REPORT ON
THE COLLOQUIUM ON
SUSTAINABLE CHANGE
IN EDUCATION

7 to 8 June 2018

Southern Sun Elangeni and Maharani Hotel
North Beach, Durban.

Report on the Colloquium on Sustainable Change in Education

7 to 8 June 2018

Southern Sun Elangeni and Maharani Hotel
North Beach, Durban.

Dr. Susan Cohen prepared this report on behalf of *Saide*

Contents

Executive summary

The *Colloquium on Sustainable Change in Education*, held over two days in June 2018, explored ideas emanating from research related to sustainable change at scale in schools in South Africa.

The colloquium began with an overview of the contents of *Learning about Sustainable Change in Education in South Africa: the Jika iMfundo campaign 2015-2017* (Christie & Monyokolo, 2017)- https://www.saide.org.za/documents/lsc_interior_20180511_screen-pdf.pdf.

Following this were 20 presentations organised around the five broad themes as follows:
1. Curriculum coverage and progression policies
2. Curriculum leadership and management at district level and its intersection with the school level
3. Understanding school leadership and management challenges, and approaches to instructional leadership in South Africa
4. Lesson plans and teacher professional development - Literacy
5. Assessment for Learning and use of learning materials - Mathematics

Using these presentations and the discussions of them as a base, participants debated a set of six strategic questions in the context of each of the five themes. These questions were:
1. What is the existing body of knowledge on change at scale in this area?
2. What are the systemic challenges (including policy mismatch and implementation weaknesses) that need to be improved in order to improve functioning at scale in this area?
3. What further work should be done (with monitoring and evaluation of the work) to inform our knowledge base of change at scale in this area?
4. What needs to be done and by whom in order to adopt and implement a learning agenda or strategy to support systems change at scale?
5. Is there a role for technology in supporting systems change at scale? What is the role?
6. What needs to be done to ensure our systems change models are scalable in different contexts?

Presentations were made by each theme group and discussed in plenary.

Several key insights about sustainable change at scale in general recurred in various forms over the two days. These include the following:

- An intervention needs to be owned by the Department of Education, and taken up at all levels of the system; It is not possible for an intervention that operates in parallel to the department to gain traction and stick; it will not be sustainable. There needs to be excellent communication across divisions both horizontally and vertically in the system, so that coherent messages are sent across it, and neither officials not teachers are confounded by conflicting instructions or duplicated demands. The tendency to work in silos is not helpful.

  > Owned by the Department of Education, with excellent horizontal and vertical communication.

- In order to be taken into the system, for there to be 'buy-in', interventions must be seen to be desirable, and supportive of core processes and requirements that are already part of the work of the officials and educators in the system; they should not introduce additional layers of work, but must rather be seen to be supportive of work that needs to be done and to contribute to meaningful improvement.

  > Supportive of core departmental processes.

- An intervention needs to have a core focus so that resources, including energy, can be directed toward it in a coordinated and meaningful way, rather than being dispersed across too many competing demands and activities. Although there are many urgent needs for change, it is important to prioritise, to choose what is doable, and to coordinate efforts around that.

  > The need for a core focus, to avoid resources being dispersed.

- It was felt imperative that the Department of Education focuses immediately on ensuring that the great majority of children are able to read for meaning by the end of Grade 4.

  > The need for children to be able to read for meaning.

- Change implies the taking of risks, and risks will not be taken unless risk-takers feel safe. Within the hierarchical system of the education department, with sub-systems such as district offices and schools, it is imperative that relationships of trust are built up across levels in the hierarchy. Monitoring and supervision need to be supportive, and intended to help identify and solve problems. Relationships of reciprocal accountability must be fostered. Without this, problems are hidden, and

  > Schools and districts should be conducive to risk-taking by teachers and officials.

mechanistic compliance to basic requirements, rather than energized work toward positive change ensues. Instructional leadership is essential - and leaders and managers need support and training.

- Change also implies the need for training and the development of new skills. It is important that those being required to make changes, being trained in new skills and behaviours, are supported in sharing these and implementing them in the workplace. Without such support, intended new learning, even when seen as valuable, will not persist and change will not be embedded and sustained.

Support for development of new skills and behaviours.

- Change processes cannot be static; it is essential therefore, that interventions are monitored and evaluated; that useful data is collected and analysed; that findings are reflected upon and that there are flexible and differentiated responses to evidence of what is working and what is not in different contexts. Research needs to address key questions, and to be less reliant on self - reporting.

Monitoring, evaluation and research are essential.

- Interventions do not happen in isolation; it is essential that all stakeholders in the endeavour be invited to participate, to lend support and to give honest critique. In this regard, the development of a knowledge portal and of databases of relevant information to facilitate the sharing of information and ideas is essential; there are many initiatives with similar intentions, and synergies need to be found so that the impacts of these can be compounded. There is a loose association of individuals and organizations working in the field of educational development and system change; it would be beneficial to have a more formalised community of practice, whose members can share and interrogate findings and processes, and co-create new ideas and strategies.

A community of practice for sustainable change to be formalised.

- Technology has many affordances that can be harnessed in support of positive change; however, inequalities in access to necessary knowledge and skills, and to physical resources limit its usefulness at present.

Inequalities in technology need to be addressed across the system.

- The Colloquium identified several important obstacles which impact on positive changes in teaching and learning, and hence on improved learner achievement. Key among these were:
    - the progression policy, allows learners to move into a higher grade annually based on age rather than achievement, creating de facto multi-grade classes as learners in any one grade are at different levels, making curriculum coverage within grade levels difficult.

      > Multi-grade classrooms are becoming the norm.

    - the mismatch between the time allocated to learning in the Curriculum and Assessment Policy Statement (CAPS), and the time demanded for formal summative assessment processes results in too little time being available for adequate curriculum coverage. This is compounded by an overfull curriculum.

      > Insufficient time for curriculum coverage.

    - Unfilled posts mean that vital human resources are absent and overstretched.

      > Human resources stretched.

    - In districts, high school and teacher to subject adviser ratios make it almost impossible for subject advisers to fulfil their role of support to teachers adequately; this needs to be re-examined if they are to add their potential value to the system.

      > Too few subject advisors.

    - Unfilled posts mean that vital human resources are absent and overstretched.
    - Within the schools, the varied demands made of Department Heads, and heavy teaching loads, make it difficult for them to fulfil their roles as supportive supervisors and mentors to members of their department.

      > Too many demands made on Department Heads.

- Curriculum Coverage is correctly understood as not what teachers report teaching, but the demonstration of what learners have learned at the specified conceptual level.

  > Curriculum Coverage as concepts learned, not what has been taught.

Further information about the background to the colloquium, its structure and organisation, and summaries of all the presentations and discussion is provided in the main report.

Main report

BACKGROUND TO THE COLLOQUIUM

The Colloquium on Sustainable Change in Education was held on June 7 and 8, 2018.

The intention of the colloquium was to explore the complex challenges of bringing about improvements in the schooling system in South Africa in sustainable ways at scale, and to put forward some suggestions for actions that might move the system forward.

The colloquium took, as its starting point, the research on *Jika iMfundo* presented in the *Saide* publication *Learning about Sustainable Change in Education in South Africa: the Jika iMfundo campaign 2015-2017* (Christie & Monyokolo, 2017)-
https://www.saide.org.za/documents/lsc_interior_20180511_screen-pdf.pdf. Jika iMfundo is a campaign of the KwaZulu-Natal Department of Education (KZNDoE) supported by the Programme to Improve Learning Outcomes (PILO) and funded by the National Education Collaboration Trust (NECT) as part of its District Improvement Programme. Between 2015 and 2017, Jika iMfundo ran as a pilot in two of the 12 districts in KZN and has since rolled out fully in a further four and its Foundation phase component has been implemented in all of the 10 remaining districts.

The Jika iMfundo campaign is conceptualised as a large-scale intervention that is embedded in the work of the department. It has, at its core, the following interconnected notions: if curriculum coverage improves, so too will learning outcomes; for curriculum coverage to improve, school management teams and district officials need to see that central to their work is the monitoring and support of the work of teachers whose job it is to deliver the curriculum; judgments about curriculum coverage must be evidence-based; and support must be constructive and directed at shared problem solving. Key to the changes required is the building of professional accountability, rather than mere compliance. Workshops are

Godwin Khosa,
Jenny Glennie,
Dr. Vusi Nzama
opening the
colloquium.

presented to school leadership and district official teams and a variety of tools have been designed to help various levels in school and district systems to embrace the changes in behaviour envisaged by the campaign.

Extensive internal reflection, as well as external evaluation and monitoring processes, took place throughout the three years of the pilot. In addition, independent researchers were encouraged, through an open call for proposals managed by *Saide*, to conduct research into various aspects of Jika iMfundo's work. Through all of these initiatives, much has been learnt about the challenges and successes of the campaign, about key features that support the change process and what some of the requirements for change at scale might be. The idea of a colloquium was born out of the realisation that valuable learning about both what has worked and what has not, should be shared, interrogated and built upon by a community of stakeholders in the educational development endeavour.

The response to the colloquium was overwhelming and the originally envisaged number of 90 participants swelled to nearly 130 delegates drawn from the national and provincial governments, teacher unions, NGOs and members of the research community from various universities and elsewhere. This report provides a succinct overview of the key presentations, of the distillation of two days of intensive reflection and debate, and of key constructs and proposals that emerged from these.

BROAD STRUCTURE OF THE COLLOQUIUM

The colloquium, chaired by Ms Jenny Glennie, director of *Saide,* was structured around several main sessions, each of which had a different purpose. These were:

1. Opening and welcome
2. An overview of the content of the book edited by Christie and Monyokolo (2018) referred to above
3. Presentations of research on five different themes, held in parallel
4. Plenary discussion of issues arising from these parallel discussions
5. Further theme-based sessions to answer six strategic questions
6. Presentation of reports by representatives of each theme on the six strategic questions and discussion of these
7. Closing remarks

Sessions 1, 2 and 3 occurred on Day 1 and Sessions 4 to 7 on Day 2.

Further information about the proceedings of these sessions is provided in the next sections of this report.

DETAILED ACCOUNTS OF EACH SESSION

SESSION 1:
Welcome and opening addresses

After a welcome message, the chair acknowledged the presence of key government members and departmental officials. Several invited speakers then addressed the delegates:

Godwin Khosa, CEO of the National Education Collaboration Trust (NECT), the major funder of PILO's work in KZN, welcomed all who were present on behalf of the NECT and commended the initiative that had led to the publication of the book, noting especially how the editors had encouraged contributions from emergent black academics.

Thanda Makhanya, from the National Teachers' Union (NATU), brought a message of support for the work of Jika iMfundo from the president of the union and stated that NATU fully supports all systems that improve our education system.

Thirona Moodley, from the National Professional Teachers' Organisation of South Africa (NAPTOSA), thanked the NECT and Jika iMfundo for undertaking such an ambitious project in the province and Mary Metcalfe for her on-going support and willingness to engage with constructive criticism. She expressed the view that, after some resistance to something new, trackers and toolkits are now part of the teachers' vocabulary and that shows that Jika iMfundo is here to stay. South Africa is ranked poorly in international benchmark tests and Jika iMfundo has shown that interventions can make a difference.

Dhirendra (Deon) Deonarain, Provincial Education Convener of the South African Democratic Teachers' Union (SADTU), observed that a strong positive relationship existed between Jika iMfundo and SADTU that stretched back many years and that there is full support for the campaign as one of the means of realising the national development plan. He noted that the emphasis on building the capacity of educators to shape their own practices, the stress on reciprocal accountability and the flexibility of Jika iMfundo that allowed schools to adapt the programme to their own contexts are particularly appealing aspects of the campaign. The union implores stakeholders to align all departmental endeavours with Jika iMfundo which should be the foundation from which all other interventions are developed.

Dr Nzama, the Head of Department (HoD) of the KwaZulu-Natal Department of Education, thanked Professor Metcalfe and the NECT for their support of the department through the Jika iMfundo campaign. He expressed the belief that Jika iMfundo, through introducing tools to monitor and support the instructional core, will contribute to improved curriculum coverage and hence improved learner outcomes in the province. He also thanked *Saide* and the contributors to the book for their involvement in the learning journey.

SESSION 2:
Overview of Learning about Sustainable Change in Education in South Africa: the Jika iMfundo campaign 2015–2017

Following the addresses of welcome and support, Professor Pam Christie, one of the editors of the book *Learning about Sustainable Change in Education in South Africa: the Jika iMfundo campaign 2015-2017*, noted above, gave a brief audio-visual overview (in absentia) of its structure and contents. This was intended to serve as a frame of reference for later group discussions. This general overview was important as each group would focus on a different topic and be informed by only one or two of the research chapters.

Professor Christie noted that the book has three parts as described below:

Part 1 comprises her own introductory overview of the book and the work of PILO in support of Jika iMfundo and two chapters by members of the PILO team describing key features of the Jika iMfundo intervention from an insider perspective.

Part 2 contains six chapters written by independent education researchers. These are described more fully in the section of this report dealing with each of the five themes of the colloquium.

Part 3 comprises a chapter reflecting on curriculum and education system change, written by herself and the other editor of the book, Mareka Monyokolo.
Following a brief outline of the focus of each chapter, Professor Christie noted that the book touches on several key questions:

- Can education systems be changed at scale through marshalling key stakeholders around PILO's theory of change in the Jika iMfundo campaign?
- Is it possible to work for change within existing structures, given their obvious shortcomings that are widely acknowledged?
- Is it possible to build professional capacity in schools and departments that lack resources and are often poorly functioning?
- Can professional accountability, as opposed to behavioural compliance, be built by changing practices of monitoring?
- Can self-report data provide a sufficiently reliable basis for gauging the extent and nature of curriculum coverage?
- Can curriculum management lead to improved curriculum coverage of sufficient quality to enhance student learning and improve learning outcomes?

She then highlighted some insights from the research related to difficulties in achieving curriculum coverage linked to quality learning outcomes:

- Teachers and Department Heads (DHs) were generally positive about the systematic planning that Jika iMfundo tools facilitated. They welcomed the transparency and role clarification it brought to curriculum monitoring but all the chapters show that teachers and DHs found problems with the pace and overload of the CAPS curriculum. They also showed the difficulties that teachers and DHs face in many of our schools, particularly those in poor communities, and schools where organisation is poor.
- Chapter 3 by Schollar shows that departmental policies may cut across each other to produce contradictory effects. Assessment policies cut across the curriculum when they promote students at different levels of competency and, in effect, make all classrooms multi-grade. This produces a "ceiling effect" on improving learning outcomes.
- Chapter 4 by Maphalala et al. shows how little experience of curriculum management there was in the schools where they worked prior to the Jika iMfundo campaign and the generally positive response to Jika iMfundo support.
- Chapter 5 by Mthiyane et al. shows the demanding range of tasks that DHs face and the challenges they face in schools with little administrative support - in contrast to schools classified "green" with existing organisational capacity and more resources.
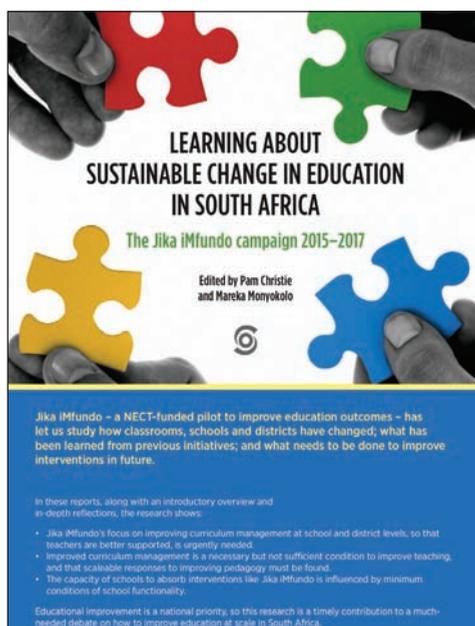
Book cover and description.

- Chapter 6 by De Clercq et al. highlights the challenges of building professional internal accountability in schools that do not have existing organisational capacity. The chapter also argues for more professional development to enable teachers to reflect on and improve their practices.
- Chapter 7 by Mkhwanazi et al. provides a snapshot of the challenges of teaching Senior Phase Mathematics in classrooms with mixed levels of conceptual understanding, particularly when organisational capacity is not strong.
- Chapter 8 by Mc Lennan et al. shows the extraordinary difficulties facing districts with wide geographical spread, large number of schools, a lack of resources and the challenges of working across "silos"[1] in district offices to support schools in curriculum coverage rather than focusing on compliance monitoring.

Professor Christie stressed that challenges such as these point to the great need to provide support to teachers, DHs, principals, School Management Teams (SMTs) and district officials in working together to improve learning outcomes within the system - which is the work that Jika iMfundo is doing. She also pointed out that the research chapters give some insights but these are research-based insights - they are NOT an evaluation of Jika iMfundo or PILO. In addition, it is too early to predict whether findings will stand the test of time as change does not happen instantaneously.

Following this presentation, there was a short time for questions to be put to a panel comprising Mary Metcalfe (PILO), Busi Dladla (Director, General Education and Training (GET) Curriculum, KZNDoE), Dierdre Williams (Open Society Foundation), Simphiwe Mpungose (principal of Hlengimpilo Primary School) and Skhumbuzo Manganye (Director, Teacher Development KZNDoE).

Question 1: Jenny Glennie asked the panel to elaborate on ways in which teachers are supported by Jika iMfundo.

    In response, Simphiwe Mpungose noted that Jika iMfundo introduced curriculum management tools to address this neglected aspect of their work. In addition, there are coaches who support the DHs and principals whereas, in the past, they were judged on their work but never supported. Skhumbuzo Manganye added that, in the Jika iMfundo approach, managers are not told what to do; they are shown how to do things better and DHs are empowered by being helped to set up and hold supportive conversations with teachers. In addition, the Jika iMfundo approach foregrounds the school as a site for teaching and learning, and advocates that professional development must take place mainly at the school level and empowers DHs to take what they have learnt back to their schools.

---

[1] separate divisions across which there is poor communication

Question 2: Takalani Rambau, from the office of the Auditor General of South Africa, asked how the district issues of a lack of capacity and working in silos had been addressed.

In response, Busi Dladla acknowledged that, generally, circuit managers and subject advisers go to schools and check for different things but neither considers curriculum coverage. However, in the context of Jika iMfundo, they work together; circuit managers identify gaps and places where improvement is needed in schools they visit and then refer issues to the relevant subject adviser - or another official - depending on the nature of the problem. Simphiwe Mpungose noted that, by focusing on the curriculum and providing monitoring tools, Jika iMfundo had assisted officials from different sections, such as subject advisers and teacher development, who deal with teachers in order to share a common focus.

Question 3: Carol Bertram, from the School of Education at the University of KwaZulu-Natal (UKZN), asked if there had been any shift in learner achievement over last three years in the two pilot districts.

Busi Dladla,
General Education and Training (GET) Curriculum, KZNDoE,
Dierdre Williams
Open Society Foundation,
Simphiwe Mpungose
Hlengimpilo Primary School
Skhumbuzo Manganye
Teacher Development KZNDoE,
Mary Metcalfe
PILO,
Jenny Glennie
Saide

Question 4: Billy Nkuna from NECT asked how Jika iMfundo emphasises accountability especially where schools are not performing well.

In response to both these questions, Mary Metcalfe noted that, where teachers are not performing well, it is clear that both the teacher and the school management are accountable but, before one can expect improvement, one must give support. The fundamental goal of this campaign is to achieve improvement in learner performance. NECT surveys show that there has been improvement in curriculum coverage but we do not really know yet if learner outcomes have improved as a result of this and, if they have not, we must find another method. Deirdre Williams observed that changes in outcomes and learning shifts will take time. It is important to keep on track; we too often try something then change tack after two years. This is a mistake; we need to see if change comes; we must stay the course and we must be flexible in what we do and, at the same time, learn from others.

Question 5: Busi Tshabalala from Free State DoE asked how teachers are getting support once they go back to their schools.

In response, Simphiwe Mpungose said that, on their return to school, the tools that had been introduced at the workshop are expected to be used within a certain time frame. Therefore, information is disseminated as soon as the SMT members return to school. The use of red, orange and green[1] to indicate how well schools are doing is an incentive to do well. Busi Dladla added that, in Jika iMfundo, there is a clear focus on the DHs and that, in the light of the paucity of subject advisers, capacitating the DHs to act as mentors to teachers is sensible. However, many challenges face DHs - some lack confidence, some lack capacity and so capacity building for DHs can enable them to support, not only monitor. In addition, coaches also assist with support via cluster meetings.

---

[1] See page 31 - bottom two lines.

SESSIONS 3 AND 4:
Presentation and discussion of key research pieces around five themes

Following the overview of the book and some discussion, participants divided into five groups and, in parallel, explored five different themes (Session 3). These were:

1. Curriculum coverage and progression policies
2. Curriculum leadership and management at district level, and its intersection with the school level
3. Understanding school leadership and management challenges and approaches to instructional leadership in South Africa
4. Lesson plans and teacher professional development - Literacy
5. Assessment for learning and use of learning materials - Mathematics

In his introduction to this session, Dugan Fraser noted that system change is difficult and requires that we operate collaboratively and respond flexibly. While there is much that is wrong, there are also things that we are getting right and it is important that we learn from success, share and build on lessons learnt. He asked groups in each theme to identify what we know and do not know about systemic change and to consider how to generate further information so that we can make hard decisions to improve the system.

After the small group discussion, a plenary, Session 4, at the start of Day 2, was allocated to the discussion of any questions or matters group members wished to raise for comment or debate with the broader group. This is reported more fully later in this section.

Each parallel group session began with presentations of key points from the relevant research chapters in the book and also from complementary research by other scholars and practitioners working in similar areas in the field. A brief summary of each presentation is provided below, together with some of the discussion on each; this was sometimes somewhat limited because of a lack of time.

THEME 1: Curriculum Coverage and Progression Policies
Chair: Tony Moodley, KZN Department of Education

There were five presentations on this theme.

Presentation 1
Curriculum Management, Improving Learner Performance and the Rise of Multi-Grade Classes: A Tangled Web of Challenges to the Design, Operation and Evaluation of Educational Development Programmes in South Africa, Eric Schollar, Eric Schollar and Associates.

In his presentation, Dr Schollar considered the impact of the national assessment policy, which allows for the promotion of learners according to age rather than achievement, on the curriculum coverage in any grade where learners are de facto at different grade levels. The key points he made include:

- Many interventions, including Jika iMfundo, focus on curriculum management as their key "lever for change" in improving learning outcomes. The logic embedded in this, and central to PILO's theory of change, is that an increase in exposure to the curriculum will lead to learners improving their scores in tests based on this curriculum.
- While this logic is sound, the expected improvement in outcomes might not materialise because, in any grade, learners receiving the curriculum for that grade are not actually at the appropriate grade level; they have been promoted with their peers on the grounds of age, not achievement. The assumption is that they are able, while being taught the curriculum at the correct level of complexity, also to catch up on the missed content and procedural competence they did not manage to attain in previous grades.
- Because of the effective multi-grade nature of classrooms, curriculum management to ensure curriculum coverage, while necessary, might not be sufficient to ensure improved outcomes for learners who have not achieved the learning expected of them in previous grades. Programmes which focus on improving curriculum coverage might, as a result, be seen to "fail", not because the logic of improved curriculum coverage leading to improved outcomes is faulty, but because of this unintended result of the national assessment policy. It is a myth that mixed ability groups or differentiated teaching will solve the problem for learners who are effectively three or four years below the required level of achievement for their grade. Teachers are forced to spend time on basics to help weaker learners and do not effectively extend learners who are at the correct level.

- For existing cohorts, the horse has bolted; for others, there should be a proper diagnostic system and streaming which would allow for weaker learners to receive the appropriate curriculum for their level in order to help them to "catch up". But, essentially, there is a need for the department to look at the disjuncture between the curriculum and assessment policy - one ascribes levels of content to certain grades, the other ascribes learners of particular ages to those grades. Grade and age levels cannot be conflated if meaningful teaching, learning and assessment are to take place.

Three questions were asked and responded to as shown below.

Question 1: What can we do about this situation?

Response: The problem exists throughout the system and has festered for a long time. We are pouring money in to no effect. We need to accept that grade levels cannot be only for children of one age - they should be promoted according to their competence and there should be more places where children can leave school along the way for other opportunities.

Question 2: How do we know that it is not just teachers being lazy?

Response: There must be some accountability. However, even if we could force teachers to cover the curriculum, the problem will not change.

Question 3: Can you explain how multi-grade teachers are supported?

Response: In well-organised schools, the school day does not finish at 1.30pm. There are often extra lessons up to 6pm for classes below matric in which the teacher can teach at the learners' level. One school added 48 weeks to the school year. Departments must stop telling schools not to teach for two weeks per term so that this time can be properly utilised.

Presentation 2

Enabling accountability and oversight for an effective monitoring of curriculum coverage, Takalani Rambau, Senior Manager, Performance Auditing, Auditor-General of South Africa.

Dr Rambau explained that curriculum coverage and the processes by which it is monitored and supported are key areas that the Auditor General of South Africa and the DBE together identified, in the auditor general's audit of the schooling system, as requiring attention. This was endorsed by references in various policies to, among others, the need to "ensure that learners cover all the topics and skills areas that they should cover within their current school year" (Goal 18 of Action Plan 2019: Towards the realisation of schooling 2030). It also included the requirement that each school has a plan that maps out its goals for the academic year with performance indicators (such as curriculum coverage) which should be frequently monitored and regularly reported on (National Development Plan 2030:311). In addition, there should

be measures implemented to "improve school governance, leadership and accountability, including competency criteria and management support of principals and district officials, to ensure that teachers are on time, teaching and cover the whole curriculum" (Medium Term Strategic Framework 2014-2019 - Department of Higher Education and Training).

He noted that there are processes and tools for planning and then reporting on curriculum coverage throughout the education system - within schools, from schools to districts and thereafter to the national department. However, value-add auditing reveals many deficiencies relating to the monitoring and support of curriculum coverage. These include:

- School DHs completing monitoring templates for compliance.
- Principals' lack of awareness of the need to include curriculum coverage in their schools' improvement plan and other reports.
- The fact that the structure and capacity constraints of districts make it difficult for them to provide whole-school monitoring and support.

These deficiencies are the result of a combination of factors:

- Leadership (such as acting positions and a lack of training and guidance)
- Personal (such as doing things for compliance, absence of consequences) and
- External (such as a work overload, intimidation and lack of capacity).

Dr Rambau concluded by outlining key aspects for improvement that the audit points to, namely,

- strengthening accountability at school level, especially that of the SMT and DHs to prioritise the planning, monitoring, support and continuous reporting of curriculum coverage
- increased use of the South African School Administration Management System (SA-SAMS) to drive school improvement, planning and reporting
- greater oversight of curriculum coverage by circuit managers, subject advisers and other relevant officials. This will entail revisiting the defined roles embedded in current district structures.

Presentation 3

Monitoring Curriculum Coverage: Quantitative Evidence from eight Districts in SA, Dhianaraj Chetty (NECT).

Dr Chetty presented and reflected on the analysis of data gathered from the NECT's monitoring of curriculum coverage across 400 schools in eight target districts, including the two in which Jika iMfundo was piloted. The data collected related to the quality and quantity of teaching and learning and its impact on outcomes in English First Additional Language (EFAL) and Mathematics in Grades 3 and 4, and in these two subjects and Natural Sciences in Grades 8 and 9. The survey tools focused on the scrutiny of learners' class workbooks,

Department of Basic Education (DBE) workbooks, where applicable, and assessment results. Qualitative data were collected on curriculum coverage and its impact on teaching and learning and also on school functionality.

There are very detailed findings from the survey across subjects and grades but the key patterns shown include:

- Evidence that the use of Structured Lesson Plans (SLPs) and trackers does lead to increased curriculum coverage over time.
- There is a deficit in the required amount of written work/exercises/DBE pages completed in all grades and subjects, with the deficit greater in some topics and in some subjects than others. There is an inverse relationship between skill level of difficulty and curriculum coverage.
- The spread of exercises completed across the months of the first two terms is uneven with February and May showing the greatest number and June the smallest. This is probably related to the dates of assessment tasks.
- Less time than is expected by CAPS is given to teaching and learning each term, and the CAPS weightings for different topics/skills are not closely followed.
- Overall, the percentage of the curriculum covered was below 50% by June which will impact on coverage as the year progresses. Some schools achieved higher percentages and others lower, showing the need for more focused interventions. The deficit is generally greater in higher than lower grades.
- Curriculum coverage and assessment scores correlate in some districts, but coverage exceeds assessment scores in others. This anomaly needs further exploration.

Dr Chetty suggested that

- we need a clear understanding of what we mean by curriculum coverage and how to measure it. Do we look at quality or quantity, depth or breadth? Are the existing benchmarks, made explicit in the CAPS, in fact, achievable in most South African schools?
- we assume that greater curriculum coverage and the behaviour changes integral to Jika iMfundo will lead to better learner achievement but will they? And, if so, in what time period? Data collected after the three-year pilot will be useful to answer these questions.
- research findings, especially those related to class size and how to teach reading in the Foundation phase, should be implemented and attention should be given to more and better teaching of higher order skills in mathematics, science and EFAL. In this regard, we need to understand the cognitive demands of these subjects better - are the higher order skills they develop equitable?
- there is a need to know more about what is actually being learnt, especially in the absence of Annual National Assessments (ANAs).

- we need to know more about the sustainability of improvements in curriculum coverage. Data from Pinetown and King Cetshwayo, the two Jika iMfundo pilot districts, should assist here.
- we need to know more about support/coaching models. Even though they are costly, they appear to be beneficial but what do they mean for the whole system?
- we need more data from pre- and post-assessment to inform programme design and delivery.
- we need to rethink school support - the number, roles and functions of subject advisers.
- teachers need more support and there should be greater professionalism. They are overburdened by curriculum and assessment requirements and might not have the capacity to deliver the curriculum.
- there are lessons to be learnt from similar projects, such as those in Kenya.

Contributors from the floor made the following comments:

- The investment in workbooks might not be warranted given their apparent low usage. Perhaps funds should be redirected. The same question should be asked about subject advisers: either we need many more, or we need to reconceptualise their role. We need to invest more in them, but we also need to re-examine the model of district-based subject advisers.
- In high performing schools, there does seem to be a strong relationship between curriculum coverage and learner achievement but not in low performing schools. This means that increasing curriculum coverage at the level of the grade they are in will not help them, as the work is above their level of achievement.

Presentation 4

Reflections on Assessment and Curriculum Coverage in South African Primary Schools, Neil Avery and Barbara Njapha, Performance Solutions Africa (PSA).

In her presentation, Barbara Njapha shared reflections on the nature of curriculum coverage and assessment practices, and factors impacting on these. This was based on work done by PSA in primary schools over many years. Her key points included:

- There is a critical link between assessment and curriculum coverage. Lack of coverage will be reflected in learners' performances on assessment tasks, as marks indicate whether or not learning expected by the curriculum has taken place. However, in a system where teacher knowledge is lacking and where a DH's management skills are rudimentary, data on measurably increased curriculum coverage may translate into wider coverage of the planned curriculum, coupled

with shallower attention to content, linked to greater use of time for assessment (including standardised assessments) - all of which will not result in improved outcomes despite apparent increased coverage.

- It is important for teachers to record what has been taught and to account to their supervisor (the DH) for what has not been covered.
- There are significant challenges to curriculum coverage related to:
  - the CAPS: Too much content and too few real teaching days; insufficient time for reflection
  - teachers: High absenteeism, poor methodology, lack of content knowledge
  - the system: Teachers are sometimes required to teach subjects for which they have not been trained; teachers are poorly motivated; teachers are not well supervised, monitored and supported.
- Research in 540 schools in KZN in 2011 showed that there are certain key management practices and principles that will improve teacher performance and which, once implemented and routinised, will result in improved learner achievement. These practices include:
  - The SMT monitoring of teachers: Identifying those who are not doing well and supporting them to address problems regarding curriculum coverage.
  - The SMT ensuring that accurate and reliable data are used to measure curriculum coverage.
  - The SMT allocating teachers appropriately and managing attendance.
- In the absence of other tools, trackers remain useful tools for tracking curriculum coverage.

She also reported that PSA has invested in an electronic assessment tool which allows schools to conduct a baseline and annual assessment of their management practices' maturity. Future interventions can be based on this so that schools can be supported on a needs basis rather than in a "one size fits all" fashion.

Discussion of this presentation was held over to the end of this session.

Presentation 5

Exploring Mathematics Teachers' Usage of the Curriculum Planner and Tracker in Secondary Schools in King Cetshwayo and Pinetown districts, Thokozani Mkhwanazi, Zanele Ndlovu, Sebenzile Ngema & Sarah Bansilal, UKZN.

This presentation reported on research conducted in 16 schools across the two pilot districts, with the aim to:

- identify the reasons for the much lower take up of mathematics planners and trackers[2] in the secondary school in 2015 and 2016 than in other subjects
- identify challenges facing mathematics teachers when using the planner and tracker
- evaluate the impact of using the planner and tracker on curriculum coverage.

Data was obtained from the surveys conducted in 2015 and 2016, interviews with teachers and DHs and classroom materials.

Key findings included:

- There was poor use of the planner and tracker that was being routinely used in only three of the 16 schools for the purposes for which it is intended. In other schools, it was not used at all or only as a reference document. Where it was signed, it was for compliance purposes only.
- There are several concerns with the planner and tracker:
  - It demands too fast a pace for learners to master concepts.
  - The sequence of topics is too rigid.
  - There is a lack of alignment between the tracker and other tools, such as the Annual Teaching Plan (ATP) provided by the Department of Education and the Sasol Inzalo books.
  - Teachers lacked confidence in using it as they had never been trained.
  - There was shortage of the resources, such as textbooks, on which the planner and tracker is based.
- There are several enabling factors that support the use of the planner and tracker. It is detailed and easy to use; it helps teachers understand the depth to which they must work and the sequencing of topics; it provides assessment tasks and also helps teachers find tasks in the range of LTSMs as it cross references these.
- Evidence about the impact of the use of planners and trackers is insufficient to make a judgement but it did appear that, where the trackers were routinely used, teachers were on track, while in other schools they were not.
- Generally, there was a low level of curriculum coverage. This was worse in General Education and Training (GET) than in Further Education and Training (FET) classes, possibly because of the impact of common papers in the FET and the number of curriculum catch-up interventions. More general reasons for poor coverage offered by respondents included internal school issues, lack of learner commitment, DBE commitments which reduced the time teachers spent in class, a lack of resources and, in the GET, overcrowded classrooms.

---

[2] Planners and trackers are documents which link the curriculum statements with pages and exercises in the approved textbooks and teachers' guides. They are intended to support planning and monitoring of curriculum coverage.

Several suggestions emanated from the research:
- There is a need to pay more attention to the reflective section of the planner and tracker.
- A supportive organisational environment and accountability of all stakeholders are essential conditions for the successful implementation of Jika iMfundo.
- There is a need for synergy between Jika iMfundo and the KZN DoE to avoid confusion brought about by conflicting plans and requirements from each.

There was little time for discussion after these last two presentations but the following comments were made:
- The pressures in the FET mean that teachers use official departmental documents, such as ATPs, rather than planners and trackers.
- The DoE needs to take up the reins so that there is synergy between the two systems.

THEME 2: Curriculum Leadership and Management at District Level and its intersection with the School Level
Chair: Tom Sokhela, PILO

In this theme, there were four presentations:

Presentation 1
District Support for Curriculum Management Change in Schools, Anne Mc Lennan, Mike Muller, Mark Orkin & Hanlie Robertson, University of the Witwatersrand (Wits).

This presentation was based on the chapter in the book edited by Christie and Monyokolo (2018) in which the authors explore the effects of the Jika iMfundo district change programme on curriculum management relationships between schools and circuits.

Professor Mc Lennan began by giving some key points about Jika iMfundo's district support programme:
- It is integral to the overall change strategy.
- Its aim is to build cooperative ways of supporting schools through professional conversations among circuit managers, SMTs and teachers.
- To achieve this goal, officials need to build commitment to change as well as the capacity to do the same work differently - using evidence driven conversations as a basis for action, and working in multifunctional teams to support schools, rather than in silos.
- Interventions will only be seen several months later in relationships and routine practices.

> She then gave some thoughts on the question, "Can districts be developmental?", in which she noted that there is evidence that district leadership matters if it is focused on learner performance and the support of schools. District officials can be intermediaries, who monitor progress and provide support, offering leadership "from the middle".

This was followed by a description of some of the key activities of the Jika iMfundo district intervention - on-boarding workshops, the establishment of a champions' team, quarterly leadership sessions and the development of a circuit manager conversation tool. This has two sections - one on curriculum management and the other on general management. Both are scored to give a heat map dashboard of how well the school is doing on a range of criteria. The dashboard serves as the basis for conversations aimed at offering support and strategies for improvement and also enables the district to identify schools in greatest need of support.

The presenter then gave some of the conclusions from the analysis of qualitative research data collected by PILO in the form of interviews and routine reviews of interventions across schools and districts over a period from 2015 to 2017. These include the following:

- Data do suggest that interactions between some schools and their respective circuits are more interactive and less compliance oriented. This is evidenced in better planning, scheduled visits and a shift from compliance checking to "How can I help you?" However, the tendency to focus on management compliance rather than curriculum management persists.
- Effective use of the Circuit Manager (CM) tool allows circuit managers and principals to begin to see themselves as instructional leaders. The challenge is that it does not become a compliance instrument.
- Tools and evidence allow new routines to be introduced and practiced. Reinforced practice enables institutionalisation.
- Scores on the relationship criterion of the CM tools seem to correlate positively with achievement at the National Senior Certificate (NSC) level - no other criterion had this same link.
- Heat maps are a means to identify challenges but are limited as a means to track individual or school progress.
- Conditions may make change difficult but the focus on agency and constructive conversations suggests that dysfunctional schools or districts need not be overlooked. The PILO approach allows officials to see and understand what can be done despite the prevailing conditions.

Three questions were asked about this presentation.

Question 1: What are the indicators for the link between improved relationships and higher NSC results?

      Response: Data provided were the quantity of Circuit Manager school visit tools and the scoring that was done through the dashboard. Interviews were also conducted as the programme was aimed at establishing routines of curriculum coverage and management. There was however no baseline data.

Question 2: What is the time lag: How long does it take to change behaviours?

      Response: A diagnostic assessment was conducted at the beginning. After 18 months, routines were being established but there was no information on changes in what was taught and what learners learnt.

Question 3: How do we remove other influences/interventions that impact on the district?

      Response: We need to empower people to work through the challenges by focusing on what works in their context.

Presentation 2

Leadership and literacy: Exploring their Linkages in Rural and Township South African Schools, Nick Taylor, JET Education Services and Ursula Hoadley, University of Cape Town (UCT).

In his presentation, Nick Taylor presented the background to and main findings from research conducted by the "Leadership for Literacy" project aimed at understanding how good leaders promote good reading instruction in their schools.

Dr Taylor described the research methodology, noting that there had been a sample of 60 schools, 30 of which performed well and 30 whose performance was average. Reading tests were given to learners in all 60 schools. Then, a case study of four matched pairs (eight schools) was conducted in which there was a qualitative analysis of leadership practices. Interviews were held with school leadership and teachers, books in the classroom and the library were inspected and learners' writing in selected grades and subjects was examined,

He then described the theoretical framework for the research which identified four sets of resources in a school which impact on learners learning to read. These are:

- Symbolic resources: The extent to which school leaders, as a collective, understand the value and technology of teaching reading and the extent to which this is shared with teachers across the school.

- Human resources: The extent to which expertise in reading instruction is used to recruit and promote educators, to which existing expertise is recognised and utilised across the school and the extent to which expertise is developed.
- Strategic resources: The extent to which there are programmes and practices in the school that are geared towards the improvement of reading instruction and outcomes.
- Material resources: The extent to which time is used effectively for reading instruction and the extent to which textual resources are procured, deployed and utilised for effective reading instruction.

These resources need to be mobilised, guided and developed by leadership to promote effective reading pedagogy throughout the school. Questions about these resources were included in interviews in the case study schools.

Findings from the research were then presented and include:
- There were generally weak leadership practices in all four categories across all eight schools.
- Where better practices existed, these activities were inconsistent. As a result, within each pair, the two schools are not strongly distinguished from each other. Also, the weak leadership practices allowed teacher effects to predominate although there had been no opportunity to identify what these were.
- The one factor that appears to be more prolific in better performing schools was the presence of symbolic resources - the knowledge and understanding of reading. If school leaders themselves do not have a full grasp of the importance of reading and how it should best be taught, they cannot exert good leadership in any of the other three resource categories.

Recommendations from the research include:
- Select school leaders on the basis of expertise. This will not change much initially but it will send a strong message that knowledge and skill are important and it is likely to incentivise educators to develop their capacity in curriculum, pedagogy and assessment.
- Build the capacity of school leaders in these areas. Only when they are demonstrably more knowledgeable than their teachers will they generate professional respect.
- Remove all constraints to the selection and promotion of educators according to expertise, motivation and ethical behaviour. Skilled and knowledgeable educators are essential if reading proficiency is to be developed to high levels.

Discussion after this presentation focused on questions of how leaders at school are appointed and the challenge that arises when they have management expertise, but little curriculum knowledge. In response, it was noted that

- Jika iMfundo is an important intervention because it highlights collaboration and emphasises that instructional leadership is a collaborative effort across the school. This approach should be promoted across the province.
- A principal who is aware that 70% of RSA learners cannot read will allocate resources accordingly.

Two further issues were raised, but could not be discussed because of a shortage of time:

- Issues of sustainability - management of personnel change - how do we institutionalise management practices in the light of this?
- Challenges of the HR framework - such as not being able to hire staff as you wish.

Presentation 3

Leading to Improve Learning Outcomes in the Jika iMfundo Campaign, Allistair Witten, PILO and UCT and Kaizer Makole, PILO.

Dr Witten described the case study research undertaken to describe and explore the effects of training on members of school SMTs. Research was focused on eight schools in each of the two Jika iMfundo pilot districts, four of which were "early adopters" and four of which showed less uptake of and involvement in the programme. Data were collected by means of individual and focus group interviews with principals, deputies, DHs and teachers; questionnaires; observations of SMT training sessions; district-school meetings; SMT meetings; various reports, reviews and articles about the intervention; and meeting notes. Dr Witten also described how the data had been analysed, and the measures taken to ensure the validity of the research.

He then presented the key findings of the research which, among others, concluded that

- the training had strengthened the focus on curriculum management
- participants had become more aware of the hard and soft skills required for instructional leadership
- there was increased understanding of supervision as a professional, collaborative and supportive engagement
- the training had increased an understanding of the "how" of supervision
- there was greater support offered to teachers.

Various challenges to instructional leaders in schools were then identified. They were categorised as school-based (such as inadequate content knowledge, unfilled vacant posts leading to overcrowding) and external (such as parental involvement and support, substance abuse, learner attendance).

Dr Witten concluded with three important points:

- The SMT training is intended to shift leadership focus and orientation from a bureaucratic impulse to one of leading to support learning. It helps leaders to rethink and reframe supervision as an instructional practice that is developmental.
- It is important to find a balance between agency and structure.
- Instructional leadership must be recognised as a systems-wide construct. There needs to be systemic instructional coherence - all the elements of the system such as professional roles and responsibilities, resources and stakeholder relationships across the different levels of the system should be arranged such that they mutually reinforce each other, interconnecting to and supporting teaching and learning in the classroom.

After the presentation, the following points were made and questions asked:

Around training of leaders:

- Leadership is a big issue in the high schools where subject expertise is required. It is clear that supervision is not easy - collaboration and creating safe spaces are not always familiar practices.
- Is the timing of training on how to do supervision supposed to come after or before people apply for senior positions?
- When teachers are trained, there should be more focus on curriculum coverage and management.

How do we deal with resisters?

- Jika IMfundo is a campaign. People were encouraged to sign up and make a commitment. However, due to many programmes that have come before and did not achieve their results, some people did not stay on board. We need individuals at strategic positions to ensure that people are on board, for example, at school level (coaches) and at district level (champions' team). We had nine modules (three per year) and very often coaches pick up blockages in take-up. There are variations in this.

What about inadequate content knowledge? Is it an issue of faulty recruitment or does the problem lie with the universities?

- Our universities are not preparing our teachers for teaching (pedagogics).
- We need to encourage those who know more to lead (subject heads).

Presentation 4

Data Driven Districts Dashboard as a Tool to Monitor Performance in South African Basic Education, Takalani Muloiwa, Victor Huni & Edwin Luvhimbi, New Leaders Foundation.

This presentation presented the case for better data about the education system and described a case study which showed how effectively good quality data can be used in educational settings. Key points made in the presentation included:

- There is very limited access to quality data, especially in grades other than Grade 12, and thus there is little opportunity for strategic systemic improvement. Matric results are taken as indicators of the entire school performance but only provide information at the exit point of basic education and do not highlight challenges in lower grades.
- Research suggests a need to shift the focus from the FET phase to the GET phase in order to build a solid foundation for learners.
- SA-SAMS can provide a great deal of useful data about learners in all grades. The number of learners whose data are captured in SA-SAMS has increased to more than 10 million across over 19 000 schools in seven provinces.
- Results from a case study in underperforming schools in Limpopo show that SA-SAMS data are made even more useful if they are uploaded to the online District Data Driven dashboard. This makes it possible to monitor and evaluate learner performance over time, even in lower grades. Also, the efficient and effective use of data can impact on interventions and so influence learner outcomes.

Discussion after this presentation focused on three questions.

Question 1: What are the challenges of schools not using SA-SAMS? What is the take-up of SA-SAMS in schools?

    Responses:

- There were initially differences in weightings between SA-SAMS and CAPS. There was insufficient training of administrators and educators which means that they are unable to change what they have rights to change in the system to make it work for them.
- There is a burden of capturing data on administrators, perceived to be greater in SA-SAMS than in Excel. But submissions in Vhembe are now 90% in the first term of the year because of the director's intervention.

Question 2: When you track learner performance, presumably you use teacher tests. What were the mentors doing?

    Response: There was a decline in learner performance and the district intervened by introducing common tests.

Question 3: What support is given by the district to unblock issues?

    Responses:

- There is strong support from the District Director.
- Data quality is everyone's responsibility, from the District office to educators at school. Everyone must play a role and there must be proper systems of capturing data at all levels from the source to the final capturing. You cannot manage what you cannot measure.

THEME 3: Understanding School Leadership and Management Challenges and approaches to instructional leadership in SA

Chair: Alison Newby, SEED Foundation.

There were four presentations in this theme.

Presentation 1

A Quantitative Perspective on School Leadership and Management in South Africa, Gabrielle Wills, University of Stellenbosch.

In her presentation, Dr Wills noted that, while there was a rich bank of qualitative research in school leadership and management (SLM), there was little quantitative research. She identified two foci of the quantitative research that do exist - the linkages between SLM and learning and the structure and dynamics of SLM resourcing.

With regard to the research into the linkages between SLM and learning, she identified four stages of research and examined the key findings from each. Key points from this overview include:

- Work in phase one of the research shifts attention from resources to efficiency dimensions and suggests that it is how resources, including SLM, are used (their efficiency) rather than their presence that is important for differences in school performance.
- Work in phase two of the research incorporates proxies for SLM into models of learning levels and suggests that some proxies of SLM have an impact on learning levels. Three such proxies are: time on task, the opportunity to learn and curriculum coverage. Research findings support the call for increased management of these.
- Work in phase three incorporates proxies of SLM into models of learning gains and suggests that the impact of the proxies of SLM is mediated through other factors, for example, the opportunity to learn is strongly mediated through the capacity of teachers to deliver the curriculum.

- In an emergent fourth phase, research suggests that there is no causal evidence for the relationship between school management or principal leadership and learning outcomes; however there are causal links between provincial administrative functionality and matriculation results.

Based on these findings, Dr Wills suggests that "SLM may matter for raising learning outcomes but it is highly unlikely to overcome large inequalities in learning". She notes that it is an inconvenient truth that "leadership and management is a necessary but not sufficient condition for school turnaround or learning improvements."

Regarding research into the structure and dynamics of SLM resourcing, Dr Wills notes that

- there are large inequalities in SMT post provisioning across provinces. Also, wealthier schools (quintile 5) have more managers than schools in lower quintiles and school principals are better qualified
- the inequalities suggest that improved conditions are possible and that filling posts with suitably qualified personnel is a worthwhile first step toward improving SLM in schools
- we need more research into how best to improve the quality of SLM so that we can upgrade the quality of SLM.

The presentation was followed by a question and answer session that is reflected below. Unfortunately, there was not enough time to respond to all the questions.

Question 1: Are school principals being evaluated in terms of performance?

Response: There are programmes in place although they are not appropriately implemented in South Africa, but there are countries that are doing it successfully.

Question 2: How can the inequality gap be narrowed?

Response: There is no straight answer to this since some of the provinces are achieving better with the same resources. Provincial administrations can, to some extent, resolve the problem and improving teacher qualifications could help.

Question 3: Is there data for DHs who are employed by the SGBs (School Governing Bodies)?

Response: No data are readily available (regarding the shared research findings).

Question 4: What is the segregation between the existing quintiles?

Response: Budget is allocated considering the number of learners in some, but not all provinces, for example, Gauteng. Funds are being pumped into schools without such considerations.

Question 5: Principals' Qualifications: Is there any correlation between principals' qualifications and school performance (improvement)?

    Response: Research has not shown any correlation.

Unanswered questions:

- Is there an induction programme for the SMTs?
- Where do you, as change agents, enter the system as a way of initiating change?
- What would be the ideal package to improve leadership in schools?
- Can we consider lead indicators in addressing the balance on what we target to change in school leadership?
- Do we have statistics (based on research) on how many principals would be retiring in the next few years?

Presentation 2

Empowering Principals as Instructional Leaders to Lead Public Schools Effectively in the 21st century, Raj Mestry, University of Johannesburg.

In this presentation, Professor Mestry discussed findings from his research that examined the role of principals as instructional leaders. He looked, in particular, at principals' perceptions of this role and the adequacy of their preparation for it. Key findings are given below:

- The principal's role is complex and multifunctional, and is one of high autonomy coupled with high accountability. The role has shifted from one mainly of management and control to one of educational leadership with an emphasis on the fostering of staff development, parent involvement, community support and student growth and achievement. There is a need for new leadership styles, such as distributive leadership.
- Despite this, there is rarely any formal leadership training and principals are appointed on the basis of their teaching records rather than their leadership potential.
- Creative and innovative leaders are rare; there is a tendency for principals to be compliance driven.
- In order to improve the quality of educational leadership, there are several new initiatives, including on-going in-service professional development offered by the DBE to both appointed and aspiring principles and the development of an Advanced Diploma in Education for Principalship which will, in future, be an entry requirement for the position.

Following the presentation, the questions, noted below were asked. Responses to those for which there was time to respond are noted with them.

Question 1: Is there a suggestion on how principals should be appointed?

    Response:

- Teaching is still the last resort considered for a career in South Africa and hence there is a poor quality of principals.
- Taking away performance management around the IQMS process can be a solution (teachers are focusing on the 1% increment and not the quality).

Question 2: Has the research looked at the situation where 99% of teachers are highly unionised and politicised?

    Response:

- This is not part of any research as yet.
- Unions should start working meaningfully with the education authorities.

Further unanswered questions:

- Did the research consider the issue of people failing to honour their key responsibilities?
- Are there innovations through which school leaders can be empowered without being removed completely from the work site for a while?
- What is it to be a principal today, compared to principals 5-10 years ago? Are there any informed/researched comparisons in place?
- Are there any immediate recommendations for change for the DoE?

Presentation 3

Balancing Monitoring and Support: The role of Heads of Department in Curriculum Coverage, Nonhlanhla Mthiyane, Jaqueline Naidoo & Carol Bertram, University of KwaZulu-Natal (UKZN).

This presentation reported on research which explored the extent to which Department Heads (DHs) are able to play an adaptive leadership role in supporting the teachers in their departments. It attempted to answer two key questions:

- In what ways do DHs think that Jika iMfundo training and tools do or do not enable them to better support their teachers to improve curriculum coverage?
- What challenges do DHs participating in Jika iMfundo face when supporting their teachers to improve curriculum coverage?

Data were collected from PILO-administered questionnaires completed by 53 DHs in 35 schools and from semi-structured interviews with 29 DHs from 15 purposively chosen schools across primary, secondary and combined schools. Schools were in PILO categories defined on the basis of need for support: green - no support needed; orange - require support to implement; red - unable to implement.

The main findings and conclusions of the research are noted below:

- PILO was seen to have helped DHs in various ways, although not equally across the red, orange and green schools:
  - The training helped participants clarify their roles as DHs
  - DHs in red and orange schools found that
    - the planner and tracker was helpful as it brought structure to their work and created transparency in their supervision practices
    - Tool 1 (Supervision and Tracker tool) was useful because it assisted them in monitoring curriculum coverage so that they were always aware of which teachers were and were not "on track"
    - Tool 2 (the Structuring a Supervision Conversation tool) was useful and the training around collegial relationships and how to have a supportive conversation helped them to improve relationships in their departments.
- Many DHs in orange schools noted that their participation in Jika iMfundo has resulted in more regular meetings with the staff in their departments, improved curriculum coverage, improved relationships within departments and enhanced confidence regarding their own role as a DH.
- In green schools, the DHs already had successful planning and monitoring practices, and did not see the need for Jika iMfundo's planning and monitoring tools. Collegial support, as envisaged by Jika iMfundo, was already in place in these schools.

The research identified many challenges facing DHs:

- There is too much paperwork and too much time required to fulfil all the expectations of meetings and minute keeping on top of all the other work of a DH, especially in large departments where a DH might have 13 or more members of staff to supervise.
- The pacing of the trackers is too fast (though it was acknowledged that this problem was shared with the ATPs) and the sequencing of content (in maths) is too rigid and inappropriate in places. The consequences are that learners are left behind and are not developing the required knowledge and skills.
- Many conditions beyond the control of the DH impact on curriculum coverage. The tracker does not address these issues, which include:
  - Limited resources in schools
  - Teacher absenteeism
  - High learner: teacher ratios
  - The fact that learners learn at different paces
  - The heavy administrative requirements of the DH role.

There were noticeable differences in supervision and monitoring styles between the green and red/orange schools:

- DHs in orange and red schools tend to take a more technical approach to their DH role which favours the monitoring rather than the support aspect of their role. This is, in part, the best they can do as they work under trying circumstances.
- The DHs in the green fee-paying schools seemed more likely to practice adaptive leadership. This practice reflects their professional confidence, which is supported by their school context that has a "flatter" organisational ethos and where there is greater collaboration and support amongst teachers.

The key conclusions of the research were noted as:

- The training and tools provided by Jika iMfundo are helpful for many DHs in the orange and red schools. However, their ability to play a supportive and developmental role is constrained by a lack of time and contextual challenges in their schools.
- The Jika iMfundo programme seems to overestimate the agency that DHs have as levers of change. They are middle managers who are held responsible and accountable to implement policy and ensure curriculum coverage but have minimal resources and decision-making powers to assist them in these roles.

The presentation was followed by questions noted below, but there was insufficient time for responses to them.

- What is the meaning of the codes: Red, Orange and Green in the PILO (Jika iMfundo) school segmentation?
- Is it possible that trackers generally receive negative uptake from the schools?
- It is good there was focus on DHs, but what about the other two layers of management (principal and deputy principal)?
- Do you have anything in place to support curriculum supervision?
- Are we, based on research findings, saying our curriculum (CAPS) is overloaded?

Presentation 4

Lessons learnt through Jika iMfundo programme in Managing School Curriculum in King Cetshwayo District: The Programme to Improve Learning Outcomes (PILO), Mncedisi Maphalala, Nontobeko Khumalo, Alan Buthelezi, Maria Mabusela, Bongani Gamede, Duduzile Sibaya & Dumisani Nzima, University of Zululand.

This presentation reported on findings from research into the perception of Jika iMfundo held by participants in the programme in schools in rural KwaZulu-Natal. Eight primary schools formed the study group - three green, three orange and two red, with 39 participants (eight principals, four deputy principals, 11 DHs and 16 teachers across the schools). Data was

collected from focus group interviews, from the analysis of documents and from site visits. The research showed that

- attitudes to Jika iMfundo were generally positive. Jika iMfundo was seen as a way of transforming education for the better as it represents a paradigm shift in managing the school curriculum.
- there were many perceived benefits of participating in the programme, attributed to the workshops for SMTs (around behaviours, attitudes and tools to support curriculum coverage and changed relationships) and for DHs and lead teachers (around curriculum content and pedagogy) and the resources (trackers and teaching/learning resources) supplied. These benefits included:
  - The broadening of teachers' and SMTs' knowledge on how to plan, implement, monitor and evaluate the curriculum through the use of tools.
  - Greater uniformity, synchronisation and streamlining of curriculum management within schools, circuits and the districts.
  - Improved ability of teachers to implement the CAPS and to use assessment effectively. Scheduled formative assessment activities were seen as helpful in monitoring learners' progress and providing immediate feedback. As a result, learner performance has improved. Also contributing to this improvement are the planned tasks that keep learners actively engaged in lessons.
  - Relationships improved as roles were clarified and better strategies for monitoring, support and feedback adopted. In addition, teachers began to plan together and work as a team to solve curriculum coverage problems.

At the same time, there were some perceived negative aspects, noted below:
- Jika iMfundo focuses on curriculum coverage rather than quality.
- The inadequate provision of resources in some schools might lead to poor learner performance.
- Teachers are unable to keep up with Jika iMfundo's pace setters due to increased workloads.
- Most time is spent on planning rather than on teaching.
- Jika iMfundo is paper driven rather than learner centred.

Questions asked about this presentation are shown below.
Note: there was only time to respond to the first question

Question 1: How does one measure/balance curriculum coverage and learning?

    Response: Mary Metcalfe defined curriculum coverage as follows: "It is not about teachers ticking a box, but it is about the learning that is demonstrated by learners. This involves deeper thinking on how teachers would best decide when to proceed to the next lesson having noted how many learners have understood the taught concepts, at well-identified levels of understanding and their capabilities". She further explained that such

decisions require professional judgement which teachers engage in on a daily basis in their teaching and learning.

Question 2: Does change in management/leadership directly influence learning?

Question 3: What role does perception play in receiving the discussed forms of support?

THEME 4: Lesson Plans and Teacher Professional Development - Literacy
Chair: Siven Maslamoney, Yellowwoods Ventures Investments

There were four presentations in this session

Presentation 1
Teachers Conception and Construction of their Instructional Practice: Shifts in Teacher Beliefs, Knowledge and Skills, Renny Somnath, SADTU.

In this presentation, Renny Somnath presented findings from research in which he used an instructional rounds approach with a group of four teachers. He noted that "instructional rounds allow teachers to make a connection between their thinking and the work they are actually asked to perform in classrooms. The instructional core (that is the relationship between the teacher and learners around content) focuses discussions as teachers repeat cycles of establishing a problem of practice, conducting classroom observations, classifying data during debriefing sessions, identifying patterns based on evidence from classrooms and generating the next level of work. In the process, participating teachers develop a common language of description of their work and they develop new norms of practice."

The researcher interviewed the teachers before the intervention and, one year later, observed three debriefing sessions and observed actual classroom practice. The aim of the study was to understand teachers' conceptions and constructions of their instructional practise before the intervention and a year later.

The research showed that
- initially, teachers conceptualised and constructed their instructional practice based on their own schooling experience, support they received from their colleagues, preparing learners for matric, summative assessments, school demands or requirements and subject knowledge.
- a year later, patterns of practice had shifted teachers from believing that external factors influence learning to a belief that it is mainly internal factors that are important.

- instructional rounds practice is a powerful instrument for shifting teacher conceptions of their work. This shift is essential if teachers are to establish new resources to create their professional work.

Presentation 2

Evidence of the Structured Pedagogic Programmes for Improving Early Grade Learning, Brahm Fleisch, Wits.

In his presentation, Professor Fleisch focused on the design and results of studies that demonstrate the effectiveness of system-wide instructional change using the "structured pedagogic programme model", otherwise known as the "education triple cocktail". This is a model which uses a mutually reinforcing combination of daily lesson plans, high quality educational materials and coaching/training to bring about improvements in learning.

He noted that several studies (regression discontinuity design study of the GPLMS (Fleisch et al., 2014; 2016); the RCUP replication study (Fleisch et al., 2016, 2017); the EGRS I (Taylor et al., 2017) and the EGRS II (Kotze, et al., 2018)) provide robust evidence of the size of the impact of intervention models in mathematics, Setswana Home Language and English First Additional Language (and English Remedial). In addition, complementary large sample classroom observation studies and in-depth case studies also tell us about the mechanisms of change.

He concluded his presentation with a discussion of the stages, phases and types of change, outlining an agenda for the next generation of research on system-wide instructional reform.

Presentation 3

Teachers' and Heads' of Department Accountability on Curriculum Coverage: PILO's Contribution to the Theory of Change in Education, Francine De Clercq, Yael Shalem & Thabisile Nkambule, Wits.

This presentation reported on findings of research that examined how the forms of internal reciprocal accountability expected of DHs and teachers in the Jika iMfundo campaign take shape on the ground. The research is considered to be "formative" in that it aims to identify what needs improving.

Research data were gathered from PILO surveys conducted in 40 rural primary schools in 2015 and 2016 in the King Cetshwayo district. This was supplemented by data from Jika iMfundo tools from six differently coded schools (one green, two red and three orange, reflecting different levels of functionality), and then from a closer examination of complete sets of nine terms of planners and trackers filled in by ten Grade 3 teachers. Four completed DH Tool 2 templates from six primary schools were analysed for information about DH monitoring and their reflections on their conversations with teachers.

The findings of the research were presented in relation to three main research questions, and are given below.

Findings with regard to Question 1: What is the impact of curriculum planners and tracker on teachers and DHs work and relationships?

- Trackers provide useful frames that structure curriculum delivery and coverage. Teachers appreciate the support these give for planning, curriculum coverage and sequencing, and pacing of content.
- Teachers noted that the trackers were problematic in the context of overcrowded classrooms and many "slow" learners in that they were fast paced and had congested activities. They felt that this affected their ability to comprehend what learners are learning.
- A few committed teachers use trackers and reflections to improve and engage with learner development. It was not clear whether teachers prefer someone to plan for them, or to do the planning themselves as "specialists" in their subject.

Findings with regard to Question 2: What is the nature/quality of teacher reflection and supportive routine professional conversations between DHs and teachers?

- DH monitoring of teachers' work is more transparent and comfortable, leading to the beginning of collegial supportive relationships with teachers.
- Reflections tended to be thin, especially in red and orange schools, and they blamed the curriculum, the school context and learners for any difficulties experienced. They seldom contained reflections about actual teaching and how it might be improved.
- Teachers and DHs need training on how to positively reflect on and improve practice. They need to develop the capacity to identify problems in their own practices.

Findings with regard to Question 3: How do DHs fulfil their pedagogical and managerial roles for better curriculum coverage and better professional development?

- DHs do not always discuss teacher work supportively as they feel their authority is undermined by these conversations; a new supportive collegial culture takes time to develop.
- Professional conversations were more supportive of regulatory practices than they were supportive of improving such practices.
- DHs need training to understand priority professional development needs and how to match these with adequate support.

The presentation ended with some reflections on what is and what is not working:

- DHs and teachers are encouraged to focus on and improve curriculum coverage, with better monitoring. However, there is a risk that this might lead to curriculum delivery being overlooked. There is therefore a need to focus more on teacher practice/knowledge.
- There is greater take up in schools with some organisational capacity and with proficiency in content and pedagogical knowledge. This suggests that a certain level of functionality is needed for more effective curriculum coverage to be achieved.
- Change is slow and incremental and happens in different ways in different school contexts. This suggests that different interventions might be needed for different categories of schools.

Presentation 4

To use or not to use lesson plans in early reading instruction? Teachers' ability to plan for teaching and learning in the Zenlit Project, Lilli Pretorius, University of South Africa (UNISA).

The Zenlit Project was a pilot study in three provinces from 2015 to 2017. In this presentation, Professor Pretorius provided a brief overview of the Zenlit Project's approach to the professional development of teachers of reading and presented some of the findings after three years of intervention.

The project did not make use of scripted lesson plans although it acknowledged that they have been used with some success in other interventions. Rather, it provided teachers with 11 two-day workshops over three years, as well as teacher materials (guides and handouts), bookcases, book resources and laminating machines. DHs were trained in years two and three, and intensive coaching (one coach per three to four schools) was provided throughout.

After three years of the intervention, it was found that, from 2016 to 2017:

- there had been noticeable improvements in teachers' term planning, weekly and fortnightly planning, lesson planning, decoding, reading of stories and monitoring of books
- many teachers did more read-alouds, many more did GGR and introduced paired reading
- there was more writing in learners' books
- there was little evidence of independent reading.

Reflection on the project suggests that
- change happens slowly and unevenly
- teachers/schools respond differently
- different components of reading are taken up differently
- progress is not steady - backsliding and plateau effects are common
- the entire FP should ideally be involved (Grade R-3)
- DH training is very important concurrently with the phase of literacy training
- it is helpful to start with components of reading that can give quick wins (for instance, changing the classroom, practising routines)
- some topics should only be tackled later (assessment and supporting struggling readers)
- it is important to revisit/reteach topics and make time for consolidation.

Discussion of the presentations in this theme revolved around the three questions noted below.

Question 1: How good is a lesson plan? Is it possible to diversify the lesson plan because of the contextual factors?
Responses:
- Lesson plans alone without the other resources are not helping teachers: Resources include coaching plus other materials that will influence the instructional process.
- At the beginning of the campaign, there should be lesson plans and, as participants become more independent, they will be able to create their own lesson plans. Initially, it is about teachers developing routines and confidence before they make adjustments.
- Lesson plans should be short and not lengthy especially when teachers are not capacitated.
- Lesson plans are a fundamental part of teaching.
- There is a difference between the lesson plans and the trackers. The trackers give an outline and an overview of the concepts or skills to teach while the lesson plans allow the teacher to follow a process of what to teach. It is a starting point; it is a resource tool and not an end in itself. The down side is that it does not allow teachers to be creative and they may interact with it in a mechanical manner. In addition, it may not be appropriate for all teachers because they are at different levels. Teachers may tend to omit parts of the lesson plans so coaching is needed to guide them.

Question 2: At scale, how intensively do we support a teacher in order to do self-reflections? What do we need to do in order to get teachers to reach that level of reflection?

Responses:

- Reflections are extremely important and while we acknowledge that this is part of PILO's theory of change, it is still the weak link.
- Teachers are not reflecting as intensively as they should because they do not have the content knowledge to do honest reflections.

Question 3: What is the source of the problem as far as learners performing badly?

Responses:

- Perhaps teachers are not adequately equipped with knowledge, teaching methodology and the instructional core.
- There are other factors that impact on poor learning outcomes. For example, changing policies too often and the packed nature of the current curriculum policy. There is also the issue of competing programmes that confuse teachers.

THEME 5: Assessment for Learning, and Use of Learning Materials - Mathematics

Chair: Mickey Pierce, Independent Consultant.

There were three presentations in this theme

Presentation 1

The Role of Learning and Teaching Support Materials (LTSM) in Enabling Learning for All, Ingrid Sapire, Wits.

In her presentation, Ingrid Sapire considered findings from research that shed light on the factors that led to LTSMs supporting learning. Looking across four case studies drawn from Rwanda and South Africa, including Jika iMfundo, she identified barriers and enablers that seem common across both contexts. Based on these, she proposed a framework for LTSM use which sees teachers, learners and materials as an interactive triad. The key elements of this triad are:

- accessible and flexible LTSMs, which are supportive of teachers' autonomy and are, conceptually and linguistically, accessible to all.
- learner participation, meaning that LTSMs are available to learners in the classroom and at home, and that learners engage actively with them in the classroom.
- teacher enactment, meaning that teachers are appropriately trained and prepared for using the materials; that they have confidence in them and in their ability to use them; that the materials provide lesson coherence and that they allow the use of affordances.

Ms Sapire then considered the significance of language affordances of LTSMs, especially in multilingual contexts where many learners and teachers use a language that is not their own as the language of learning and teaching (LOLT). She noted that

- in Rwanda, language supportive textbooks, sanctioning strategic code-switching and the inclusion of activities in mother tongue, facilitated teacher confidence and more participatory classroom practice.
- in Jika iMfundo, the Foundation phase mathematics learning materials have certain bilingual features in order to support trans-languaging in mathematics lessons. The material has been well received at the district level. However, the trans-languaging support adds to the complexity of the material and the value of this design feature needs to be further investigated.

Questions and comments about and discussion of this presentation included:

Comment 1: LTSM alone cannot assist in improving learner performance.

Responses: No! A good textbook or workbook and a lesson plan can assist but there needs to be a teacher with content knowledge and sound pedagogy.

Comment 2: LTSM provided in the Foundation phase by Jika iMfundo is sometimes not at a suitable level and age appropriate for learners.

Responses: The material is in line with the CAPS curriculum and is continuously reviewed and improved to address the needs of the teacher.

Comment 3: Jika iMfundo's approach creates a space for teachers to reclaim their professional space in the classroom. It is for the teacher to identify gaps and adapt. In this way, the material supports the teacher professionalism in the classroom.

Presentation 2
Research, Development and Collaboration for Building Number Sense, Hamsa Venkatakrishnan, Wits & Mellony Graven, Rhodes University.

In her presentation, Professor Venkatakrishnan reported on the work of the two SA Numeracy Chairs in South Africa with an explicit focus on research-based development, designing and studying of interventions with the potential to work at scale.

In their second 5-year term, the two chairs set up a collaborative team to look at diagnostic assessment models in Grade 3 that could provide a feedback loop to support the teaching and learning of early number sense. Scrutiny of prior research evidence led the team to recognise the importance of clusters of basic rapid-recall "fluencies" and "strategic calculating" and

"strategic thinking" competences allied with these fluencies. Both the CAPS and the literature based on developing effective, efficient and flexible early number working, rapid recall, strategic calculating and strategic thinking pointed to the need for the development and assessment of these skills. However, common assessments, both in the ANA and more recently, were not assessing for this combination of skills. Instead, the assessments marked for correct answers without reference to the approaches used to produce such answers and so were contributing to an on-going acceptance of extended unit counting-based approaches instead of encouraging progression towards more structured calculation and reasoning-based approaches.

In response to this, stakeholders (the DBE, various NGOs and maths organisations) agreed on a diagnostic assessment format:

- Two-week "test-let" format, focused on a particular strategy (for instance, doubling and halving), incorporating rapid recall, strategic calculating and strategic thinking items.
- The two-week test-teach-test block begins and ends with a 20-minute time limited test.
- Teacher marking would be followed by guidance based on eight interim "reasoning chain" activities aimed at developing fluencies and strategies, with re-tests providing feedback on learning and, hence, success of teaching.
- Three to four strategies per term.

An initial "bridging through 10" test-let trialled with class teachers in government schools in Gauteng and the Eastern Cape gave positive results. In response to this, there will be further collaborative work with the DBE on broader trials, while engaging in development activities that seek to further understand and thereby anticipate the possibilities and pitfalls likely to arise in moving towards national implementation.

On-going work will involve a gradually expanding research and development model set within a multi-constituency collaborative base. This approach is adopted in order obtain multiple perspectives on the impact of the interventions. Such perspectives are necessary if interventions with the potential for sustainable change are to be built, as they enable both the understanding of change from a research perspective and also of the cost and support requirements prior to large-scale implementation.

Questions and comments

Question 1: Do the test-lets fit with CAPS?

   Responses: Subject advisers collaborated with the team. If it had been a big test, it would have been checked against the CAPS, but it is a very small test.

Question 2: Does this exercise capacitate teachers?

    Responses: Yes - it helps with understanding key strategies and progression.

Comment: If the learners can master number sense in the Foundation phase, there will be a huge improvement in mathematics.

Presentation 3
Enhancing Teachers' Pedagogical Practices: Using "Real" Formative Assessment to Improve Learning for ALL, Anil Kanjee, Tshwane University of Technology (TUT).

In his presentation, Professor Kanjee reported on work aimed at developing a sustainable model of support for teachers in conducting effective formative assessment. He noted that improving pedagogy is the key to improving learner outcomes for all learners; that, for pedagogy to improve, there must be effective formative assessment; yet formative assessment is a neglected aspect of teacher development and support in South Africa. He emphasised that classroom assessment is a process, not an event, and starts when the teacher is planning and preparing lessons before going to class. It should not be used to exercise power, but should focus on engaging all learners in all lessons. It has the power to activate learners as owners of their own learning. It needs to focus on:

- Where are learners in their learning?
- Where do they need to go, as specified by CAPS?
- How can they be supported to get there?

In response to the need for better support for teachers, the Formative Assessment Professional Development Programme (FA-PDP) was implemented in two districts. Key objectives of the programme were

- to determine the extent to which FA-PDP models/theories/approaches and strategies are appropriate in SA, across different school quintiles and the impact of these approaches on teachers.
- to do the work at scale.
- to develop sustainable approaches to teacher professional development.
- to develop formative assessment materials relevant to the SA context.

In this programme, teachers attended workshops, completed activities at the workshops, after the workshops and at school, and compiled a portfolio of their work. They also formed learning communities. Supportive materials, such as a template for lesson preparation, were developed for teachers' use and they were visited regularly by district officials who had been specifically trained on how to observe and give feedback based on formative assessment principles.

Findings show that, compared with a control group,

- teachers on the programme increased their knowledge of formative assessment and increased their use of formative assessment strategies and techniques.
- in addition, their learners showed increased engagement during lessons across both fee paying and free schools, and findings from interviews showed that learners recognised the benefits of their teacher's use of formative assessment.
- however, several challenges were also found:
  - implementation levels were highest in fee paying schools
  - overall, there was limited support for teachers, resulting in low or poor implementation
  - DHs' results were similar to teachers' and they were unable to provide support to them
  - there was limited implementation of professional learning communities.

A model that could scale up the programme to all schools was proposed:

- Firstly, the skills and capacity of district officials would be developed.
- In the third term, officials would run workshops for teachers and members of the SMT, with regular support visits between workshops.
- Materials/resources would be provided to schools.
- The programme would then be implemented in schools in the first term of the following year, with on-going support visits.

Questions and comments

Question 1: Does Jika iMfundo allow collaboration with other NGOs?

Responses: Yes, collaboration and re-creation is promoted. Jika iMfundo creates a space to collaborate and avoid duplication.

Comment 1: It is interesting that Professor Anil indicated that there are many teachers who do not prepare their lessons. These teachers usually have one-page lesson plans that are presented in a table format for an entire month. Teachers realise that they can work together collaboratively when the intervention has come to their own school. If there is no intervention, there is no collaboration. If teachers improve their curriculum coverage, the performance results increase too. Just-in-time support needs to be reinforced.

Comment 2: There is a misconception that Jika iMfundo provides lesson plans and the teacher does nothing. But this is viewed as a support and teachers do plan and prepare well in advance.

There was no presentation of each theme-group's discussion to the plenary group. However, on Day 2 of the colloquium, in Session 4, time was allocated for participants to raise, for general discussion in a plenary session, any insights or questions arising from the presentations in the parallel sessions described above. These included the following:

- There is a need for a platform through which people in the room can share what they know and learn from each other in real time.
- Leadership plays a clear role in systems change. Without leadership, systems remain dormant and cannot marshal the energy required to be different. The ability of leaders to collaborate and work with other leaders is a key skill for change to take place, but it is a rare skill.
- Jika iMfundo's "How can I help you?" approach is a positive one and should be filtered through the system.
- Presentations show that schools do appreciate interventions from Jika iMfundo and that these do assist with monitoring but there is an overload of paperwork which needs to be reduced by synergising what the Department and what Jika iMfundo expect.
- Teachers attend workshops but then continue as though no intervention has occurred. It is not clear why this happens.
- Jika iMfundo does not really include learners with barriers to learning or multi-grade classes.
- Advisers and the Heads of Curriculum must see a need for any intervention otherwise they do not buy in or support it.
- There has been an improvement in curriculum coverage in the pilot districts through the use of trackers, lesson plans, training and coaching. The pilot has also revealed misalignments and contradictions in the system such as the low number of advisers for the amount of work they need to do.
- Progression policies that push learners up based on age result in multi-grade classes in which it is impossible to cover the curriculum in a meaningful way.
- Teachers are under huge stress - the curriculum is too full; there is a disjuncture between the number of teaching days and curriculum requirements; there is a need for better coherence between GET and FET in schools. The province is also under stress - it has the greatest number of learners and much pressure on it to produce results.
- Learners need to take more responsibility for their learning but, for many, this is hard in certain contexts, such as where there is no parental support.

Many of these comments were picked up again in the discussions of the next session, and re-appear in the synthesis of group reports described there.

SESSION 5 AND 6:

Discussion of six strategic questions about sustainable change at scale

In Sessions 5 and 6, chaired by Jenny Glennie, six strategic questions were discussed, first in general in plenary and then in the same theme-focused groups as in Session 3. After the group discussions, each group presented the key points of its discussion on as many of the questions as it had chosen to discuss but no further discussion was possible in the remaining time.

The six strategic questions were:

1. What is the existing body of knowledge on change at scale in this area?
2. What are the systemic challenges (including policy mismatch and implementation weaknesses) that need to be improved in order to improve functioning at scale in this area?
3. What further work should be done (with monitoring and evaluation of the work) to inform our knowledge base of change at scale in this area?
4. What needs to be done and by whom in order to adopt and implement a learning agenda or strategy to support systems change at scale?
5. Is there a role for technology in supporting systems change at scale? What is the role?
6. What needs to be done to ensure our systems change models are scalable in different contexts?

The main points made in Sessions 5 and 6 about the six discussion questions are presented in this part of the report. As there was a great deal of commonality in points made in the various discussion contexts and as not all groups addressed all the questions, the main points about each are not presented by theme. In reporting on responses to each of the questions, an attempt has been made to highlight the key ideas but also to give some of the actual comments made so that the nuances in these are captured.

Question 1: What is the existing body of knowledge on change at scale?

Key points about what is known include the following:

1. It is important that the change intervention is embedded in and led by the department, as expressed below:
    *   Change at scale must be embedded within the department and officials must lead and must be the drivers of change. Interventions must work in support of the department, not parallel to it. Without this, it is difficult to bring officials on board and the intervention is seen as an "add on" to teachers' and officials'

work, rather than something in support of it. In addition, conflicting messages cause confusion and the intervention can lose credibility because of this.

● Skilled and empowered district officials, working with principals and SMTs, can "lead from the middle" (Fullan, 2015). District planning, support and oversight have the potential to contribute to learning improvement.

2. Leadership and management skills are key to change but there are complexities associated with them:

● Leadership plays a clear role in systems change. Without leadership, systems remain dormant and cannot marshal the energy required to be different. The ability of leaders to collaborate and work with other leaders is a key, though rare, skill for change to take place.

● Management and leadership skills must be developed and the differences between the two should be recognised. They are often seen as the same, but they have different skills sets.

● Leadership is not static - it relates to a relationship between people; it is not something one has or owns. Leadership cannot be replicated at scale. It must be flexible; one size does not fit all.

● Relationship management is emotional and invisible. It takes time and it takes skill. These aspects need to be acknowledged and supported; management tools alone are not sufficient.

3. Teachers need support, monitoring and supervision, and must have developmental purposes and processes so that malicious compliance does not prevail.

● Tick box accountability, audit style, encourages compliance rather than development and growth. It also hampers timely responses and support to schools.

● Pressure on teachers to cover the curriculum leads to them complying and hiding the real situation. Instead, they need support.

4. Training workshops are not enough, there must be follow-through and support in the schools. Heads of Department and district officials have a role to play here.

● It is clear that there is a need for support and monitoring of teachers post an intervention. Coaches are helpful but are expensive and have a finite term. It therefore seems better to build capacity within the school by ensuring that the DH is capacitated to support teachers. This must be coupled with good understanding and support at district level.

5. Stakeholder support is imperative.
   - Buy-in from stakeholders is essential. Jika iMfundo has been accepted by the unions which has meant it has a great deal of support and useful advice.

Question 2: What are the systemic challenges (including policy mismatch and implementation weaknesses) that need to be improved in order to improve functioning at scale?

Key challenges identified were:

1. Inadequate resource provisioning, which puts pressure on all levels of the system and impacts on its efficient functioning and on learning outcomes. A shortage of, and unfilled posts are particularly problematic:
   - Class sizes are often too large for effective curriculum implementation - even when there is more than one teacher in the class.
   - There are so few subject advisers that they cannot be effective levers for change. We need a better understanding of their role in change at scale.
   - DHs struggle with a lack of time to meet the demands made on them because of work intensification. They are too heavily loaded to adequately monitor and support the members of their departments.
   - Post Provisioning Norms do not support management processes to focus on teaching and learning. They make curriculum work difficult and also limit management and supervision work. This is particularly true in phases where there is curriculum complexity and in small schools.

2. Policy misalignment, unintended consequences of some policies, and some priority decisions impact negatively on effective management and on teaching and learning. Promotion and assessment policies and the CAPS itself are cases in point.
   - There is a disjuncture between the time required by CAPS to cover the curriculum - 40 weeks of CAPS, 28 actual teaching weeks. There is simply too little time-on-task.
   - The progression policy allows learners who have not covered the curriculum to move up to the next grade on the basis of age and to repeat only one grade in a phase. This leads to all classes being multi-grade classes, which are difficult for the teacher to teach effectively, exacerbating challenges of curriculum coverage.
   - Policies do not always align - such as assessment policy and the CAPS.
   - There is an emphasis on summative assessment rather than formative assessment. Formative assessment should be seen as a path to improvement in summative assessment.

- Common exams are often imposed and are not always supportive of learning as they take no account of context and what has actually happened in classrooms. Assessment interferes with teaching time during the term, but especially at the end of a term where summative assessment demands mean that much teaching time is lost. SA-SAMS deadlines interfere with teaching and learning in the classroom. Teachers end up clustering topics to cater for SA-SAMS submissions.
- The DBE prioritises Grade 12 to the detriment of other grades. The prioritisation of NSC performance and the emphasis on the matric pass rate means that districts and schools tend to neglect lower grades. As a result, content-knowledge gaps develop and unnecessary pressure is placed on both teachers and learners.
- Recruitment and appointment processes are distorted by various bureaucratic processes, such as the way people are interviewed. As a result, people with the appropriate skills sets do not always get the job.

3. People in management and leadership positions have difficult jobs and are often inadequately trained for and supported in their roles.
   - DHs sit at the interface of many roles - liaising with the SMT; managing curriculum coverage; managing relationships in their departments and other emotional work. Yet they are often not adequately prepared or supported for these roles and so are not adequately skilled or confident enough to act as curriculum leaders.
   - SMTs are not routinely trained at schools that struggle with teaching and learning. There is little induction and mentoring for people in positions of leadership and management.
   - Accountability does not come with support. There is a sense of "stuckness" at management level as they know what the problems are - but do not know what to do about them.
   - There is often a disjuncture between what is learnt in SMT training and what is asked for in follow-up monitoring, so there is no formative feedback loop for people trying to improve their practices.

4. Hierarchical relationships in the system that lead to fear, inhibit communication, stifle innovation and professional growth and lead to "malicious compliance".
   - People go to workshops but do not change their practices because a culture of fear inhibits risk taking so they do not try new things, do not grow and learn. SMTs need to encourage risk taking and emphasise a different type of approach to change in schools that allows risk taking.

- There are conflicting hierarchies, for instance, one of people knowledgeable about curriculum and one of people in management. Subject advisers feel they cannot talk to the principal who is seen as superior and DHs cannot talk to more knowledgeable teachers as they see them as having superior curriculum knowledge. Fear of "talking up the hierarchy" inhibits communication.
- Districts tend to promote bureaucratic management dispositions as opposed to an instructional leadership approach.

5. Poor communication across departments and vertically in the system leads to information being missed, an overlap of programmes and confusion and resistance to change because of conflicting instructions and priorities.
   - Information is not efficiently communicated - there is a need to find effective communication conduits between departments and also to schools.
   - There are too many interventions and programmes that are not always aligned. Communication about them is poor across departments and so there is often overlap and a lack of support for them.

Question 3: What further work should be done (with monitoring and evaluation of the work) to inform our knowledge base of change at scale in this area?

Key points made in response to this question focused on the collection and use of data, and the kinds of focus and research that should be done.

1. We need to understand better what is working well, why it is doing so, and how it can be strengthened.
   - Many different interventions seem to bring about change in curriculum coverage - so we need to be clear about what is making the change.
   - We need to do the necessary research to check what works and what needs to change.
   - We need to generate more information on the models we are working on, in relation to such questions as:
     - Do we need to revise materials so they better suit needs of teachers and DHs and better support teaching and learning?
     - Is our training doing what we hope - should we revise the model/s?
     - How could we strengthen coaching? Could we develop circuit managers as coaches?
     - What is the relationship(s) between curriculum coverage and learning outcomes bearing in mind countervailing dynamics (for instance, ceiling on improvement due to multi-grading)?

2. Data needs to be collected purposefully, to drive change and should have meaning for those who collect it.
   - We need to think about how to collect data in the system - how we drive a change process that motivates how data are collected and how to use data to drive the change.
   - We must ensure that there is no collection overload. People collecting data must understand its importance and benefit to themselves. They should not just see it as something needed for higher up the system.
   - We need to utilise data to monitor learner performance throughout the year, in all grades.
   - We need to develop and maintain accurate up-to-date and accessible data to monitor and evaluate interventions, amongst others.

3. Research data must be verifiable and its collection must respond flexibly to changing needs.
   - We need to move away from self-reporting and self-perception surveys. We need other verifiable elements.
   - There is a need to check data relevance in a fluid system, like education, frequently.

4. We need to develop and maintain databases, and to ensure access to information by all who need it. Data need to be shared across the system.
   - Data must be disseminated to those who need it so that it is shared and used to inform the system.
   - National DBE needs to develop tools for monitoring curriculum coverage that are used across the provinces so we can collect data at scale and analyse it across provinces.

Question 4: What needs to be done and by whom in order to adopt and implement a learning agenda or strategy to support systems change at scale?

In relation to this question, suggestions focused on the need to change behaviours, attitudes and relationships, and the critical role of district officials in developing and supporting teachers, the SMT and officials.

1. Relationships need to be more collegial and supportive. Reciprocal accountability must be fostered. For schools to be effective, there must be organisational and attitudinal change, and the instructional core must be the focus of all endeavours.
   - We need to change the mind-set of the bureaucracy.
   - Adaptation requires risk taking which cannot happen in fearful conditions.

- We must place accountability at every level starting with teachers - usually circuit managers and district managers must account for poor performance - but it is the teacher who teaches the learners.
- We need to promote agency and constructive conversations to support schools to focus on the instructional core.
- We need to improve relationships between districts and schools towards the building of professional accountability and collaborative commitment to change.
- We need to shift from line authority to performance compliance and accountability, thereby controlling outcomes.
- There needs to be change from top down hierarchies of management to collaborative decision making cultures.

2. District officials should embrace the focus on curriculum as core to their work and should work to promote attitudes and behaviours that are supportive of change.
   - All officials should adopt a curriculum specialist cap.
   - All officials should prioritise the curriculum - resources should be consciously directed toward supporting the curriculum.
   - Officials should prioritise curriculum coverage in all meetings, at all levels.
   - District officials should promote professional relationships based on trust, resulting in professional accountability.
   - District officials should adopt and utilise tools to collect evidence for planning and holding of professional conversations on curriculum coverage.
   - District officials should allow new routines to be introduced and practised. These routines should be institutionalised.

Question 5: Is there a role for technology in supporting systems change at scale? What is the role?

There was general agreement that technology could be useful in several ways:
1. Technology has the potential to give support at a distance
   - We could look at programmed learning.
   - We could do some coaching at a distance and offer support for advisers remotely.

2. It increases access to resources.
   - Technology can be used developmentally for learning as it gives access to resources on the worldwide web.
   - Can put resources on a laptop for teachers.
   - A bank of tools could be made available for teachers.

3. It can make administration workloads less tedious, thus freeing up time for more efficient curriculum-focused tasks and can facilitate the sharing of information.
   ● It can ease the administrative load at all levels in the system and can provide access to information that needs to be shared. SA-SAMS is an example of the use of technology for these purposes.
   ● Technology can be used administratively to automate bureaucratic and repetitive tasks, to free up time for focusing on teaching and learning.

4. It can be used to the support the analysis of data, decision-making and problem solving.
   ● Technology can be used to diagnose curriculum problems - even for streaming classes.
   ● Technology can be used for data collation and synthesis which are needed to make curriculum decisions.
   ● Data collection and synthesis using technology is critical for SMTs for formative diagnostic decisions.

There were also some cautionary comments about the use of technology. Some noted conditions that must be fulfilled for the benefits to manifest. Training and support were key factors in this regard.
   ● The role of technology and the readiness for it is very uneven. In the Western Cape, all educators have a laptop therefore we need to find resources to improve access to technology. There are connectivity and security issues but increased IT access does bring opportunities.
   ● It is essential to include training with provision - many educators cannot use what is available. It is essential that IT training be included in pre-service courses.
   ● Technology needs baseline infrastructure (power, security, local maintenance and support, and connectivity) to be effective. Even a simple photocopy machine must work.
   ● Technology is often introduced without agency - users do not have agency.

Question 6: What needs to be done to ensure our systems change models are scalable in different contexts?

Comments here related mainly to the need to share our learning; to work from the bottom up; value the contribution of stakeholders; recognise the need to be flexible in choice of approach and focused to prioritise changes in the nature of bureaucratic relationships, attitudes and behaviours across the system.

1. We need to consolidate and systematise our knowledge.
   - An existing body of knowledge does exist but it is scattered and incoherent. There needs to be a focus that could inform a theory of practice and impact on pedagogical practices. There is also a need for baselines.
2. We need mechanisms for sharing and building learning across a wide range of contexts.
   - Establish a repository of case studies and other knowledge sources about working at scale that enables sharing what we know and how things are working.
   - Different organisations/people are doing different things. We need to find synergies in what they are doing and support each other.
   - We need a platform where practitioners and academics can critique and share experiences for growth and personal development.
   - We need to establish a community of practice though which people interested in the challenges of going to scale can explore design ideas and ways of solving problems.
   - We should institutionalise professional development initiatives, so that practitioners can share practices over time.

3. We need to recognise that one size does not fit all contexts and that interventions should be "bottom up".
   - Interventions must be differentiated to local context, even though adaptation requires risk taking.
   - One-size-fits-all does not work. We need differentiated solutions for different contexts.
   - Any change at scale must include flexibility to be adapted.
   - Any interventions at scale must be bottom-up to respond to context.

4. Interventions should be focused and have a defined scope of work but can be multi-pronged within this.
   - The intervention needs to have a clear focus which is well understood and seen as important by all stakeholders.
   - There is no single lever for change. We need a multi-pronged approach that includes management and leadership and also curriculum knowledge.

5. Collaboration with stakeholders is essential.
   - Must work with unions to bring about change.
   - There are existing organisations and hierarchies. These must be harnessed, not ignored.
   - No scaled change is possible outside working with teachers and unions. We cannot ignore and sideline these.
   - Intervention programmes should have a single focus with NGOs working to a common goal.

6. Training must result in sustainable change.
    ● Training must catalyse changes in schools so that practices persist once support is withdrawn.
7. Evaluation and monitoring must focus on key aspects of change.
    ● Behavioural aspects must be included in monitoring and evaluation systems - must be able to measure movements and shifts as and when they scale.
    ● When scaling, it is easy to lose sight of critical milestones - there must be focus and common indicators of progress.
8. Change interventions must be embedded in the department.
9. One group put forward the following idea:
    ● We need an ambitious, but common and mobilising idea that is "doable", such as a focus on Foundation phase numeracy and literacy. It should be system wide, impactful and measureable, not only to get reading right, but also to address impediments to scale in the system, such as national post provisioning arrangements, lack of budget and poor policy alignment. We would not expect a quick fix but rather the start of substantial change with professional development at all levels. If we do this well, we could shift the culture of the system to one of "How can we help you?" We should lead by example and build coherence.

SESSION 7:

Perspectives on the way forward and closing of the colloquium

In the closing session of the colloquium, chaired by Jenny Glennie, representatives of government, the unions and funding organisations gave messages of support and some perspectives on the way forward. Summaries of these are recorded below.

NAPTOSA

The representative from NAPTOSA affirmed that the union welcomes any intervention aimed at improving education in South Africa, among which is Jika iMfundo. She raised three key points of particular significance for the union. Firstly, the dire shortage of subject advisers in KZN is of real concern because of the integral role they play in the school support structures. Secondly, she noted the importance of monitoring and evaluation. Thirdly, she highlighted the value of teachers in the system and raised concerns about the increasing stress they experience on account of, for example, the overloaded curriculum and large classes which pose a threat to the sustainability of the programme. Finally, she noted that the union looked forward to further strengthening of relationships with all the education stakeholders.

SADTU

The SADTU representative noted that the union was looking forward to seeing improvements in classrooms. However, she noted on-going concerns about the developmental levels of learners and the administrative burdens of teachers. She suggested that technology might be used to alleviate these but that training would be necessary. She observed that, from a range of approaches, Jika IMfundo seems the most practical and feasible as it assists teachers in pacing their work. She reconfirmed SADTU's support of the Jika iMfundo project.

NECT

Mr Khosa noted that very complex issues had been discussed over the past two days and that the nature of these is such that we have to continue the conversation.

He reflected on the challenges of systemic interventions, commenting on the fact that they call for clear thinking about how an external entity engages with and supports a system with a history and long standing ways of doing things, and in which there are complex layers of politics and a network of connections to other entities. He suggested that systemic interventions require on-going efforts to navigate relationships and complex systems of rules and policies, and also the linking of systems that perhaps did not naturally work together before. This is not easy work but the book being launched at the colloquium is good testimony to many successes in navigating the many hurdles.

Mr Khosa then turned to the concept of curriculum coverage. It is true, he believes, that curriculum coverage on its own will not lead to improved learning but it is not true to say it

is not essential. It is indeed an essential part of the business of improving learning. It is the most basic way in which we can start to improve the efficiency of education provision as it lays a basis for transparency and accountability in terms of the effort that is being made in the classroom and in the school, and what sort of support is needed from DHs, principals and advisers. It is thus a good place to start but is not an end in itself; we have to build on it.

He then commented on how professional development spaces are being redefined In South Africa. What we focus on, what we emphasise and how we engage as players in these newly defined professional development spaces is being re-examined. The way in which different unions, once unable to be in the same room, can now engage in the same development programme, is evidence of this, as is the change in their focus from membership to the profession. Mr Khosa noted that the experience at the colloquium is helping to redefine those new spaces. It has focused us on considering what the profession requires that we do jointly in order to improve professionalism in education. It also refocuses various levels of the education system on what is important to improve in teaching and learning - on what should be the new enterprise logic and how we should all work together toward this. He felt that it is important not to dichotomise solutions in education - there will not be an either/or choice of approach to take us forward but there will be a mix of different approaches. And, our decisions about these must be based on evidence; we cannot make changes based on feelings.

He concluded by observing that we have had fantastic dialogue over the past days but that we need to take this one step further. Conversations are of value but schools are governed by policy and programmes. We therefore need to find a way to distil the key lessons for policy and programmes from the work we are doing, and to ensure that we have official engagement about recommendations that are emerging from what we have learnt. This calls for methodological discipline - whatever we take through policy analysis must be backed by evidence. In short, we need a more robust policy conversation and policy development based on a balanced, participatory playing field.

The Provincial Execution Team (PET)

In his address, Mbongiseni Mazibuko, Chief Director for Curriculum Support in the KZNDoE, and chair of the Provincial Execution Team for the NECT in KZN, identified some of the key lessons from the Jika iMfundo intervention that should be institutionalised to bring about developmental change in the system. He pointed out, though, that Jika iMfundo had not brought new things. Instead, it had conscientised us about what should be happening and brought tools, such as planners and trackers, to make it happen. He identified the following key reminders of what the intervention has foregrounded:

- A focus on curriculum coverage places the curriculum at the centre of school leadership and management.
- Everything rises and falls on leadership. For curriculum to be managed properly, leaders at all levels must play their roles, from the DH to the District Director.
- We should not work in silos. There is much to be gained by a common focus and collaborative work. Without this, two officials visiting the same school might well take different messages, causing confusion and loss of confidence.
- In a district, the director should take the lead, seeing him or herself as a curriculum adviser, as should a school principal, too. Neither needs to be a subject expert; Department Heads in schools and subject advisers in the districts fulfil this role.
- It is important to hear teachers' concerns but they must be backed by evidence. We need to mitigate their problems without absolving them of the work a teacher must do.
- Supervision, monitoring and evaluation must be for developmental purposes. There must be supportive conversations to assist people in solving problems and improving their practices.
- Planning to create synergy from province, district and schools is essential.
- Teaching and learning time must be protected.

Yellowwoods/Hollard trust

Nicola Galombik, who has been involved from the start of the intervention, was able to recount how the impetus for Jika iMfundo had been the recognition that the process of sustainable change and continuous improvement in the system has to be driven and owned by people every day in their practices, in their daily conversations and decision making, and in the exercise of their professional work in the system and that it would take multi-sector partnerships to drive change and create the conditions for on-going improvement and innovation in the system. She noted that there have been many very good programmes but there has not always been adoption and traction. She observed that, in Jika iMfundo, we are beginning to see the evidence of that process coming together, of schools across a district

system beginning to manage the basics in a way that makes people feel empowered and that makes data seem valuable as they see it can be used for their improvement and the improvement of their learners. She expressed her belief that we must celebrate this milestone, that we have found something that is working. Everyone agrees that this is a positive process; however it does not mean we have achieved all the objectives. We are at the start of the journey but it is a good journey and we must celebrate this.

Ms Galombik then outlined the following take-outs from the colloquium that are key for success in the next phase:

- We have had very effective partnerships. She expressed heartfelt thanks to the KZN team who have led and championed this partnership; Godwin Khosa and the NECT which has championed this partnership; Mary Metcalfe and the PILO team who have worked so hard on the ground; the three unions and their members who are in the classroom every day; all the thought partners, learners and academics, and the funders who have helped shape his programme.

- The KZNDoE senior/executive leadership needs to embrace, choose and support this project, and fund it at another level going forward. That is what is going to give it the next phase of traction and legitimacy in the system.

- Cross fertilisation across the provinces is important, so thanks to the Free State and Gauteng officials who have attended and shared. There is an exciting next phase in which we begin to standardise that which is useful across the provinces.

- We need to focus; we have a long list of things that are important, but must pick a few. It is hard to bring about improvement, so we need to focus on a few things - such as the Foundation phase from a learning outcomes point of view; entrenching routine practices of curriculum coverage nationally; time management of the curriculum, and resizing it and the SMT/leadership change and development work. It will take multi-sector agreement that these are the things we agree to focus on and then state resources need to be redirected. In the end it is about policy choices.

In closing, Ms Galombik thanked everyone for their active participation and contribution to learning in this programme and in work that happens in schools, and wished the community well as they take the work forward.

Thanks were expressed to:
- all the speakers
- Jenny Glennie and the Saide team for bringing the learning and everyone together, and doing it with such grace
- Joanne Murphy and the PILO team for their seamless work behind the scenes putting the colloquium together
- Pam Christie for the extraordinary work done on the book and for her support of the new researchers included in it, and also to Mareka Monyokolo, the co-editor, who was unfortunately not able to attend the colloquium.

Nicola Galombik closing the colloquium on behalf of Yellowwoods/Hollard Trust, after closing comments from Godwin Khosa and Mbongiseni Mazibuko (KZNDoE)

Conclusion

This colloquium on sustainable change in education brought together a broad range of participants in the education sector. It provided rich stimulus in the form of 20 presentations of research on five key themes, and six challenging organising questions to shape debate. The wealth of expertise and experience among participants meant that matters were explored thoroughly, from many perspectives and, while the Jika iMfundo campaign was the base from which this work sprang, discussion was not confined to reflections on it.

Several key insights about sustainable change at scale in general recurred in various forms over the two days. These include the following:

- An intervention needs to be owned by the Department of Education, and taken up at all levels of the system; It is not possible for an intervention that operates in parallel to the department to gain traction and stick; it will not be sustainable. There needs to be excellent communication across divisions both horizontally and vertically in the system, so that coherent messages are sent across it, and neither officials not teachers are confounded by conflicting instructions or duplicated demands. The tendency to work in silos is not helpful.

  Owned by the Department of Education, with excellent horizontal and vertical communication.

- In order to be taken into the system, for there to be 'buy-in', interventions must be seen to be desirable, and supportive of core processes and requirements that are already part of the work of the officials and educators in the system; they should not introduce additional layers of work, but must rather be seen to be supportive of work that needs to be done and to contribute to meaningful improvement.

  Supportive of core departmental processes.

- An intervention needs to have a core focus so that resources, including energy, can be directed toward it in a coordinated and meaningful way, rather than being dispersed across too many competing demands and activities. Although there are many urgent needs for change, it is important to prioritise, to choose what is doable, and to coordinate efforts around that.

  The need for a core focus, to avoid resources being dispersed.

- It was felt imperative that the Department of Education focuses immediately on ensuring that the great majority of children are able to read for meaning by the end of Grade 4.

  The need for children to be able to read for meaning.

- Change implies the taking of risks, and risks will not be taken unless risk-takers feel safe. Within the hierarchical system of the education department, with sub-systems such as district offices and schools, it is imperative that relationships of trust are built up across levels in the hierarchy. Monitoring and supervision need to be supportive, and intended to help identify and solve problems. Relationships of reciprocal accountability must be fostered. Without this, problems are hidden, and mechanistic compliance to basic requirements, rather than energized work toward positive change ensues. Instructional leadership is essential - and leaders and managers need support and training.

  Schools and districts should be conducive to risk-taking by teachers and officials.

- Change also implies the need for training and the development of new skills. It is important that those being required to make changes, being trained in new skills and behaviours, are supported in sharing these and implementing them in the workplace. Without such support, intended new learning, even when seen as valuable, will not persist and change will not be embedded and sustained.

  Support for development of new skills and behaviours.

- Change processes cannot be static; it is essential therefore, that interventions are monitored and evaluated; that useful data is collected and analysed; that findings are reflected upon and that there are flexible and differentiated responses to evidence of what is working and what is not in different contexts. Research needs to address key questions, and to be less reliant on self - reporting.

  Monitoring, evaluation and research are essential.

- Interventions do not happen in isolation; it is essential that all stakeholders in the endeavour be invited to participate, to lend support and to give honest critique. In this regard, the development of a knowledge portal and of databases of relevant information to facilitate the sharing of information and ideas is essential; there are many initiatives with similar intentions, and synergies need to be found so that the impacts of these can be compounded. There is a loose association of individuals and organizations working in the field of educational development and system change; it would be beneficial

  A community of practice for sustainable change to be formalised.

to have a more formalised community of practice, whose members can share and interrogate findings and processes, and co-create new ideas and strategies.

- Technology has many affordances that can be harnessed in support of positive change; however, inequalities in access to necessary knowledge and skills, and to physical resources limit its usefulness at present.

Inequalities in technology need to be addressed across the system.

- The Colloquium identified several important obstacles which impact on positive changes in teaching and learning, and hence on improved learner achievement. Key among these were:

  - the progression policy, allows learners to move into a higher grade annually based on age rather than achievement, creating de facto multi-grade classes as learners in any one grade are at different levels, making curriculum coverage within grade levels difficult.

  Multi-grade classrooms are becoming the norm.

  - the mismatch between the time allocated to learning in the Curriculum and Assessment Policy Statement (CAPS), and the time demanded for formal summative assessment processes results in too little time being available for adequate curriculum coverage. This is compounded by an overfull curriculum.

  Insufficient time for curriculum coverage.

  - Unfilled posts mean that vital human resources are absent and overstretched.

  Human resources stretched.

  - In districts, high school and teacher to subject adviser ratios make it almost impossible for subject advisers to fulfil their role of support to teachers adequately; this needs to be re-examined if they are to add their potential value to the system.

  Too few subject advisors.

  - Within the schools, the varied demands made of Department Heads, and heavy teaching loads, make it difficult for them to fulfil their roles as supportive supervisors and mentors to members of their department.

  Too many demands made on Department Heads.

● Curriculum coverage is correctly understood as not what teachers report teaching but the demonstration of what learners have learned at the specified conceptual level.

Curriculum Coverage as concepts learned, not what has been taught.

Finally, the colloquium attested to the commitment to grappling with the complexities of bringing about sustainable positive change in our education system across a broad range of stakeholders - unions, funders, researchers, NGOs, departmental officials and teachers at the chalk face. It celebrated the pioneering work of the Jika iMfundo campaign, and the insights of the academics who presented research papers. It did not set out to provide definitive answers to challenging questions, but to bring them to the surface and explore them. The rich debate and the thoughtful summary presentations suggest that this intention was realised.

List of acronyms

ANA	Annual National Assessment
ATP	Annual Teaching Plan
CAPS	Curriculum and Assessment Policy Statement
CEO	Chief Executive Officer
CM	Circuit Manager
DBE	Department of Basic Education
DH	Department Head
EFAL	English First Additional Language
EGRS	Early Grade Reading Study
FA	Formative Assessment
FA-PDP	Formative Assessment Professional Development Programme
FET	Further Education and Training
FP	Foundation Phase
GET	General Education and Training
GGR	Group Guided Reading
GPLMS	Gauteng Primary Literacy and Mathematics Strategy
HoD	Head of Department
IQMS	Integrated Quality Management System
IT	Information Technology
KZN	KwaZulu-Natal
KZNDoE	KwaZulu-Natal Department of Education
LoLT	Language of Learning and Teaching
LTSM	Learning and Teaching Support Materials
NAPTOSA	National Professional Teachers' Organisation of South Africa
NATU	National Teachers' Union
NECT	National Education Collaboration Trust
NGO	Non-Governmental Organisation
NSC	National Senior Certificate
PET	Provincial Execution Team
PILO	Programme to Improve Learning Outcomes
PPN	Post Provisioning Norm
PSA	Performance Solutions Africa
RCUP	Reading Catch-Up Programm
SA	South Africa
SADTU	South African Democratic Teachers' Union
Saide	South African Institute for Distance Education
SA-SAMS	South African School Administration Management System
SEED	Social, Education and Economic Development
SGB	School Governing Body
SLM	School Leadership and Management
SLP	Structured Lesson Plan
SMT	School Management Teams
TUT	Tshwane University of Technology
UCT	University of Cape Town
UKZN	University of KwaZulu-Natal
UNISA	University of South Africa
Wits	University of the Witwatersrand