leadership role of principals.
- **Subject advisers:** Require subject advisors or other district officials that visit schools on each occasion to test the reading fluency of a random selection of learners from a random selection of Foundation Phase classes. They must report back on this to the district.
- **Increasing access to print material:** To support early reading acquisition, children must have access to reading material. Small print runs and other factors lead to high prices and limited availability of books in African languages. Government could intervene in two ways:
 - ◇ **Provide subsidies** to authors and publishers of reading material for young children in African languages.
 - ◇ **Allocate more funds**, through the conditional grants to provinces, to the acquisition of books in African languages for young children. The brief province-wide roll-out of the isiXhosa Anthologies of Graded Readers in Grades 1–3 in the Eastern Cape in 2019/20 showed that this is possible and at very low cost (~R15/anthology).