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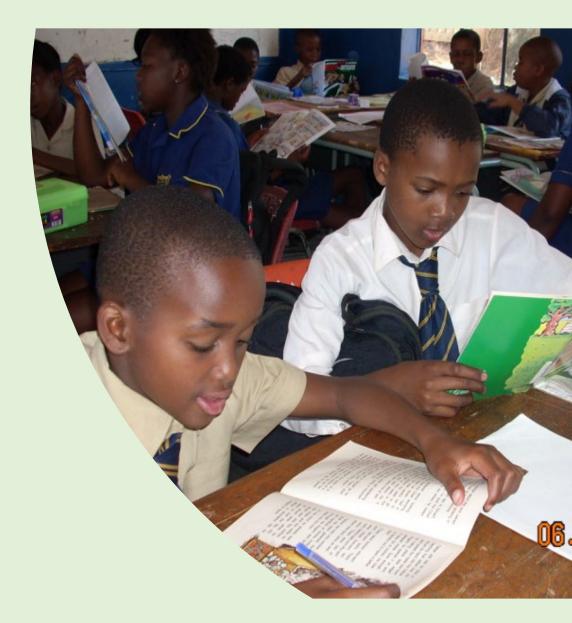
The Primary Teacher Education (Prim TEd) Project: How did we get to the literacy standards?



OUTLINE

The Consolidated Literacy Working Group (CLWG)

- Rationale and aims
- Work modus operandi
- Underpinnings of the Prim TEd approach
- Broader literacy context and SA schooling context
- What does research tell us about early reading performance?
- What does research tell us about effective reading instruction?



LAUNCHING READING ROCKETS

(REQUIRES THE TRAINING OF ROCKET SCIENTISTS)

In schooling systems around the world, by the end of Grade 3 children are expected to be able to read accurately, at a steady pace (grade appropriate), with meaning and enjoyment.

Do ITE programmes in South Africa prepare teacher trainees for this?





2016 PIRLS LITERACY

	Did not reach lowest benchmark (cannot read for meaning or answer simple, literal questions)	Reached lowest benchmark (can answer literal questions)
N Sotho	93%	7 %
Setswana	90%	10%
Tshivenda	89%	11%
isiXhosa	88%	12%
Xitsonga	88%	12%
isiZulu	87%	13%
isiNdebele	87%	13%
siSwati	84%	16%
S Sotho	82%	18%
English	57%	43%
Afrikaans	56%	44%
SA Total	78%	15%

WHAT DO READING TEACHERS NEED TO KNOW?

Three areas of knowledge that pose challenges for many SA teachers: (NEEDU, 2013; Taylor & Taylor, 2013; Pretorius 2014).

Content knowledge

• Knowledge *about* the discipline/subject taught, e.g. knowledge of the language(s) taught and used, literacy (specifically reading and writing)

Pedagogic content knowledge

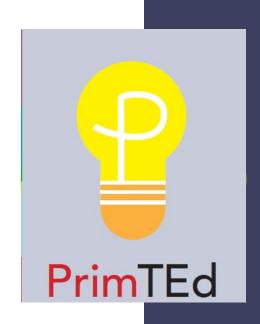
• Knowing *how* to teach language/reading/writing effectively. The transformation of conceptual knowledge into knowledge-in-practice.

Curriculum knowledge

• Being familiar with the details of what the curriculum specifies at each grade level, e.g. knowing CAPS and other education policy documents

RATIONALE FOR PRIM TEd

- Primary education in South Africa is in crisis:
 - Poor learner performance
 - Teachers' own lack of knowledge
- Literacy and mathematics are pivotal subjects at primary school
- Wide variations between initial teacher education (ITE) programmes at different higher education institutions
- There is a need to focus on ITE programme practices at universities in order to improve the quality of programmes:
 - Content, depth and breadth
 - Practice-theory balance



SEVEN WORKING GROUPS within PRIM TED

- 1. Consolidated Literacy Working Group (African languages and EFAL)
- 2. Number sense and algebra
- 3. Geometry and measurement
- 4. Mathematical thinking
- 5. Knowledge management and materials development
- 6. Assessment (of BEd students' literacy and numeracy)
- 7. Work Integrated Learning (WIL)

CONSOLIDATED LITERACY WORKING GROUP: CATEGORIES OF SUB-PROJECTS

- Annotated bibliographies, literature reviews and research
- Development of core standards for teachers of literacy
- Audits of Higher Education Institutions' qualifications, courses (modules) and materials related to literacy and language
- Development of curriculum, course and materials frameworks
- Resource repository



WORK MODUS OPERANDI

2016 - 2019

- 3 groups amalgamated into one
- Prof Aitchison CLWG oversight
- Aneesha Mayet project manager (Wits based)
- Getting together occasionally for 1-2 discussion days to plan, strategise
- 6 writing retreats over weekends to consult and do the formal writing up
- Literature reviews and writing in own times (usually weekends)
- National working groups with Numeracy (x2 a year)
- 2-day workshops with education stakeholders to share work done, to invite critical and constructive feedback, to revise documents
- All work accessible on Jet website

CONSOLIDATED LITERACY WORKING GROUP: Data sources

Annotated bibliographies, literature reviews and research

- 1. Reading research in African languages 2004-2017
- 2. Reading research in EFAL in South Africa 2007-2017

Website address:

https://www.jet.org.za/clearinghouse/projects/primted/resources/language-and-literacy-resources

APPROACH AND UNDERPINNINGS

What does research say about early reading development in general?

How can this inform ITE programmes?

What does research say about early reading in SA context?

How can this inform ITE programmes?

What does research say about effective reading instruction (in alphabetic languages)?

How can this inform ITE programmes?

SMALL AND LARGE PROBLEM SPACES IN READING

IF SA is performing so poorly in reading comprehension, is comprehension the stumbling block?

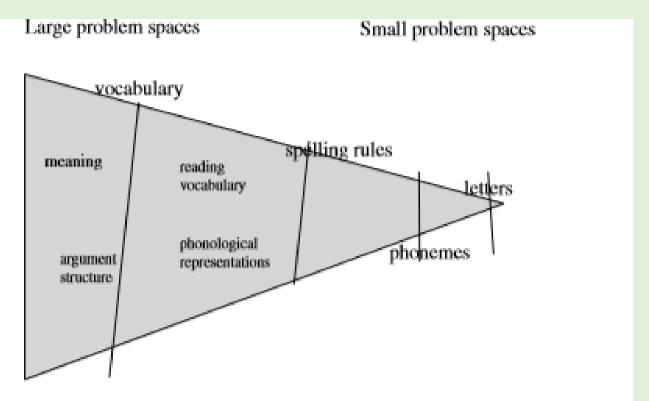


FIGURE 7.4. A representation of the various problem spaces associated with literacy.

Country	Average Scale Score	Reading Achievement Distribution
Russian Federation	581 (2,2) N	
3 Singapore	576 (3,2) h	
† Hong Kong SAR	569 (2,7) h	
Ireland	567 (2.5) h	
Finland	566 (1,8) h	
Poland	565 (2,1) h	
Northern Ireland	565 (2,2) h	
Norway (5)	559 (2,3) h	
Chinese Taipei	559 (2.0) h	
England	559 (1,9) h	
2 Latvia	558 (1,7) N	
Sweden	555 (2,4) h	
Hungary	554 (2,9) h	
Bulgaria	552 (4,2) h	
† United States	549 (3,1) h	
Lithuania	548 (2,6) h	
Italy	548 (2,2) h	
2 Denmark	547 (2,1) h	
Macao SAR	546 (1.0) h	
† Netherlands		
	545 (1,7) h	
Australia	544 (2,5) h	
Czech Republic	543 (2,1) h	
12 Canada	543 (1,8) h	
Slovenia	542 (2,0) h	
2 Austria	541 (2,4) h	
Germany	537 (3,2) h	
Kazakhstan	536 (2,5) h	
Slovak Republic	535 (3,1) h	
3 Israel	530 (2,5) h	
2 Portugal	528 (2,3) h	
Spain	528 (1,7) h	
Belgium (Flemish)	525 (1,9) h	
New Zealand	523 (2,2) h	
France	511 (2,2) h	
PRLS Scale Centerpoint	500	
2 Belgium (French)	497 (2,6)	
Chile	494 (2,5)	
1 Georgia	488 (2,8)	
Trinidad and Tobago	479 (3,3)	
Azerbaijan	472 (4,2)	
2 Matta	452 (1.8)	
United Arab Emirates	450 (3,2)	
Bahrain	446 (2,3)	
Qatar	442 (1,8)	
Saudi Arabia	430 (4,2)	
Iran, Islamic Rep. of	428 (4.0)	
Oman	418 (3,3)	
Kuwait	393 (4,1)	
Morocco	358 (3,9)	
Egypt	330 (5,6)	
South Africa	320 (4,4)	



2016 PIRLS LITERACY BENCHMARKS: SA AND INTERNATIONAL PERFORMANCE

Benchmark descriptors (according to	International	SA mean
question types)	mean	
Learners not able to reach the lowest	4%	78%
benchmark (i.e. could not read for		
meaning)		
Learners could read for meaning at some	96%	22%
level		
1. Focusing on and retrieving explicitly	14%	15%
stated information		
2. Drawing straightforward conclusions	35%	6%
3. Understanding and integrating ideas and	37%	2%
information		
4. Examining and evaluating content,	10%	0.2%
language and textual elements		

COMPREHENSION CRITERIA

(McCormick 1995:100)

INDEPENDENT LEVEL	98% decoding accuracy 95% level of comprehension	Highly skilled readers who can effectively learn from texts appropriate for that specific maturational level.
INSTRUCTIONAL LEVEL	95% decoding accuracy75% comprehension	Readers who do not have major reading problems but who benefit from reading instruction at their maturational level.
BORDERLINE LEVEL	90-94% accuracy in decoding 55-74% accuracy in comprehension	These readers need to be given additional reading exposure and practice.
FRUSTRATION LEVEL	less than 90% decoding accuracy and about 50% or less comprehension	Readers who have major reading problems and who read well below their maturational level. They need intensive reading programmes to increase their reading level.

CHILDREN WHO CANNOT READ AT ALL

Over half the children worldwide do not learn basic reading skills within the first four years of schooling (UNESCO 2014, 2017).

(ZERO SCORES IN FOUNDATIONAL LITERACY)

	Grade 1		Grade 2	Grade 3	
Letter-sounds	Nigeria Ghana Setswana Zulu (rural)	90% 30-70% 18% 56%	Setswana 8% Xhosa 9% (urban) Zulu 18% (rural) Xhosa 12% (EC)		
Word reading	Ghana Zulu/Swati Setswana Zulu (rural)	54-92% 45% 60% 80%	36% Setswana Xhosa 42% Zulu 32%	Swahili, Kenya Home Lang, Kenya Home Lang, Uganda Xhosa Zulu	17% 18% 38% 28% 19%
Composite literacy score			52% Zambia (Whole Language programme) 39% Zambia (phonics programme)		

READING SKILLS WORLDWIDE LITERACY STANDARDS IN CONTEXT

Most of the children who cannot read after four years of schooling come from developing countries (middle- and low-income economies) in South America, Africa, the Middle East, India and south-east Asia. They all have features in common:

- Poverty is widespread
- Multilingualism is common
- Learners typically acquire literacy in more than one language
- The language of school may be different from the language of home
- The distance between the standard written forms of school languages and the languages spoken at home may vary (e.g. Arabic, Spanish)
- Print material in local language varieties are usually limited.
- Pedagogical tension between advancing learning by providing instruction in a familiar or home language on the one hand, and societal and work demands where literate proficiency in a post-colonial global language is seen to provide social and economic mobility in a globalised world driven by a knowledge economy.

LETTER-SOUND KNOWLEDGE: LETTERS CORRECT PER MINUTE

(percentage of learners scoring zero is given in brackets)

			Grade R	Grade 1	Grade 2	Grade 3
	Clayton et al. 2019	English UK	27.9			
	Good et al. 2000	English USA		47		
	Jukes et al. 2017 (n=2,220)	Swahili Intervention Swahili Control		10.4 4.8	11.4 6.6	
	Piper et al. 2018	Swahili Intervention (PRIMR)		8	17	
	(n= 4,385)	Kenyan Intervention Home languages		4	11	
		Swahili Control		7	13	
spi	Taylor et al. 2017	Setswana coaching Intervention		25(0=18%)	43 (0=8%)	
unos.	(n = 2,600*)	Setswana Control		22	39	
Letter sounds	Spaull et al. 2018	N Sotho			31	43
	(n = 740)	Tsonga			35	47
		Zulu			27	36
	Menendez & Ardington 2018	Xhosa baseline			19	31
	(n = 8,776)	Zulu baseline			15	18
	Saldru/Funda Wande (n=1,180)	Xhosa baseline		5 (0=52%)	28(0=28%)	
	ZenLit (2018)	Xhosa Intervention (urban)		46 (0=1%)	66 (0=1%)	74(0=0%)
	(n= 990)	Xhosa Control (urban)		24 (0=8%)	41(0=6%)	47(0=2%)
		Zulu Control (rural)		5(0=55%)	11(0=35%)	16(0=27%)

ORAL READING FLUENCY: TOTAL WORDS READ CORRECTLY

If learners read very slowly, can they process information efficiently to comprehend?

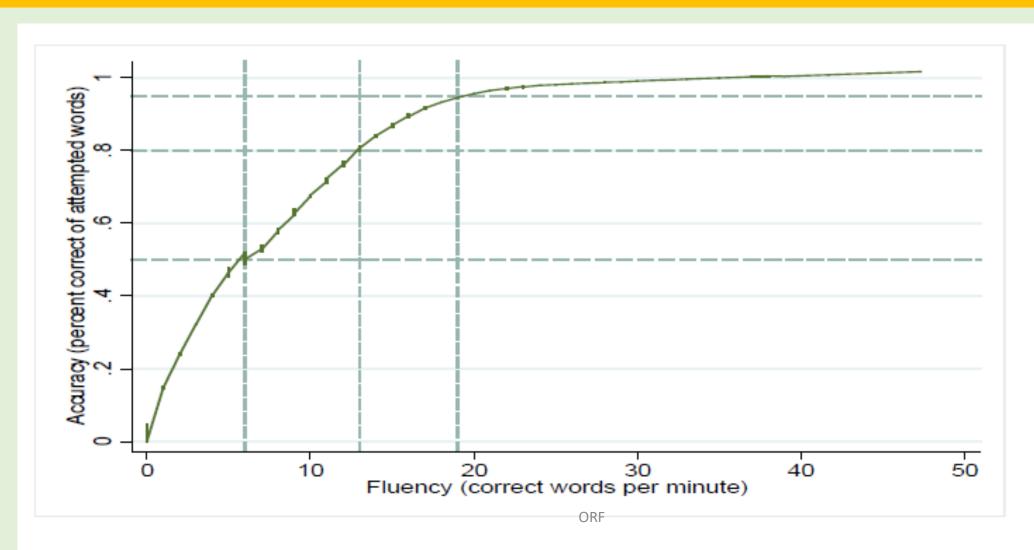
(Spaull & Pretorius 2019)

		End Gr1	End Gr2	End Gr3	# Learners	# Schools	
EGRS 1	Setswana	7	24		1200	80	
	EFAL	5.3			1459	80	Decodable words
EGRS 2 (DBE, forthcoming)	isiZulu	6.1			427	22	CVCV words
	Siswati	5.3			1032	58	CVCV words
	Northern Sotho		39	55	113	9	
o II i 1/2040)	Xitsonga		41	59	89	10	End of Grade 2/
Spaull et al (2018)	isiZulu		21	31	414	42	start of Grade 3
Zenex (2018)	isiZulu	1	12	21	60	4	Rural
Zeliex (ZU10)	isiXhosa	7	16	21	60	4	Urban
E-LIT	isiXhosa	12			63	7	Q1-3 WC

RELATIONSHIP BETWEEN ACCURACY AND FLUENCY

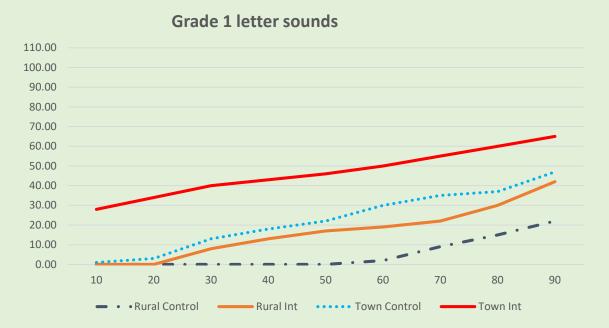
Greater accuracy leads to faster processing speed (fluency)

SALDRU | Funda Wande Coaching Evaluation May 2019

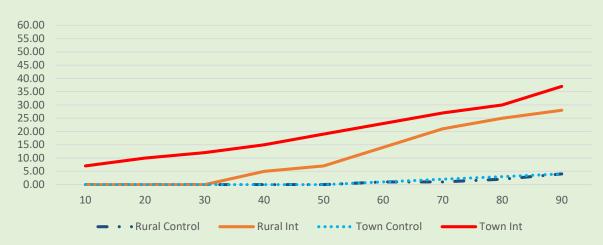


Who is lifting off where in Grades 1 & 2?

(horizontal axis = learner performance according to percentiles (continuum, where 10 = weak learners, 90 = strong learners)



Grade 1 Word Reading (wcpm)



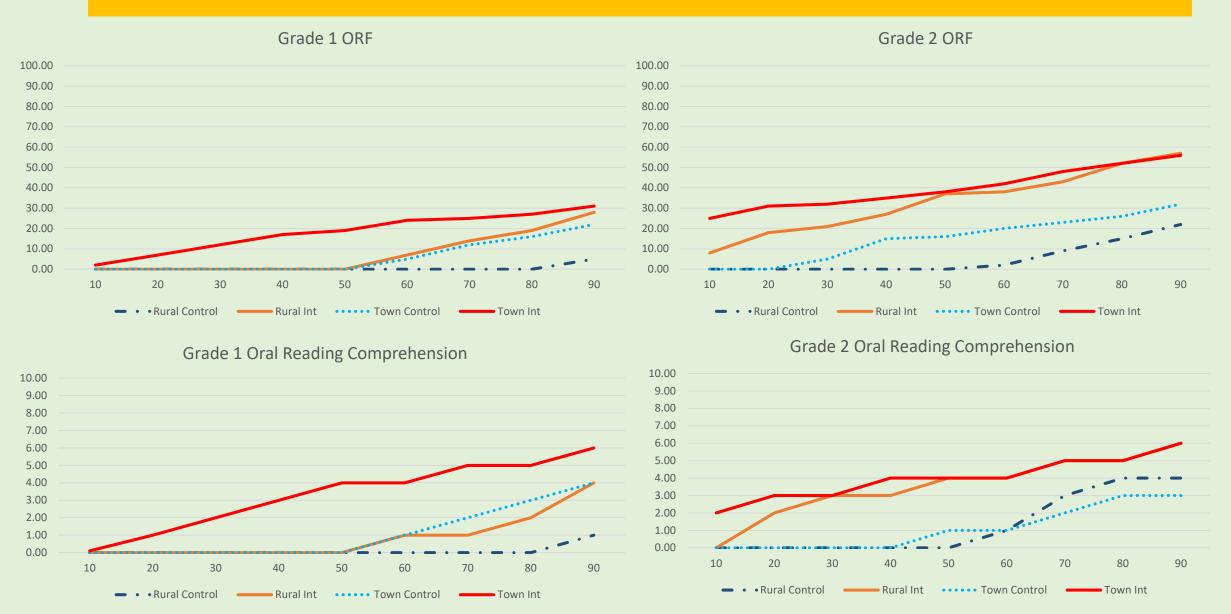
Grade 2 letter sounds



Grade 2 Word Reading (wcpm)



Who's gaining fluency and comprehension?



ORTHOGRAPHIC FEATURES OF AFRICAN LANGUAGES

Do they have implications for *early* reading development? Will there be slightly different reading norms in the Nguni/Sotho languages?

SOUTHERN BANTU LANGUAGE FAMILY IN SOUTH AFRICA

NGUNI LANGUAGES

(Conjunctive orthography)

isiZulu isiXhosa Siswati isiNdebele 'Minority' languages

Tshivenda Xitsonga

SOTHO LANGUAGES

(**Disjunctive** orthography)

Northern Sotho/Sepedi

Southern Sotho/Sesotho

Setswana

WORDS PER SENTENCE IN CONJUNCTIVE / DISJUNCTIVE ORTHOGRAPHIES

(Spaull, Pretorius & Mohohlwane, 2018)

Language	Text								
N Sotho	Ka le lengwe la matšatši mosepedi yo a bego a na le tlala. O fihlile motseng wo mongwe a kgopela dijo. Go be								
	go se na yo a bego a na le dijo.								
Xitsonga	Siku rin'wana mufambi loyi a ri na ndlala. U fikile emugangeni. A kombela swakudya, kambe a ku nga ri na loyi.								
isiZulu	Kunesihambi esasilambile kakhulu. Sahamba sicela ukudla emizini yabantu. Abantu abengenakho ukudla.								
Gloss	There was a stranger who was very hungry. He came to a village and asked for food. Nobody had any food.								
	Words in Sentence 1	Words in Sentence 3	Total words	Words per sentence	Letters per word	Total single syllable words:			
N Sotho	13	8	12	33	11	3.2	21		
Tsonga	8	3	10	21	7	4	9		
Zulu	3	5	3	11	3.6	8	0		
English	8	9	4	21	7	3.8	(14)		

WHAT DOES RESEARCH SAY ABOUT EFFECTIVE READING INSTRUCTION?

Daily exposure to texts; motivation and incentives to read Explicit teaching of decoding, comprehension and critical text reading

A variety of strategies and activities to develop vocabulary in HL and FAL

Regular writing, in combination with reading, to deepen understanding of written language

Reliable and rigorous reading assessments to inform classroom teaching (and help struggling readers)

WHAT DO SUCCESSFUL READING TEACHERS LOOK LIKE?

What do they know (about reading, writing, language)?

(CONTENT K)

What do they do?
(PEDAGOGIC & CURRICULUM K)

Knowing how to teach combined with knowing what CAPS requires

What are their values and attitudes?
Their agency?

(PROFESSIONAL K?)

Are they readers?
Do they know about children's books?
Will they be good reading role models?

CAPS



CLASSROOM LITERACY PRACTICES

PRINT-RICH **CLASSROOMS**

ROUTINES and **PLANNING**

LEARNER SELF-REGULATION **MOTIVATION**

SHARED READING

PAIRED

READING

LISTENING &

SPEAKING

GROUP GUIDED READING

INDEPENDENT READING

WRITING

(EXPLICIT) **PHONICS**

GROUP WORK

READ **ALOUDS**

ORAL LANGUAGE PROFICIENCY

Listening comp.
Vocabulary
Grammar
(morphology/
syntax)
Pragmatic
knowledge of
language use

SOCIOECONOMIC AND CULTURAL CONTEXT HOME SCHOOL COMMUNITY

READING COMPREHENSION

DECODING

READER RESPONSE

EXECUTIVE CONTROL

Working memory
Cognitive selfcontrol
Cognitive
flexibility

NEUROLOGICAL STRUCTURES AND PATHWAYS

NEUROLINGUISTIC COGNITIVE AFFECTIVE SOCIOCULTURAL MODEL OF READING

DISCUSSION POINTS

How do/can literacy standards inform

- curriculum frameworks for ITE?
- existing courses and modules?
- teaching and learning materials?
- assessment?
- How can compliance be accommodated (in the context of academic freedom and when the standards are recommendations)?
- How can the usefulness of the standards be monitored?

THANK YOU

Human history becomes more and more a race between education and catastrophe

H.G. Wells