Theory of Change and Theory of Education: Pedagogic and Curriculum Defects in Early Grade Reading Interventions in South Africa

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Introduction

Michael Fullan (1999) made the distinction between a theory of change and a theory of education. Much of the field of educational change has focused on better understanding the former, that is, what knowledge is needed to make substantial educational change, particularly improvement to learning outcomes at scale. In the original formulations, Fullan suggested that the cornerstone of change was the application of the correctly calibrated combination of capacity building (support) with accountability (pressure). Since then the knowledge-based of educational change derived from the theory of action has become far more sophisticated with extensive and deeper insights into change at the instructional core, structural levers, authentic cooperative professional learning, differentiated change journeys and when and how to use accountability measures in progressive ways (Hargreaves & Shirley, 2019; Hubers, 2020; Harris & Jones, 2017; Mourshed et al 2010; Fleisch, 2018 and 2020).

In the South African context, much of the research on educational change has concentrated on different models, with various components and dosages, that elevate various learning outcomes (Arlington & Meiring, 2020; Cilliers et al 2020a; Cilliers et al 2020b; Fleisch et al 2016; Kotze et al 2019; NORC, 2019; Zenx, 2019). My own work over the past ten years has focused exclusively on using impact evaluation to build a robust knowledge-base on how an aligned and coherent set of components, i.e. lesson plans, learning materials and training/onsite coaching would predictably leverage gains in early grade learning (Fleisch, 2018). Although often diluted, much of the focus of the work of the field has concentrated on applying various theories of action in externally led and funded interventions designed to help teachers teach better. The mechanisms associated with these interventions generally assume that teachers would take up the new models in their daily routines and that these routines would improve teachers' use of time, space and resources which in turn would lift learning achievement system-wide or at least in the schools in the interventions.

In the absence of longitudinal or panel systemic learner data, we have little idea of, and to what extent, the various interventions have indeed shifted the needle of early grade learning system-wide. But if the October 2019 evaluation in the EGRS II study is anything to go by, and I certainly believe it is the most current and most rigorous assessment of Home Language reading levels, then even if improvement has taken place, the level of early grade learning remains is very low for poor and rural children (similar results in Pretorius et al, 2020). In the Home Language component of that reading assessment (EGRS II), 18% of all sampled children who had progressed to Grade 3 could <u>not</u> read a single word in their home language, and two-thirds could not read sufficiently fluently (35 words or more a minute read correctly) to make sense of a simple paragraph.ⁱ

Educationalists like Helen Abadzi (2013) have argued that most children should be able to learn to read fluently in a year if they are learning in a language that has a transparent orthography. Notwithstanding the challenges of shifting teaching cultures system-wide, the fact that such a large proportion of learners

fail to learn to read for meaning, notwithstanding the more than 500 lessons they would have attended in the first three years of schooling begs the question, why is our education system failing to teach children to read in their home languages?

This paper suggests that in part we may have been looking in the wrong place. The search for the optimal theory of change or theory of action is obviously very important, but could it not be that a key part of the problem are defects in our theory of education? This paper suggests that there is something educationally unsound in certain aspects of our national pedagogy and curriculum policy, and further, we are not likely to make much progress toward the goal of getting children to read for meaning by the time they get to be ten years old if these defects are not addressed. This short paper points to two serious weaknesses in our policies on pedagogy and curriculum, the first relates to the under-specification and weak guidance with reference to the teaching of phonics with linked decodable texts, the second the privileging of an unworkable reading teaching methodology called Group Guided Reading which is embedded in the policy documents and national interventions.

Phonics and decodable texts

It is often assumed that the core problem in reading is the problem of comprehending. That assumes that children can decode but lack the ability to link the words they decode to the meaning in the text. What the EGRS II (Cilliers et al 2020b), the earlier RCUP research (Pather et al, 2018) and Pretorius and colleagues research (2020) reveal is that children may be "barking at text", communally chorusing texts selected by the teacher, but that they are not just having difficulty with comprehending, but in linking the graphemes (the smallest meaningful contrastive unit in a writing system) to the phonemes (distinct sound unit). Children learning to read in township and rural schools struggle to convert letters into sounds, to blend sounds aloud and from hearing these words aloud, make meaning. They are having difficulty with basic skills like segmenting and blending large letter units such as syllables, prefixes, suffixes and root words. Although the Curriculum and Assessment Policy Statement: Foundation Phase (CAPS) makes clear that one hour 15 minutes per week is to be devoted to the teaching of daily phonological awareness and phonic activities, the curriculum policy document provides only very broad guidelines. For example, in Grade 1 Term 1 teachers should teach letter-sound relationships of single letters (at least 2 vowels and 6 consonants). In the absence of a strong scaffolded and sequenced phonics programme (like those that exist in English such as Jolly Phonics), teachers would have little guidance on the sequencing of daily phonics routines. Resources such as the DBE Rainbow Workbooks and policy document like Department of Education (2008) Teaching Reading in the Early Grades: A Teacher's Handbook would not be of much help. What is critical however, is not just the development of automaticity of going from phonemes to graphemes; segmenting and blending, but the extent to which this core bottom-up literacy practice gets linked to reading sentences and longer connected text with decodable words (words that are phonically regular, e.g. cat). The tighter this link, the more likely that the bottom-up phonic and decoding skills would help young schoolchildren develop fluency and confidence.

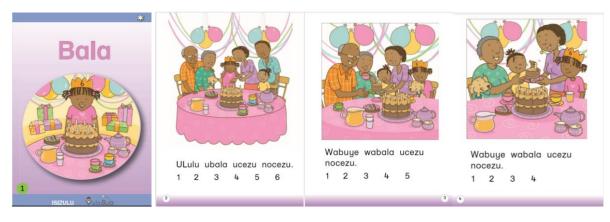
A simple comparison between two current Foundation Phase reading texts illustrates this point. The *Vula Bula* books are widely used in many early grade interventions and are designed with meaning making as a key pedagogic element. In the first book in the series, *Bala*, the authors use a repeated sentence combined with numbers and interesting pictures sets up a story that the child can identify with. Lulu has a birthday cake and her mom gives each member of the family a piece of the cake. Lulu is seen in the pictures getting increasingly worried that there will not be a piece left for her. The story is genuinely

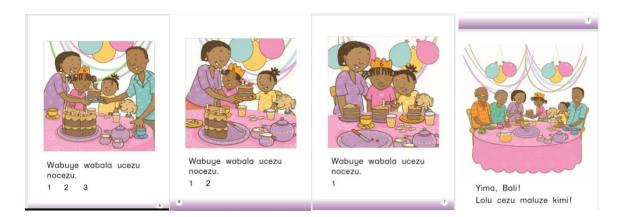
engaging and the repeated sentence allows for consolidation. The use of the name Lulu and the word *ubala* uses simple early phonic blends.

Figure 1: Vula Bula Bala first book

ULulu ubala ucezu nocezu 1 2 3 4 5 6			
Wabuye wabala ucezu nocezu 1 2 3 4 5			
Wabuye wabala ucezu nocezu 1 2 3 4			
Wabuye wabala ucezu nocezu 1 2 3			
Wabuye wabala ucezu nocezu 1 2			
Wabuye wabala ucezu nocezu 1			
Yima, Bali! Lolu cezu maluze kimi!			

In terms of the three cueing system of word identification (Goodman & Goodman, 1977), this passage relies on semantic cues and to a lesser extent on grapho-phonetic cues. In general, while the first semantic and syntactical cuing systems become increasingly central to word identification as children's reading improves and become more sophisticated, it could be argued that grapho-phonetics should be privileged if children are to decode words in very early stages of reading text.





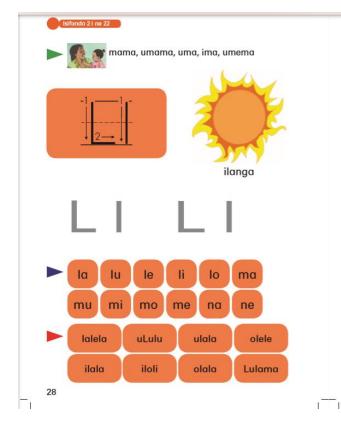
In contrast, the Room-to-Read reader, *Ubiciko baesiZulu* stresses the grapho-phonetic cues and directly links the letters (graphemes) to sounds, focusing on the simplest single graphemes in the words in the

first passage reading. The lesson immediately prior to the decodable text reading lesson would involve drills the blends *ma, mu, me* etc and the words associated with the first blends, i.e.: *mama, umama, uma, ima, umema*. The new content in the new lesson focuses on teaching the letter L and a series of L syllables i.e. *la, lu, le, li, lo* and the related words *lalela, uLulu, ulala, olele, ilala, iloli, Olalalala, Lulama*. This is then followed by the passage which clearly prioritizes the grapho-phonetic cueing to help children decode the words. While the pictures in the text do help with semantic cueing, the priority is definitely given to the bottom-up assembly of the words using the smaller sound-letter cluster component parts.

Figure 2: Ubiciko besiZulu (Room to Read) p. 29

"Mama!" uLulama ulala le. "Lutho, yimina olala, la ulala le uLulu." "Mama yimina olala la, Ululama ulala le." "Lulu lalela, Lulama lalea." "Iulama lala la, Lulu lala le." Ululu no Lulama balala.

The examples from *Vula Bula* and Room to Read materials illustrate two different entry points into the learning to read journey. *Vula Bula* has with an emphasis on semantic meaning making very early in the first lessons. Room to Read materials make use of a substantially different approach in which priority is given to grapho-phonetics, segmentation and blending. Given the transparent nature of the language and the familiarity that teachers have with the *ma, mu, me* approach, it is likely that a systematic and structure version of the latter that builds up to decodable stories is more likely to help the majority of teachers help the majority of learners move towards easier word identification and ultimately decoding of simple texts at the beginning stages of the learning to read journey. The simple comparative analysis of these two early grade reading texts illustrates both the educational defects in current policy and practices and what is needed to correct them. The absence of systematic phonics programmes with closely aligned decodable texts is a major gap in our approach to improving early grade reading system-wide.





"Mama!" uLulama ulala le. "Lutho, yimina olala la, ulala le uLulu." "Mama yimina olala la, uLulama ulala le." "Lulu lalela, Lulama lalela." "Lulama lala la, Lulu lala le." ULulu no Lulama balala.

Imibuzo

- I. Ubani omemeza umama?
- 2. Babangani oLulu noLulama?
- 3. Umama wathi alale kuphi uLulu?
- 4. ULulama yena ulala kuphi?
- 5. Wakwazi yini ukusiza umama? Yebo/Cha
- 6. Balala yini oLulu noLulama? Yebo/Cha

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Notwithstanding this critique, *Bala* type books have a fundamental role in the learning to read journey. Without extensive opportunity to read books that are fun and trigger children pleasure in reading, reading fluency is unlikely to be developed rapidly.

CAPS on Group Guided Reading

The Department of Basic Education has issued curriculum policy that directs teachers teaching of reading in the Foundation Phase (DBE, 2011). With reference to the national policy on approaches to teaching of reading, the policy documents deal with teaching reading in each of the eleven languages in separate documents, although each of the separate language documents appears to be translations rather than versions of the base English version.¹

According the policy, the subject to of Home Language literacy is to occupy teachers and learners for eight hours of the teaching week. These eight hours are to be divided between four distinct literacy components: listening & speaking; reading and phonics; handwriting; and writing. Reading and phonics is further subdivided into three subcomponents: phonics, shared reading/shared writing; and Group Guided Reading. Of the eight hours per week to be allocated to home language literacy, two and a half hours is specifically to be devoted to group reading. Amongst all the components and subcomponents, this is the largest single allocation of time and it is consistently the same proportion of time across the three grades.

Listening & speaking		15 minutes per day for 4 days	1 hour
Reading & phonics			
	Phonics:	15 minutes per day for 5 days (1 hour 15 minutes)	
	Shared Reading/Shared Writing:	15 minutes per day for 5 days (1 hour 15 minutes)	
	Group Reading:	30 minutes per day (2 groups each for 15 minutes) for 5 days (2 hour 30 minutes)	5 hours
Handwriting		15 minutes per day for 4 days	1 hour
Writing		20 minutes per day for 3 days	1 hour
Total per week			8 hours

Table 1: Components of Literacy in Foundation Phase CAPS

(DBE, p. 9)

What exactly is to be done in the subcomponent, Group Guided Reading? The first guidance provided by the curriculum policy document is that during group guided teaching, teachers need to teach learners in ability groups. Each of these ability groups would consist of between 6 and 10 learners. The policy further requires the teacher to spend between 10 and 15 minutes per group and would work with and between one and two groups per day.

Within these 10-15 minute small group teaching sessions, the teacher would work with the 6-10 learners (who are more or less at the same reading level) with a text. The first task required by CAPS is for the teacher to form the ability groups. According to the policy, the easiest way of establishing the groups is

¹ We compared the isiZulu and Afrikaans version, and found them identical to the English version. This despite very different language structures for the African languages and Afrikaans.

to observe children reading a text and then allocated them to levels. On the basis of the reading levels, the teacher would assign the learners to specific reading groups.

The second task is the matching of learners to texts. The policy recommends that the texts that are selected follow the following requirements, that is, that learners are able to recognize and quickly decode 90-95% of words in the book. The text should be of interest to the learners and the learners should be able to read the text silently without finger pointing. The assumption that is made is that these specialized texts are to be selected from the classroom book collection of "graded readers".

The policy specifies the four steps in the Group Guided Reading session. The steps included an (1) introduction (2-3 minutes), (2) picture talk or browsing (3) first reading and (4) discussion. During the introduction, the teacher introduces the book or chapter and the topic and connect the topic to children's life experiences. This is followed by a more focused conversation called 'picture talk' or a time of browsing. For younger children, specifically for Grade 1s, the picture talk step involved talking about illustrations and talking about what the children see. For older children the 2-3 minutes after the introduction is "text talking" about features of the text such as captions, chapter headings, etc. After between 4 and 6 minutes, the teacher begins to work with the children on the first reading. In the first reading, children read the text individually, for younger children they do it in a whisper, for older children silently. The teacher goes around from child to child to listen to each read a section of the text aloud. After hearing them, the teacher would ask children questions like "What do you expect to read in this book?" "Does that make sense to you?" The final step in the Group Guided Reading methodology is the discussion. During the Group Guided Reading discussion, the teacher returns to questions that came up during "text talk". The emphasis across the first and last steps is on comprehension. In subsequent Group Guided Reading sessions, the learners would return to the same text for re-reading to enhance fluency, grammar and comprehension.

This curriculum policy makes four key assumptions. First, teachers have the tools and expertise to accurately assess learners reading levels as a precondition to allocate them to the correct level guided reading groups. Second, classrooms have graded readers in the right quantity at the right levels to meet the 90-95% decoding accuracy rule. Third, teachers have sufficient time and expertise in the "first reading" step to listen to each learner read aloud individually and have a meaningful exchange that would help the learner find solutions to reading challenges they encounter. The Group Guided Reading time would be sufficient to allow children to develop fluency and comprehension skills.

This description of the CAPS policy makes is evident that the methodology is highly complex, with multiple layers of steps each requiring high levels of expertise. Group Guided Reading, as described in the policy requires classrooms to have extensive reading material collections with multiple copies of each title. And it assumes that the limited time that children actually do reading (much of the Group Guided Reading sessions is taken up with prediction and discussion of the text) is sufficient for children to practice reading to gain fluency and for the teachers to identify specific work attack skill problems.

Given the high levels of complexity associated with the methodology, the sophistication of the knowledge about how to address individualized reading challenges, the range and quantity of resources required to make it work, it is highly unlikely that teachers would make effective use of it. The published case study research confirms this (Kruizinger & Nathanson, 2010; Makumbila & Roland, 2016).

So if Group Guided Reading as a core methodology for the teaching of reading is unworkable, what are the alternatives? We need to better understand how whole class teaching with aspects of individual reading might work. There is certainly precedent about how this would work both in the Tuscome innovation in Kenya and the current approached used by Room to Read.

Conclusion

So, what is to be done? The first and most important insight is to recognize that extending our knowledge of effective models based on theories of change is necessary but not sufficient to improve early grade reading system-wide. The second point is to acknowledge the serious weaknesses or defects in our educational policies (CAPS in particular) and how these have led to design flaws in our interventions. The next two points are more specific. Third, we need to put in place simple and effective phonics programmes with linked decodable texts for Grades 1 and 2. Finally, we need to replace Group Guided Reading with a teaching reading methodology that teachers can understand and use, with the requisite resources.

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ⁱ In private correspondence, Dr Gustafson indicated that in the Grade 4 PIRLS, only 7% of learners in 2016 did not get a single constructed response answer right. As such more research is needed to more accurately gauge the proportion of children in Grades 3 and 4 who are not making any progress in reading.