

Towards a Pedagogy for the Education Crisis

It is difficult to say for certain whether the people staffing Liberia's classrooms should be called teachers or facilitators. Starting from 2015, the country began a process of outsourcing their education system to a private American firm that sought to revolutionise how lessons work.¹ Instead of training teachers for each school, standardised video lessons would be distributed across the system. Lessons would be similar routinized, through the use of tablet and computer technology. Teachers are given set scripts to guide some lessons, but their primary role is a supporting one, answering questions, guiding exercises and (presumably) fixing the technology when it breaks. While the Liberian case may seem a radical departure, it in fact represents the apogee of an ongoing trend towards the centralisation of pedagogy, that can be equally seen by the increasing role of scripted teacher interactions, the deepening of curriculum planning by central departments, and a growing sense of departments viewing their teachers as passive conduits for knowledge, rather than active parts of the education process.

While South Africa is far from the situation observed in Liberia, the post-apartheid education regime has seen a centralisation of decisions on pedagogy and curriculum, with the rapid cycling of new curriculum and teaching designs being driven by departmental officials who are often far removed from the reality of the classroom. While teachers and teaching unions are always involved in these processes, and were nominally given a lot of power in the old outcomes based education (OBE) system, the proactive drive for where ideas come from remains vested in the departments. Teachers respond to problem areas and sometimes succeed in avoiding the most seriously flawed policies, but the exclusion of teachers from the initial phase, of generating a concept for how education works in South Africa, has resulted in a deskilling of crucial aspects of pedagogy among teachers. The deskilling of pedagogy has coincided with a winnowing out of the vital professional skills development opportunities offered to teachers, notably from the integration of teacher training colleges into universities, and from the erosion of professional associations (outside of unions), which historically have played a vital role in driving new ideas around teaching.

In one sense, this is a golden age of pedagogy, but of pedagogy from above. It's important to realise how unusual this approach is. Healthcare workers, for example are also subject to a range of centralised decisions, on everything from investment in new equipment to access conditions for patients. But the medical staff nevertheless drive the treatment agenda, working through their own bodies and own decisions to determine how patients are treated. The difference in this case seems to be a fundamental tension in how teachers are viewed in South Africa. Doctors are uncontestedly considered professionals, whereas teachers increasingly are seen as implementing agents of decisions made by distant professionals in Pretoria. For a country in which education is a central challenge for economic development and closing inequalities, the stripping away of the voice of teachers is a missed opportunity. Putting the collective knowledge and experience of these teachers to work in driving a more progressive pedagogy will require changing the institutional mechanisms by which we offer opportunities to

¹ Pilling, D. "Liberia is outsourcing education. Can it work?". FT Magazine, 21 April 2017. <https://www.ft.com/content/291b7fca-2487-11e7-a34a-538b4cb30025?mhq5j=e1>

teachers to gain additional skills and lend their knowledge to curriculum design, as well as crafting in itself a new vision for pedagogy.

This paper will explore three core issues. First, it will review the development of pedagogy and the role of teachers in South Africa. Second, it will analyse the institutional mechanisms available for the development of such pedagogy, and make some recommendations on how these can be reviewed. Third and finally, it will suggest some foundational ideas that could drive this new vision of pedagogy, based on recent research in educational best practices.

Historical Review

The post-Apartheid education system had to not only rework the curriculum for a rapidly changing world, but also had to drastically expand educational access to the majority of black students who lacked access to quality education. This demanded a substantial expansion of the skills and infrastructure that underpin a working education system, and a complex and contentious integration of segregated schools. But it also meant wading into a complex and contested space of what people were taught and how. Education was a powerful tool of the apartheid government, used to create a discriminatory distribution of skills and to reinforce core apartheid tenants regarding race and inequality, and a reformed system offered the opportunity to roll back these beliefs among a new generation. Reforms were also an essential means of creating access to employment, at a time in which the South African economy was going through profound changes by opening up and shifting focus to a more inclusive vision of growth. Large technological shifts were rapidly dismantling old skills sets and requiring constant updating of what children learned. At independence 16 million people worldwide were connected to the internet, today twice as many are connected in South Africa alone. This vast array of demands had to be tackled by an education department that was itself being rebuilt from the ground up.

For teachers, who were at the front line of what may be some of the most drastic post-apartheid reform efforts, coping with change was the priority. Attention shifted away from the favoured concepts of the People's Education, where educators were actively designing a new vision for the curriculum, towards one of attempting to cope with rapid change.

Much of the change was building towards the first major reform effort, Curriculum 2005, which was implemented in 1998, after a process that featured extensive consultation with all parties, including unions, educational professionals, and foreign consultants.² This curriculum reform is essential to understanding post-Apartheid pedagogy, because in many ways it was a system that prioritised the how of teaching over the what of teaching. Teachers and schools were given unprecedented leeway in what could be taught, so long as the process achieved a set of outcomes which centred on the development of a set of intangible skills like critical thinking and problem solving. The curriculum explicitly stated that: "No thought is given to the existing curriculum. Instead schools (or local districts) are told they can choose any content and use a

² Hoadley, U. 2015. "Knowledge, knowers and knowing: Curriculum reform in South Africa." in Yates, L. * Grumet, M. (eds). *Curriculum in Today's World: configuring knowledge, identities, work and politics*. Abingdon: Routledge.

wide range of teaching methods as long as these develop citizens who display the agreed-upon critical outcomes.”³ This light-on-content approach was underpinned by more prescriptive guidelines on how classroom instruction would be undertaken, with a focus on group work and engagement.

There was a logic to this approach. The large social fissures and massive inequalities that apartheid created resulted in a student population with very different sets of knowledge, all based in very different cultures and environments. The vision of Curriculum 2005 was to build enough flexibility into the curriculum to allow teachers to be responsive to these diverse needs, and in that sense it was a very inclusive vision. However, while the Curriculum took great care in considering the imbalances in the student population, similar consideration was not given to the teachers. Teachers operated in wildly different circumstances, many having to cope with under resourced schools and a historic lack of access to quality knowledge development programmes. Designing a curriculum was a daunting prospect for a teacher that had little experience outside of the old system. The use of an education model that put the teachers at the centre of education was good for those with good teachers, and bad for those with struggling teachers, and often meant that old model-C schools could implement the curriculum far more effectively than schools in rural areas and townships. And this is before considering that content was desperately needed to bridge the large knowledge gap that resulted from a discriminatory schooling system.

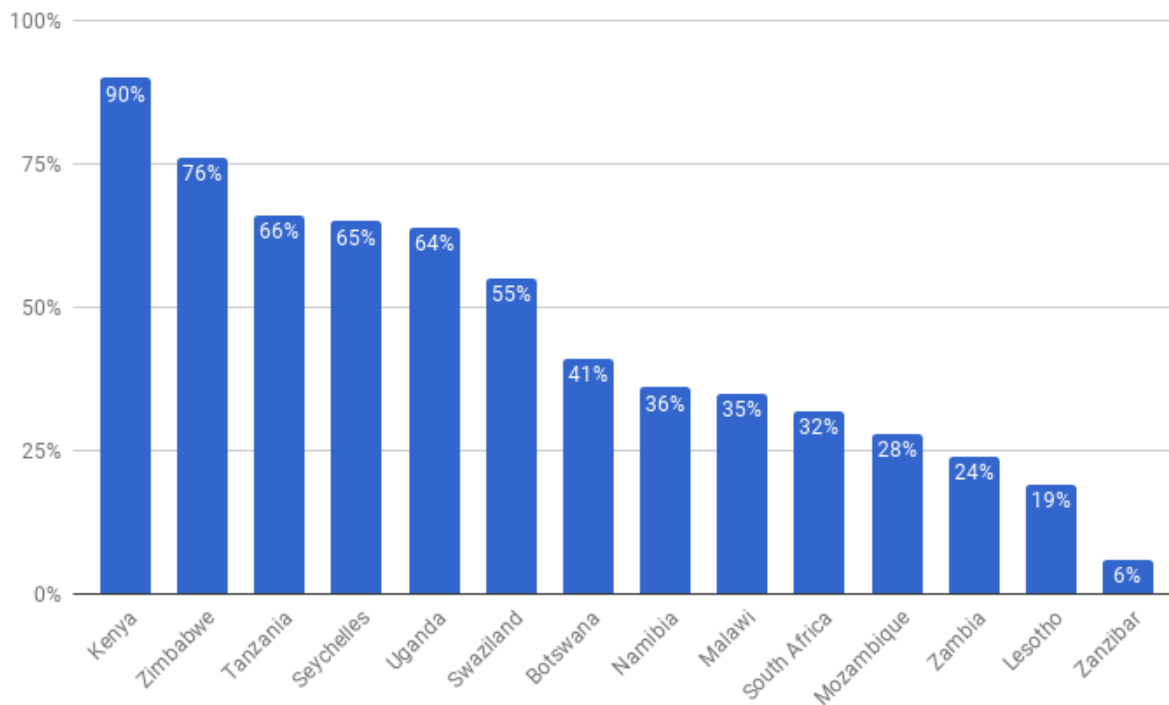
The imbalances in the school resources needed to implement Curriculum 2005 was perhaps the core problem, but a secondary issue was the way pedagogy was treated. The pedagogy of Outcomes Based Education is very different from traditional teaching, requiring a much deeper level of consistent and individualised interaction with students. The teacher in this role is doing less imparting of knowledge and more developing of individuals. There are three problems with this. First, it is simply impractical in the context of large classrooms and overstretched teachers. That’s bad for the working of the programme, but in requiring teachers to align with an impossible pedagogical approach, it also stifles the development of skills that could be more effective for large classrooms. Second, it undermined teacher development. Pedagogy is a relatively accessible skill set because there’s a constant learning process across years. With each new year the teacher gains more skills, greater mastery of the content, and is better able to help students. This, however, isn’t the case for a system which puts individual development at the centre of teacher’s focus, as the core skill learnt is flexibility in the face of changing individual needs. Those skills are useful, but they came at the cost of slower growth in curriculum knowledge, which could have been more thoroughly developed through a focus on the content.

Third, this is particularly worrying since it occurred at the same time as rapid changes in teacher training systems. The 145 education training institutions that were present at the end of apartheid were integrated into 23 organisations, in an effort to centralise teacher training in the

³ South African Department of Education. 2000. “Curriculum 2005: Towards a theoretical framework”. Pretoria: South African Department of Education. (As quoted in Hoadley, 2015).

universities.⁴ But the result was great instability in the training environment, reduced spaces for teacher training, centralisation of where skills were developed, and a shift in the approach to teacher training (discussed below) These resultant gaps in teacher training couldn't be closed by on the job training, since already-scarce time was taken up by learning the intricacies of working with the new curriculum. This, combined with the legacy of unequal historic access to education and the fundamental crisis of education, has resulted in teachers that are not properly equipped with knowledge of the content they're trying to impart, as can be seen in Figure 1.

Figure 1: Percentage of Grade 6 Students with Access to Teachers with Desirable Levels of Mathematics Knowledge



Source: van der Berg, S., Spaull, N., Wills, G., Gustafsson, M. & Kotzé, J. 2016. "Identifying Binding Constraints in Education." RESEP: Research on Socio-Economic Policy.

In many ways the ends that Curriculum 2005 was trying to achieve were undermined by those ends being defined in the curriculum, rather than established through a process. To put that another way: teachers with a strong mastery of curriculum knowledge and a stable classroom environment likely would have been better placed to implement the individual-focused pedagogy demanded by the curriculum.

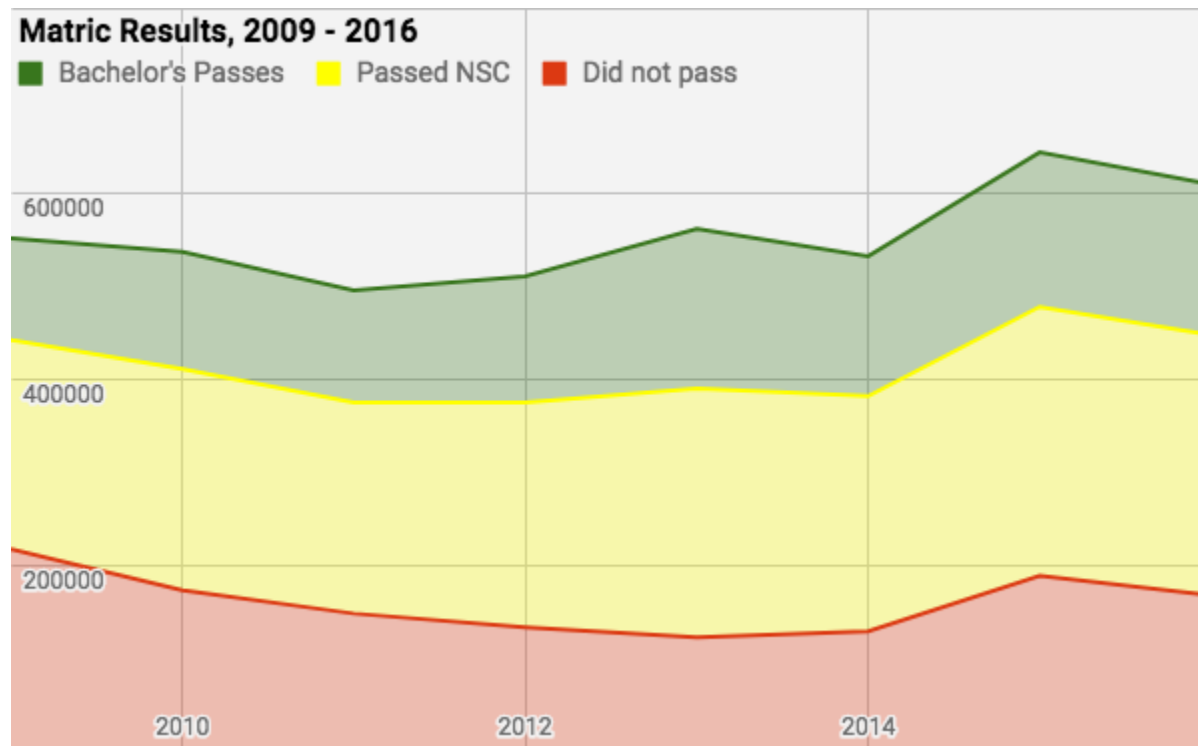
The second round of reforms, the implementation of the revised National Curriculum Statement in 2002, picked up on many of these failings, and put greater emphasis on content and simplicity in curriculum design, but it maintained many of the core outcomes-focused tenants

⁴ CDE. 2015. "Teachers in South Africa: Supply and Demand 2013–2025." Johannesburg: Centre for Development and Enterprise.

that underpinned the curriculum.⁵ The larger change came in 2009, following a review of the curriculum conducted through, among other means, a series of provincial teacher hearings.⁶ The review rejected the previous outcomes-focused approach, and implemented in its place a far greater focus on content, simplicity, and more traditional skill and assessment standards.

Since the impact of curriculum change can only be seen in the long-run, it remains early to judge the suitability of the new curriculum direction. But what is clear is that the fundamental education challenges remain unabated. As can be seen in Figure 2, while there has been a pickup in the pass rate for matric, the relative ratios of students passing and achieving a matric exemption have not changed drastically. It is also difficult to compare across time, since the testing methodology and pass mark shifted with the change in curriculum. More consistent tests are less promising, with the OECD’s Trends in International Mathematics and Science Study (TIMSS) placing South Africa last in its rankings, and with the Annual National Assessments (ANAs) showing only marginal gains in performance between 2012 and 2014, and from a very low base. On balance, it seems fair to say that things are getting better, but in the context of a deep crisis in education, this improvement isn’t enough.

Figure 2: South African Matric Results, 2009 - 2016



Source: DoE. 2016. "National Senior Certificate: Examination Report 2016." Pretoria: Department of Education.

⁵ Hoadley, U. 2015. "Knowledge, knowers and knowing: Curriculum reform in South Africa." in Yates, L. * Grumet, M. (eds). *Curriculum in Today's World: configuring knowledge, identities, work and politics*. Abingdon: Routledge.

⁶ Ibid.

As worrying is the lasting impact of previous experiments on the capacity of educators to implement the new curriculum. The rapid shift in curriculums with very clear pedagogical basis makes it difficult to gauge the extent to which teachers' approaches to core educational problems are being supported. In the aftermath of two large shifts in educational policy within two decades, and persistent and pernicious imbalances in an education system in crisis, there is a need to begin to developing a teacher-driven response to managing a very difficult classroom challenge.

Institutional Mechanisms

Underpinning the development of any proactive effort by educators to assist in overcoming the education crisis will require a level of institutional support that has sadly decayed in the decades since the end of apartheid. While some institutions, notably teachers unions, are still prominent, many have shifted to a more focused approach on the wellbeing of teachers, particularly through wage negotiations. Where debate and discussion on the substance of teaching does happen, it is often through consultation processes which, while very useful, are not a substitute for bodies that allow teachers to communicate and cooperate in how they implement the centrally-decided curriculum. The institutions that allow for teacher contribution to policy debates have remained strong, but the institutions that underpin policy implementation have been weakened. These will need to be strengthened in order to build a more foundational and active pedagogy, and three factors are crucially important.

First, is a strengthening of the system for teacher training. The end of apartheid saw the closing of most teacher training colleges, and their integration into the university system. The country went from having 102 teacher training colleges, 20 universities and 15 Technicon's to only 23 institutions.⁷ The motivations behind this were clearly sound. It was believed that integrating teacher training into universities would create a more knowledgeable and professional teacher training system. The reality has often been different, with a number of worrying impacts filtering through to the broader education system, and impacting efforts to build strong pedagogical and content knowledge in teachers.

Most directly, the closures and mergers dramatically reduced the number of teacher training spots available, and with it the number of teachers being trained. One estimate argues that the number of teachers in pre-service programmes fell from 70,7321 in 1994 to 10,153, in 2000.⁸ This contraction had a differing impact depending on where schools were located, particularly as the integration of teacher training into universities centralised where training happens. According to the Centre for Development and Enterprise (CDE), "(t)he University of South Africa (UNISA), the University of KwaZulu-Natal (UKZN) and North-West University (NWU) account for about 60 per cent of all (initial teacher education) enrolments and nearly half of all graduates."⁹ The net result was, and arguably remains, too few teachers being produced and too many being

⁷ Council on Higher Education. 2010. "Report on the National Review of Academic and Professional Programmes in Education." Higher Education Monitor No. 11.

⁸ CDE. 2015. "Teachers in South Africa: Supply and Demand 2013–2025." Johannesburg: Centre for Development and Enterprise.

⁹ Ibid.

clustered around the metros, with a subsequent stretching of the work burden on current teachers. The problem may well get worse in coming years, as teachers are disproportionately clustered among the 40 to 49 years old age group, with this cohort set to begin retiring by 2025.¹⁰ This is directly harmful for students, but also reduces the capacity of teachers to engage in the context of very large classes, and undermines efforts to retrain those currently in the system.

But more fundamentally, universities are generally believed to have introduced a broader approach to teacher training, one focused more on a liberal sciences than on practical aspects of instruction. While it's hard to prove this definitively, it does fit with general beliefs on the various strength of universities and teacher training in the old system, in which "(universities believed their qualifications equipped students to teach with a strong knowledge base. The colleges, on the other hand, were sceptical of the university's' academic emphasis and insisted that induction into the profession depended on sustained practice" - a familiar divide in the focus between pedagogy and content that was witnessed in the debates on Curriculum 2015.¹¹ While this is a debate with strong arguments on both sides, the more fundamental concern is that university centralisation results in a growing disconnect between how teachers are trained and what actually happens in classrooms. A system with a great diversity of options in where teachers are trained - featuring both universities and teacher training colleges - would be better equipped to find a working middle ground between the two approaches.

Second, is the development of mechanisms for teachers to discuss and learn about new teaching methods and approaches, and to discuss amongst themselves strategies to overcome some of the hardest barriers they face, such as different capacity among students and struggles with resources. Similar cooperation efforts have a strong history in South Africa, particularly in the aftermath of the national education crisis in the 1970s and 1980s. Most notably was the broad movement that came to be known as People's Education, which was led by a coalition of teacher unions, student groups, and parents groups under the umbrella of the National Education Crisis Committee.¹² Similar institutional frameworks don't really exist in the places that most desperately need them. Of course teacher unions remain strong, but as mentioned above, the focus has (understandably) shifted to policy and teacher wellbeing issues.

The breakdown of teacher associations has a direct impact on the sharing of knowledge, undermining some of the crucial tools that were once available to allow teachers to learn and develop off each other. These connections are particularly important in the context of immense inequalities between schools, where the resources of offer in Model C and private schools could be brought to bear on assisting less well-resourced schools with their (often substantially greater) education challenges. As importantly, the breakdown of teacher organisations

¹⁰ Ibid.

¹¹ Council on Higher Education. 2010. "Report on the National Review of Academic and Professional Programmes in Education." Higher Education Monitor No. 11.

¹² Chisholm, L. & Fuller, B. 2006. "Remember people's education? Shifting alliances, state-building and South Africa's narrowing policy agenda." *Journal of Education Policy*, 11:6, pgs 693-716.

undermines a sense of education as being something different from standard jobs, but rather a collection of professionals that play an essential role in societal development.

Third, is the need for greater ongoing training and teacher support systems. This is already ongoing to a large extent, and in fact may be the greatest source of improved skills within the teacher profession. According to the CDE, “between 2012 and 2013, the nearly 31 per cent of teachers who upgraded from unqualified to qualified while in employment exceeded the 22 per cent of NTGs who entered employment for the first time in 2013.”¹³ These interventions will need to be substantially strengthened, and will need to grow more targeted, particularly to assure that further training opportunities don’t end up deepening inequalities by flowing towards those in schools that can already afford additional courses. While a lot of work needs to be done strengthening the programmes themselves, the targeting is as important, but brings the discussion back to the messy issue of deepening teacher evaluation systems. Current monitoring systems range between weak, non-functional (in the case of the ANAs), inadequate (particularly the use of matric scores as a standardised evaluation system), and non-existent. Substantial investment is needed in developing monitoring and evaluation systems that work for teachers. This means building faith that the system will be used to help teachers, rather than punish poor performance, and will be implemented in such a way as to be able to identify specific problems rather than the broad trends of failure we already know exists.

A New Vision

This institutional environment will be vital to creating some sort of unified system that empowers teachers with the skills to manage a very challenging education environment. For that reason, institution building needs to be the first priority. In the meantime, however, a lot can be done on tackling some of the most pressing questions of a potential new pedagogy for South Africa. Answering these questions is beyond the scope of this paper, and indeed many will only be able to be answered by teachers themselves, but nevertheless a couple of issues are worth highlighting.

First, is to consider what is actually within the control of teachers. A review of studies on the determinants of student performance in developing countries revealed two major determining factors: family wealth and language.¹⁴ Wealth has been proved again and again to have a very significant impact on student performance, with students from richer backgrounds having access to a number of core resources that give them an edge over poorer students. Similarly, native language speakers have been shown to develop more rapidly than those learning in a second language. In a country with extreme inequality and where most students are not taught in their home language, both of these factors are at play and underpin many of the struggles facing teachers. While some aspects of these issues can be addressed by proactive teachers - a debate around language of instruction, for example, is overdue – most of these factors are out of teacher’s control, and put binding limits on what is achievable.

¹³ CDE. 2015. “Teachers in South Africa: Supply and Demand 2013–2025.” Johannesburg: Centre for Development and Enterprise.

¹⁴ Hoadley, U. 2016. “A review of the research literature on teaching and learning in the foundation phase in South Africa.” Working Papers: 05/16. RESEP: Research on Socio-Economic Policy.

Nevertheless, there is still scope to outperform these fundamentals. In the developed world, evidence suggests that four factors are significant: time, textbooks, teacher training, and opportunity to learn.¹⁵ The final point is crucial here, with opportunity to learn broadly defined as including “the quality of resources, school conditions, curriculum, and teaching that students experience”, and indicates that many core teaching strategies do have a powerful role to play.¹⁶ The second core factors must therefore be to compile a toolset of teaching strategies that can be effective in the classroom, and that which are easy enough to apply. There are, of course, multiple books and programmes that offer similar toolsets, but building a common set that changes over time based on feedback from South African teachers, would create a safety net for teachers struggling to find a way to overcome challenging circumstances or adapt to a new classroom environment. There are a plethora of resources to draw on here, with Table 1 below showing only a handful of the strategies that could be considered

Table 1: Examples of Teaching Methods Showing Positive Impacts in Developing Countries

Intervention	Example of activity	Impact				Study
		Emergent literacy	Oral language	Reading Skills	Increase in motivation/educational success	
Emergent literacy	Use locally available materials for children to select, explore and experiment with					Malmberg et al, 2011
	Read storybooks to children, and then discuss by asking questions					Kağıtçıbaşı, 1997
Oral language Outputs	Circle discussions to promote thinking about a topic, sharing ideas, and seeing causal relationships					Bekman et al, 2011
	Morning news session to promote free verbal expression					Moore et al, 2008
Dialogic reading & shared book reading	Asking questions about cause and consequences of events					Opel et al, 2009
	Students write thoughts about stories in notebooks					Abeberese et al, 2011
Phonological games	Making 'silly sentences' by stringing words together with similar phonemes					Nag-Arulmani et al, 2003
	Work on syllables					Rolla San Francisco et al, 2006
Reciprocal teaching	Choose a book and reread multiple times, identifying words and parts that students do not yet understand					Cianca, 2012
	Fostering interactive and shared thinking between children and teachers.					Mwaura et al, 2008

Source: Nag S., Chiat S., Torgerson C., & Snowling M. J. 2014. “Literacy, Foundation Learning and Assessment in Developing Countries: Final Report”. *Education Rigorous Literature Review*. Oxford: Department for International Development, University of Oxford. (As quoted in Hoadley, 2016).

This is by no means comprehensive, nor does every strategy apply to the South African context, but it is a starting point that should be deepened and adapted on an ongoing basis. The first aim

¹⁵ Hoadley, U. 2016. “A review of the research literature on teaching and learning in the foundation phase in South Africa.” Working Papers: 05/16. RESEP: Research on Socio-Economic Policy.

¹⁶ Banicky, L. 2000. “Opportunity to Learn.” Education Policy Brief Vol 7, October 2000. University of Delaware

of education interventions at this point must be to have a basic level of performance assured of teachers in very different environments and from very different backgrounds, and some kind of ongoing discussion and support system around pedagogy would help fill this gap.

Third and finally, teachers need to lead on efforts to expand pedagogical skills outside of the schools, particularly to parents. South Africa is in the unique position of having a generation of students being raised by a generation of parents who were mostly denied access to the good schools. This leaves many parents without the skills or experience needed to assist their children in navigating their school years. Having active, interested parents who have knowledge of basic schooling practices has been shown to be transformative in many developing world education systems, particularly in East Asia. Developing a system of basic pedagogy for parents thus has great potential to create a partnership between teachers and parents that can drive better educational outcomes for learners. Achieving this would likely require the production of materials that can be distributed to parents, offering guidance and advice on how best to help their child, and the offer of classes and time for individual consultation in which parents can learn some key skills to assist with education. Achieving this would of course depend on the Department and individual schools offering the time and resources needed to make it work, but a teacher-led process would both allow parents to tap into those who are most knowledgeable on these issues, and would deepen the relationship between teachers and learner's parents, which can create additional benefits in maintaining a level of dialogue on special attention that some students may need.

Conclusion

There is no denying that South Africa's education is in a state of crisis. The crisis has been around for so long that it risks becoming normalised, but the level of underperformance of South African students is extraordinary, and a serious threat to the working of the country and the wellbeing of young people. Much of the change that is so desperately needed will need to come from a combination of good government policy and progressive economic development leading to social change. But a lot can still be done by teachers. Equipping teachers with the ability to share their skills and experience in a more supported and systematic way can offer real benefits for students and the broader education system. It is something that unions, supported by government and individual school heads, must take up and advance.