

Ending the 'Reading Wars': How insights from cognitive science can improve children's reading in South Africa

Kathy Rastle

Royal Holloway, University of London



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@kathy_rastle
www.rastlelab.com



Literacy is the foundation for knowledge, work, social interaction, and even democracy.

“...every meaningful interaction between a citizen and the state is predicated on a minimum level of literacy, meaning that access to literacy is necessary to access our political process Voting, taxes, the legal system, jury duty.” Judge Eric Clay, 6th Circuit, USA

One of the top five priorities by 2030



“Our schools will have better educational outcomes and every 10-year-old will be able to read for meaning.”

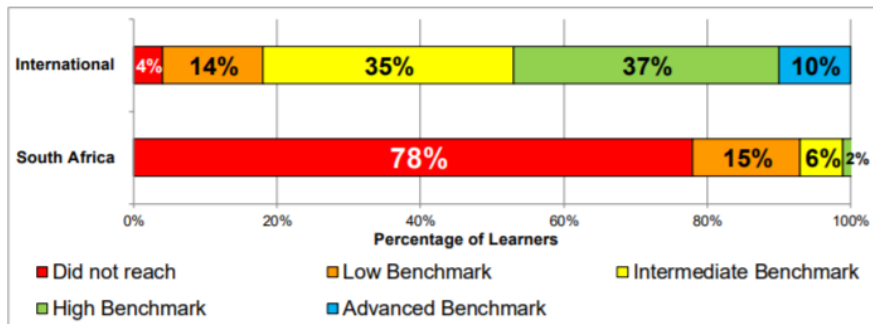
- “Early reading is the basic foundation that determines a child’s educational progress, through school, through higher education and into the workplace.”
- “All other interventions ... will not produce the results we need unless we first ensure that children can read.”
- “If we are to ensure that within the next decade, every 10-year-old will be able to read for meaning, we will need to mobilise the entire nation”

President Cyril Ramaphosa
State of the Nation Address 2019

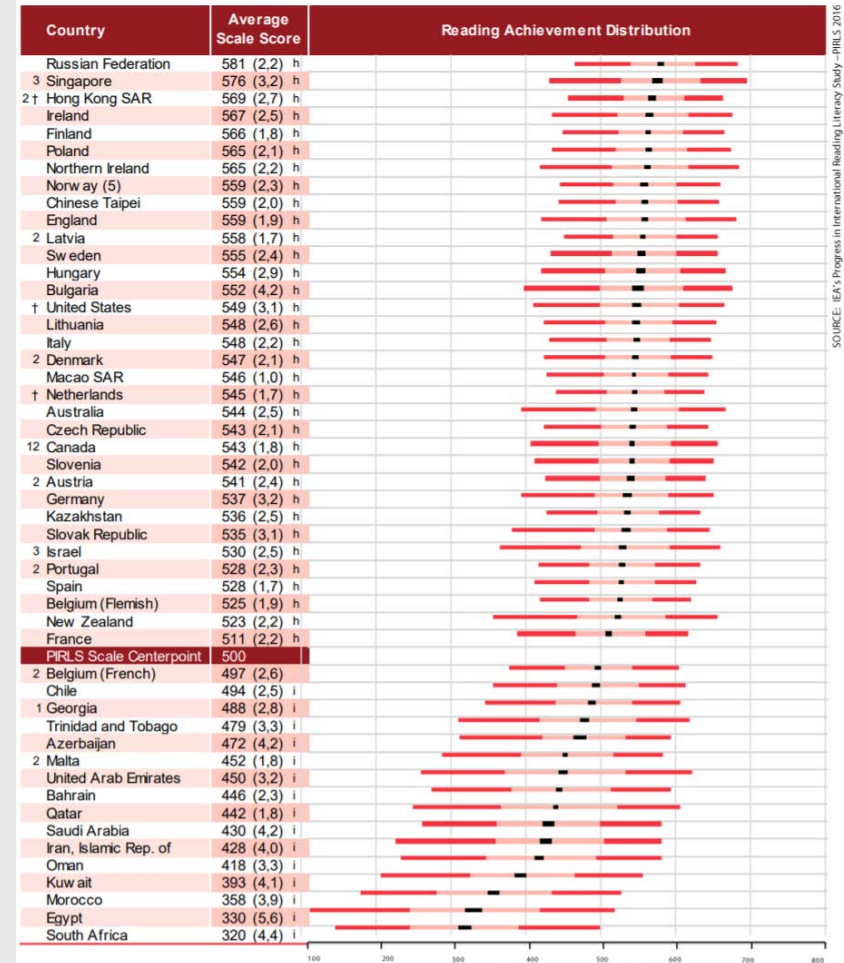
Present situation



- We don't know the present situation
- 78% of children in Grade 4 below low benchmark; they cannot read for meaning (PIRLS, 2016).
- Substantial inequality across language, province, school setting



- Overall situation and disparities very likely to be worse given school closures.

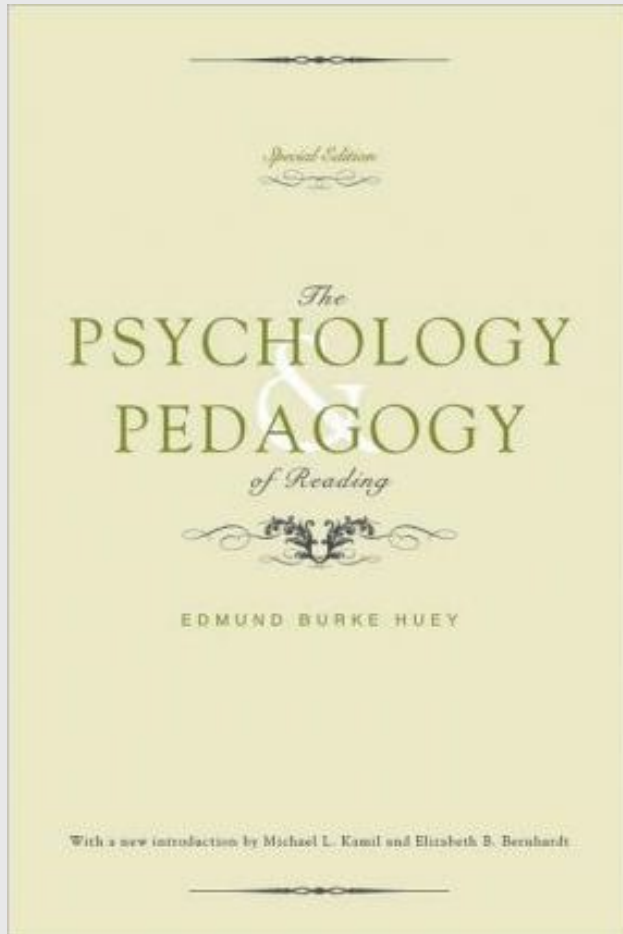


SOURCE: IEA's Progress in International Reading Literacy Study - PIRLS 2016

Why should it be this way?

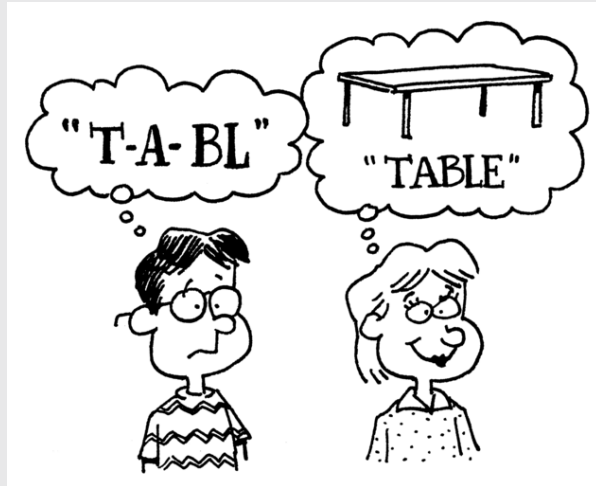


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- Over 100 years of research on reading and reading acquisition
- One of the most well-studied problems in the whole of the psychological & brain sciences
- Strong consensus on basic underpinning mechanisms and on how scientific understanding should be translated to instruction

The “Reading Wars”



<http://beamette.blogspot.com/2010/10/reading-wars-phonics-or-whole-language.html>

- Over 100 years of raging debate about how to teach children to read
- Phonics versus “whole language”; more recently “multi-cuing”, “searchlight”, or “balanced literacy”
- Touchstone for more general debate regarding pedagogical / political philosophy
- Sometimes cast as an attack on teacher knowledge and autonomy

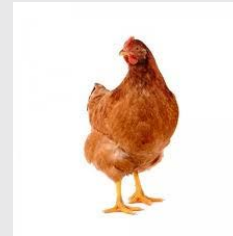
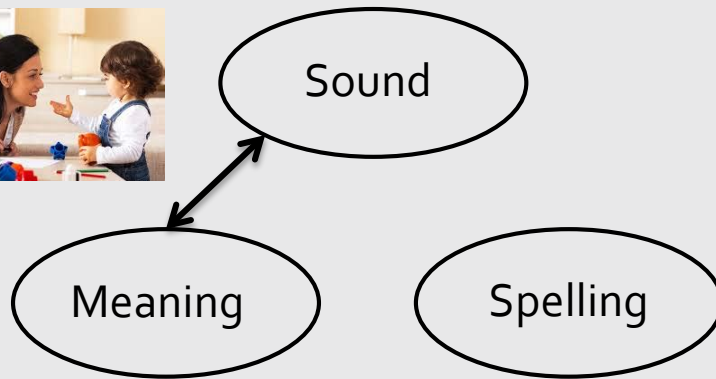


Jess decided to cut and run. She couldn't face what might happen next.

- Analysis of letters and letter positions (e.g. rub vs run; run vs urn)
- Analysis of morphemes (e.g. –ed reflects the past)
- Analysis of meanings of individual words
- Analysis of figurative / ambiguous language
- Analysis of causal connections
- Use of background knowledge; inferencing skills
- Demands on working memory and executive skills

Skilled, adult reading is multi-faceted, but it is a mistake to think that instruction should account for all aspects at the same time.

Reading starts with oral language



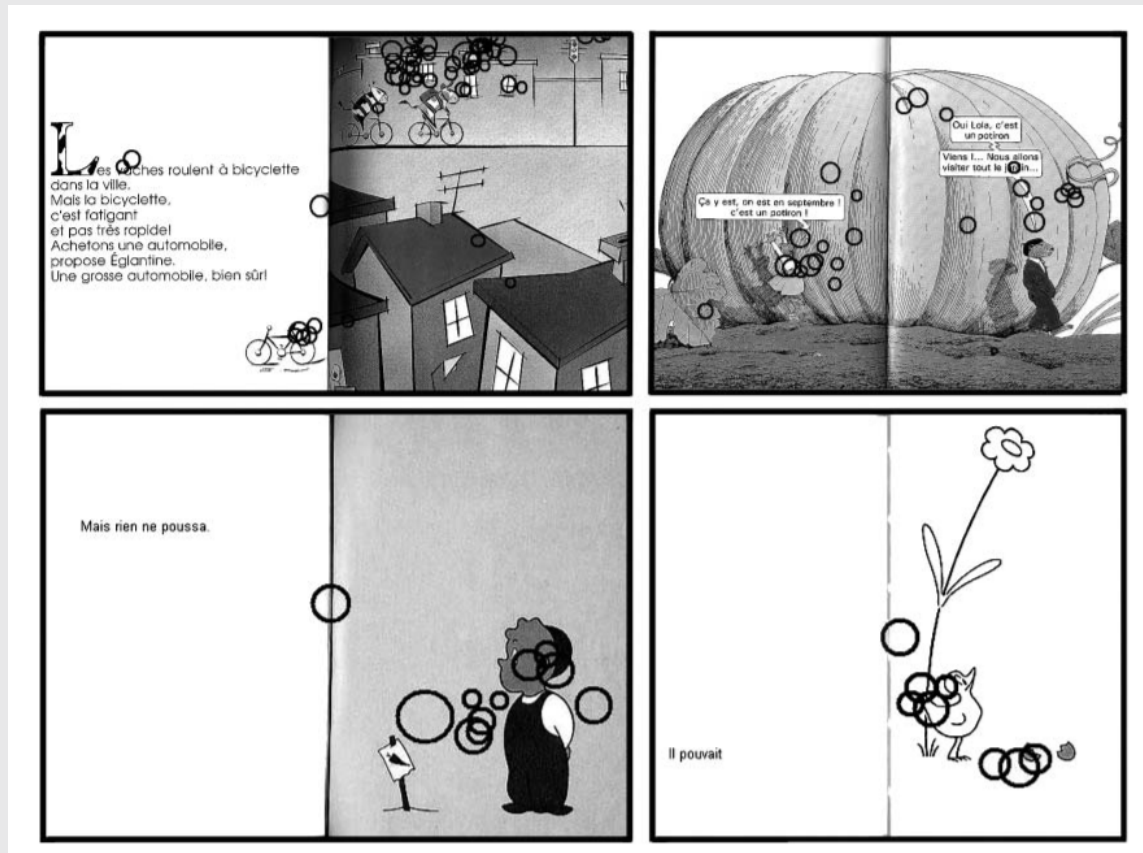
- Vocabulary, grammar, and narrative skill predict later reading comprehension
- Early interventions in oral language impact on later reading comprehension
- Enormous variation in language ability at school entry associated with (dis)advantage
- Multi-lingual context, language of instruction considerations

CAPS provides rich language experiences (e.g. language routines, shared reading) but there is no baseline assessment of children's language ability

Shared book reading



What are 4-5 year old children looking at during shared reading?



Unlikely this could be a major vehicle for development of print skills without other forms of systematic instruction.

Learning to decode through phonics



- Memorising every word individually is not possible in most languages
- Spelling-sound knowledge provides hook into oral language (read for meaning)
- Virtually all children require explicit instruction (phonics)

CAPS phonics provision is unlikely to be adequate for most learners

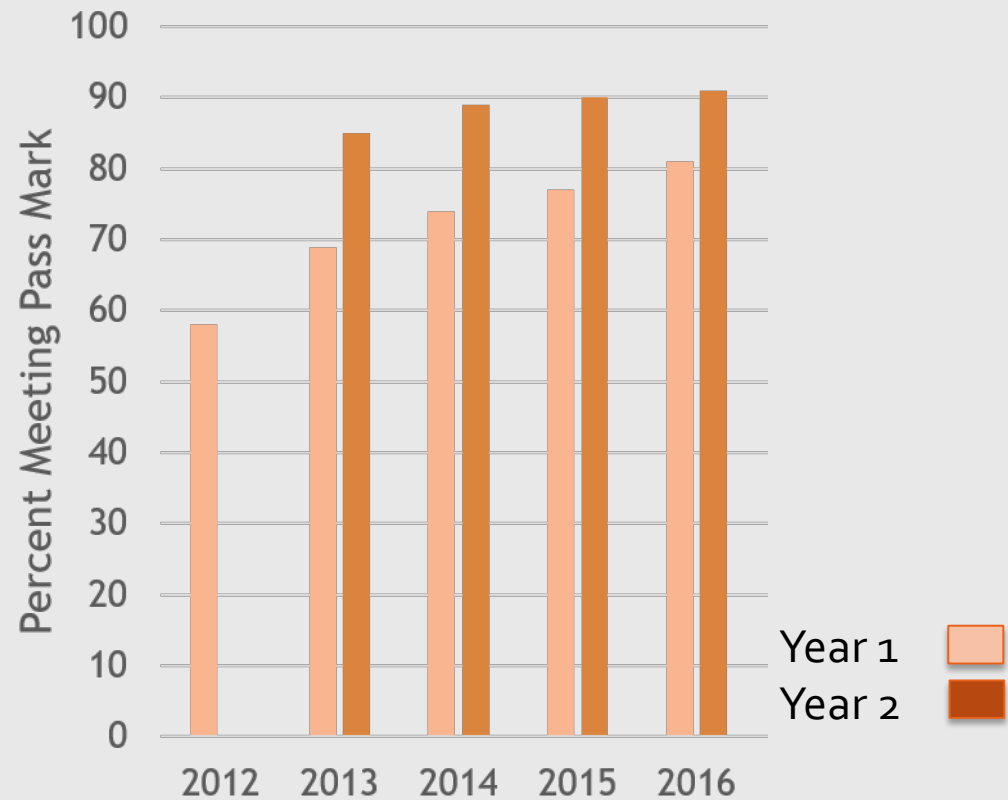


- Too slow!
 - If children don't have phonics knowledge they will not be able to read for meaning.
 - Instructional time on guided reading / writing is not as effective as it needs to be.
 - Faster pace yields superior outcomes because provides tools to read independently; reading well -> reading often.
- Includes strategies that undermine phonics instruction (e.g. guessing from pictures, context).
- No formal, recorded assessment of phonics knowledge.

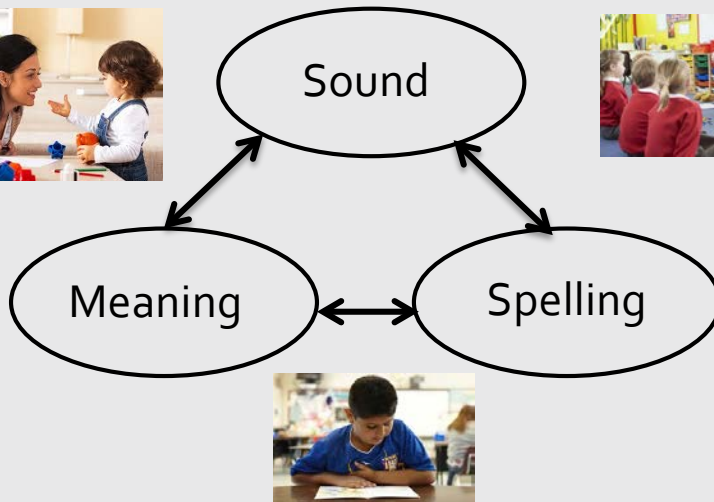
Insights from England's phonics screen



- Reading aloud test, 20 words and 20 nonwords (vib, shorg) age 5/6
- Poor performance in 2012, five years after phonics curriculum launched
- Dramatic improvements since; schools used results to refine their practice
- Driven improvements on tests of reading comprehension e.g. PIRLS
- Phonics screen performance strongest predictor of PIRLS; above e.g. SES, gender, historic school performance.



Building fluency



HEN



PEN



TEN



- Decoding skill is a necessary foundation for building fluency
- Fluent word recognition achieved through practice with appropriate books
- Fluency releases working memory for higher-level comprehension (read for meaning)

Opportunity to build fluency in CAPS limited because of poor phonics provision / assessment.

Text comprehension is hard!



“Would you like a go?” asked the little girl. Claude nodded politely and climbed onto the scooter. He was a bit wobbly at first but was soon zooming about like nobody’s business! Sir Bobblysock had a turn, but he wasn’t keen. He much preferred having a nice sit down and a biscuit.

Claude at the Circus
Alex T. Smith

- Fluent word recognition is a necessary foundation
- Harder than spoken language: richer vocabulary, more complex syntax, punctuation
- Importance of vocabulary, language experience, background knowledge

Ingredients of reading for meaning



Foundations for every child to become a skilled, confident reader

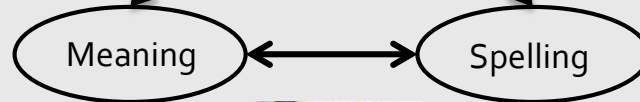
Oral language



Sound



Phonics
instruction



Text experience

This is a tractable problem, no matter what the context, and no matter what the language.

Time to End the Reading Wars



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“If we are to ensure that within the next decade, every 10-year-old will be able to read for meaning, we will need to mobilise the entire nation...”

- Banish ideology; reading is a scientific problem
- Equip teachers to practice the science of reading
- Align curriculum with the science of reading
- Track progress through formal assessment in Foundation phase

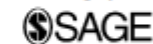
Limited instructional time; no time to waste

Ending the Reading Wars: Reading Acquisition From Novice to Expert

Anne Castles^{1,2}, Kathleen Rastle³, and Kate Nation^{2,4}

¹Department of Cognitive Science, Macquarie University; ²Australian Research Council Centre of Excellence in Cognition and its Disorders; ³Department of Psychology, Royal Holloway, University of London; and ⁴Department of Experimental Psychology, University of Oxford

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Thank you!
Kathy.Rastle@rhul.ac.uk



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