This chapter intends to do two things:

- Provide the rationale and the key ideas informing this initiative for change-at-scale.
- Document in some detail the components of Jika iMfundo in order to frame the research pieces that follow and which interact critically with some of these key components. These sections include multiple examples of the detail of the interventions to give life to the abstract descriptions in the text and highlight key system learning from the work in 2015–2017.

The chapter does not report on the monitoring and evaluation of the intervention or the multiple ways in which learning from this trial-at-scale has informed subsequent re-design. The set of research reports in this volume and the external evaluation will be invaluable in informing that process. The tasks of reporting on monitoring and evaluation, and re-design for the 2018–2021 phase will be taken further in subsequent publications.

**Brief overview of Jika iMfundo in Pinetown and King Cetshwayo, 2015–17**

Jika iMfund is a campaign of the KwaZulu-Natal Department of Education that has been piloted on scale in 2015–7 in all 1 200 public schools in two districts (King Cetshwayo and Pinetown) so that the model is tested on scale and lessons are learned before phased rollout across the province from 2018. The implementation of Jika iMfundo is supported by the Programme to Improve Learning Outcomes (PILO) and funded by the National Education Collaboration Trust (NECT). The interventions have been designed for implementation at scale with recurrent costing that can be accommodated within the department’s budget.

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The management focus is on all Circuit Managers and Subject Advisers at district level and on all the School Management Teams at school level. The teacher focus is on providing curriculum support materials to teachers from Grades 1–12 (languages, maths and science). Jika iMfundo seeks to provide district officials, teachers and School Management Teams with the tools and training needed to have professional, supportive conversations about curriculum coverage based on evidence so that problems of curriculum coverage are identified and solved and learning outcomes improve across the system. It achieves this with a set of interventions at school and district levels. It works from foundation phase to the FET phase by building routines and patterns of support within and to schools that will have a long-term and sustained impact on learning outcomes.

The overarching strategic objective is to improve learning outcomes. The Theory of Change to achieve this objective is that, if the quality of curriculum coverage improves, then learning outcomes will improve. In order for curriculum coverage to improve, the following behaviours associated with curriculum coverage must improve: monitoring curriculum coverage, reporting this at the level where action can be taken and providing supportive responses to solve problems associated with curriculum coverage. These are the lead indicators that must change before we will get change in the lag indicators of curriculum coverage and then learning.

The goal is to make behaviours supportive of quality curriculum coverage routine (embedded and sustained) practices in the system. The tools and materials developed have been collaboratively developed with the intention of driving meaningful and substantive engagement around identifying problems and actively seeking the solutions together as well as providing support in relationships of reciprocal accountability.

**Jika iMfundo: The programme to improve learning outcomes (PILO) model and change at scale**

*Jika iMfundo* is an education intervention that has been run as a campaign between 2015 and 2017 in all 1 200 public primary and secondary schools in the two districts of King Cetshwayo and Pinetown in KwaZulu-Natal. The intervention has been designed and implemented by the Programme for Improving Learning Outcomes (PILO). Jika iMfundo aims to achieve improvements in learning outcomes across the system by simultaneously focusing on the capacity of different levels of the system – the school and the district – to monitor and respond to problems of curriculum coverage. The logic has been that, if more learners have the opportunity to learn by successfully covering more of the curriculum, the more overall learning outcomes will improve.

The Programme for Improving Learning Outcomes (PILO) is a change partner of the KwaZulu-Natal Department of Education and other stakeholders in the Jika iMfundo campaign. The campaign has been supported by the National Education Collaboration Trust (NECT) since 2014. The support of government and the private sector through the NECT has been critical in enabling this pilot-at-scale.
PILO is a public benefit (non-profit) organisation with the long-term aim of developing methodologies for change at scale that will contribute to significant and sustainable improvement in the public education system. With support from a range of donors and after broad consultation and learning across the community of education practitioners between 2011 and 2013, PILO undertook a collaborative design process with both officials and teacher unions in KwaZulu-Natal (KZN) from 2013. This resulted in the Jika iMfundo design framework (or model) being finalised and implementation began in all 1 200 schools in two KwaZulu-Natal districts from 2015.

Jika iMfundo is the name of a campaign designed on the principles of the PILO model. The campaign belongs to the KwaZulu-Natal Department of Education, the NECT and stakeholders subscribing to the campaign. It has been implemented over three years in King Cetshwayo and Pinetown with PILO as the change partner. The campaign will continue after the exit of PILO through the deepening of practices introduced in the campaign. Whenever Jika iMfundo is used in this chapter, it refers to the KZN site of learning for PILO and the various activities and interventions implemented as part of the campaign. Wherever PILO is used, it refers to design and re-design considerations which have informed the work of Jika iMfundo – but which considerations are being practiced and informed across other sites of intervention outside of KZN. Jika iMfundo is thus a term used to describe the set of interventions in KZN schools. PILO is used to describe core elements of the learning of PILO that informed the design of Jika iMfundo and continues across multiple provinces. Jika iMfundo is one application of the emerging PILO model as this is explored and refined through carefully monitoring and reflecting on experience on a district scale.

PILO will continue to be the change partner to the KZNDoE in the provincial rollout of Jika iMfundo which will take place across all 6 200 schools of the province between 2018 and 2021 in a phased process of implementation beginning with uMgungundlovu, uMkhanyakude, iLembe and uMzinyathi in 2018. This means that, in 2018, Jika iMfundo will be implemented in 3 150 schools in the province. A map of the province indicating the districts is shown below together with its national boundaries and international borders. All districts are contiguous with local government districts, but the metropolitan area of eThekwini is divided into two education districts, uMlazi and Pinetown.

The work of PILO is broader than its work in KwaZulu-Natal. PILO is also a change partner in other provinces. A similar application of the model was implemented in the “A re Tokafatseng Seemo sa Thuto” campaign in the John Taolo Gaetsewe District of the Northern Cape between 2015 and 2016 where PILO was the change partner of the Northern Cape Department of Education and the Sishen Iron Ore Company. Lessons learned have enhanced the model.

Each application of the PILO model provides an opportunity to learn from “the ground” and to refine the model for change at scale. PILO gathers monitoring information that assists in assessing if the interventions are being implemented as
intended and to monitor changes in the behaviour of educators and officials in order to shape the interventions formatively. There are intensive processes of internal reflection and refinement of the model and its modalities of implementation across school and district contexts. Alignment is maintained in the change process by deepening understanding of challenges and adjusting design in response to reflection on these challenges and changes in practice across different contexts. In KwaZulu-Natal, there has been significant system learning that has required redesign. These learnings and the resultant refinements have provided proof of concept of the central design elements of the Jika iMfundo model: that systemic change requires support in tools, training and systemic reinforcement that are rooted, not in empty compliance, but in professional, supportive conversations that are evidence-based and which identify and solve problems.

The importance of the scale of the intervention cannot be over-emphasised. Change at scale is a pressing necessity in South Africa and has distinct methodological requirements. Change at scale is required because of the urgency of finding solutions.
that can achieve impact on scale in the South African context. Poor educational outcomes undermine sustainable development economically, socially and politically. Much of the investment that has been made by the CSI and donor sectors in many small or medium scale interventions has had limited systemic impact. Where changes have not been embedded in the routine practices of schools or district officials and where the change has not been adopted into the working culture and operations of the system at every level, these changes have not endured.

PILO’s conception of change at scale requires a methodology and design that fulfils at least ten necessary conditions.

Firstly, the change must be consistent with government policy priorities and assist in making the policy intentions of government routine in the work of officials and schools. All of the design elements of Jika iMfundo reinforce components of key government policy documents. In assisting government and its stakeholders to execute policy intentions, it was understood that, improved teaching and learning [can] not be brought about by fiat, testing, or blaming but requires investing in the capacity of the system to do better (Levin, 2010, p. 27).

Much policy and bureaucratic fiat is characterised by magical thinking – the assumption that the pronouncement results in changes in schools without a plausible link of causation involving on-scale activities of support. In particular, given the pace and scale of system changes in South Africa, it is underestimated how much schools and districts have been subject to “a large number of initiatives, some of which seemed to them to be competing for their energy and attention” (Levin, 2010, p. 28).

The work of assisting in the execution of government’s policy intentions does provide evidence and deep learning about design and resourcing challenges within government policy that could inform policy and its implementation. These include: the ambitious scope and pace of CAPS and its perceived inflexibility; the tension between progression policy and the limits of the possibility of differentiation within the pace of CAPS; the challenging scope of supervision responsibilities of Heads of Department at school level relative to their teaching load; the impossible scale of supervision for Subject Advisers who are often responsible for teachers in many hundreds of schools; the non-alignment between the institutional structure of schools as primary and secondary and the Inter-Sen curriculum structure particularly as this translates into the neglect of the Senior Phase and the support of teachers responsible for Grades 8 and 9; and the pervasive shortage of textbooks – particularly in Grades 8 and 9 – and reading material and other resources. All of these policy and resource considerations undermine the achievement of government’s strategic goals.

Evidence of these challenges is being rigorously gathered for constructive policy engagements with government at provincial and national levels. Where the work of
PILO produces insights that could inform the policy and implementation process, these are shared with government and other stakeholders in appropriate fora.

Secondly, responsibility for implementing the change must be located where the responsibility will remain for sustaining the programme. Jika iMfundo in King Cetshwayo and Pinetown has been and will continue to be a campaign owned by the districts themselves and by the schools for improvement within these schools. The second phase of Jika iMfundo in Pinetown and King Cetshwayo from 2018 will be driven and monitored by the two districts, supported by the provincial education department as part of the provincial rollout and supported by PILO at both provincial and district levels. The changes achieved so far will need to be further reinforced by the district and province. Schools and officials, which are struggling to adopt the new practices, will need further targeted support.

Thirdly, the programme of change must focus on the embedding of the new behaviours within the professional repertoire of the educators and officials. Policy intentions and instructions do not change behaviour. These are filtered through what educators and officials already understand and believe, what they are convinced will work in their context and what they think is possible. There is a core principle informing the PILO approach to embedding new behaviours: the PILO model is built on a positive appreciation of how educators and officials exercise agency in their daily choices. Compliance alone is insufficient as an engine of meaningful and enduring change. Passive compliance is alienating to professional agency and sense of responsibility. Change requires personal purpose and commitment. This principle is key to the design of interventions that remind participants of moral purpose, of their agency, of those contextual matters over which they have influence and can exercise mastery, and make a difference with a sense of urgency, while communicating a compelling vision of change consistently in leadership practice and action.3

Moral purpose is an important starting point. It has been invariably our experience that teachers are motivated by a desire to achieve learner success and wellbeing. However, moral purpose is not enough on its own.

Levin (2012) argues,

Real improvement is only possible if people are motivated, individually and collectively, to put in the effort needed to get results. Changed practice across many, many schools will only happen when teachers, Principals and support staff see the need and commit themselves to make the effort to improve their practice and when students and parents see that the desired changes will be good for them too (p. 13).

Levin emphasises “positive morale” which requires that people have “real involvement in the changes rather than being on the receiving end of order they don’t agree with or don’t know to carry out” (2010, p. 66). This principle was significant in informing design
and practice. For example, at district level, officials themselves designed the shared tool that was developed to guide their interactions with SMT. At school level, the SMT and teachers were encouraged to take the tools offered and adapt them to their needs and to improve existing tools and practices.

Fourthly, personal agency, or purpose, is not enough to produce mastery. Personal commitment to a vision of a better practice has to be supported by tools, by training and by systems which support the adoption of these behaviours as routines that are core to the work of the district and school, and which are reinforced by the experience of success in how these make it easier for educators and officials to succeed in their work.

Fifthly, a broad alliance of key stakeholders is necessary to ignite and sustain change, especially in education. Influence is distributed within systems and the more different centres of influence maintain alignment to a shared purpose and urgency, the greater the contribution to success. This is true of provincial, district and school levels. A broad alliance committed to change stabilises the system and maintains momentum through its inevitable setbacks and disruptions.

Focus Group research conducted for PILO (Perold, 2012) showed that education stakeholders in KZN were ready for change. They were committed to teaching, regarded education as a critical success factor for South Africa and were extremely concerned about poor learner performance in their schools. Many were also frustrated and demoralised because they felt that they are unable to bring about change and felt burdened by compliance demands and lack of support (Perold, 2012). Maintaining alignment of purpose in the alliance of stakeholders within schools, within districts and between stakeholder groupings was sustained by this core commitment to learner performance and a vision of change that they could believe in.

Teacher unions, especially SADTU, were fundamental partners in the coalition for change in Jika iMfundo. Regular reporting and consultation meetings are convened with the teacher unions at provincial, regional and branch level. These meetings are invaluable as an opportunity to co-design and as a source of monitoring information which guides implementation. The SADTU 2017 conference adopted a resolution on the expansion of Jika iMfundo building on positive reports in conference and made an explicit commitment to ownership of the rollout. While engagement with SADTU was most regular because of the size of its membership in the province and the number of its structures, the other key unions were also consulted and kept informed. When the campaign was introduced to schools in a sign-up process, messages of support from the unions were shared and SADTU sent representatives to the venues.

Jika iMfundo is being run as a campaign to be joined by all role players. The by-line, “what I do matters”, represents the appeal to moral purpose and recognition of the agency and impact of professionals. Jika iMfundo was the integrating theme across all elements of the intervention which included: the Curriculum Planners and Trackers assisting teachers to plan teaching and assessment and to track curriculum coverage; the SMT training for HoDs, Principals and deputies; the content training for HoDs
and subject and phase leaders at school level; and the work at district level. This gave coherence to the central messages of both “what I do matters” and the vision of focusing on improving curriculum coverage in order to improve learning outcomes. This goal was one to which all role players at different levels could relate in terms of an organising principle for their work. The reason that curriculum coverage was chosen as the focus is covered in the next section where the professional complexity of the concept is unpacked.

Sixth, monitoring and tracking must be integral to the change process within the school and the districts so that insights from evidence are used to respond to problems timeously and at the appropriate level. School management teams regularly track teachers’ curriculum coverage reports so that they can respond with the correct support. District teams gather and aggregate school level curriculum management data so that they can prioritise and respond to challenges at school level. The indicators monitoring the intervention were constructed to be systemic, not only for the life cycle of the intervention, but also for teachers, SMTs, the district and province to use for ongoing, systemic and routine monitoring and support. More than this, the improvements must be visible to the educators and officials. They must be able to track, validate – and celebrate – their own success because success motivates. Levin, in his 2010 seminal text on school improvement, concludes,

One of the fundamental lessons of research on human motivation is that people will do more of what they think they are good at, or can become good at (p. 235).

The change programme of Jika iMfundo uses tracking success as a motivator to “stay the course” and “accelerate the pace”.

In working at these macro and micro levels simultaneously, Jika iMfundo seeks to align the support-pressure balance within the school and between the school and the district. This is to propel technical “capacity building” constantly with the energy of human agency and the belief that, with the investment in effort, learners will have more chance of success.
Seventh, PILO’s approach to change is rooted in two conceptions of accountability: reciprocal accountability and internal accountability. Accountability is reciprocal rather than hierarchical and internal accountability precedes external accountability in well-functioning institutions. Both concepts of accountability are drawn from Elmore (2000, 2006, 2010) and are central to PILO’s approach to professional practice and agency.

Witten, Metcalfe and Makole (2017) describe PILO’s approach to accountability:

Central to PILO’s theory of change is the relationship between the different components and key actors in the system. A defining element of these relationships is the concept of accountability as proposed by Elmore (1999, 2006, 2010) ... He suggests two types of accountability that are required for effective school improvement. The first is ... ‘reciprocal accountability’ – which, in its simplest form, means that, for every unit of change performance that is required, an equivalent unit of support and capacity should be provided to those responsible for the change. ... In PILO’s approach to its work, the essential question of ‘How can I help you?’ is central to its approach in improving curriculum coverage and the extent to which this professional disposition and approach permeates throughout the system will be instrumental in determining its success.

The second type of accountability that Elmore suggests is important for school improvement is that of ‘internal accountability’, which occurs within an organisational unit like the school or a team. Elmore argues that it is the ‘... degree of coherence in the organization around norms, values, expectations and processes for getting the work done ...’ (Elmore, 2010, p. 6).

Schools are unlikely to be able to respond to external accountability without practices of internal accountability. City, Elmore, Fiarman and Teitel (2010, p. 37) argue that schools with “a chronically weak institutional culture ... have no capacity to mount a coherent response to external pressure, because they have no common instructional culture to start with”. Jika iMfundo seeks to establish a common instructional culture of curriculum management of tracking, reflecting, reporting, monitoring and collaborative problem solving. The strong theme of professional judgement in all the components of the campaign is an internal and external professional accountability based on rigorous evidence with strong mechanisms of (reciprocal) accountability.

In “Schools that Work” (Christie, Butler, & Potterton, 2007), Christie draws on the work of McLaughlin (1987) who notes that

change to the smallest unit of the system – teachers and learners in classrooms – is hard to reach from the top, given the multiple layers of education systems. Change at the level of this smallest unit requires a strategic balance of pressure
and support. Pressure alone seldom changes people's beliefs (though it may be used to bring behavioural change). Support alone allows other priorities to take precedence. Change involves both people's capacity and their will and while the former may be changed relatively easily (e.g. through good training or 'capacity building'), the latter (involving beliefs and motivation) is far harder to shift. It would be a mistake to interpret McLaughlin’s point as behaviourist; what she is advocating, rather, is that change be viewed as a process of negotiation rather than imposition. In changing school practices, it is necessary to work with both the macro-logic of systemic level concerns and the micro-logic of schools, teachers and classroom.

Eighth, the primary site of teacher professional development in South Africa is inevitably the school. Teachers may, or may not, have regular opportunities to participate in professional development opportunities provided by their employer, by their union or by professional associations, in professional learning communities across schools or other activities that are self-driven. The further teachers work from where they live, the distances they need to travel and their personal resources all constrain how frequently these opportunities may be taken. Schools are the places where teachers interact with colleagues professionally on a daily basis and formally or informally share challenges and explore solutions. PILO has therefore sought to strengthen internal institutional practices that support the functioning of the school as a Professional Learning Community.

There is much in the education literature that supports this approach. OECD research has shown that the more teachers collaborate, the greater is their belief in their ability to teach, engage students and manage a classroom (OECD, 2016, p. 199). The 2016 TALIS report argues that Principals “have the means of improving teacher quality through actions such as fostering a professional learning community” and evidence is given for a strong association between teacher characteristics, specifically, teachers’ self-efficacy, with the implementation of professional learning communities (OECD, 2016). Mourshed, Chijioke and Barber (2010) found that, in improving systems, teachers and school leaders work together to embed routines that nurture instructional and leadership excellence in the teaching community, making classroom practice public and developing teachers into coaches of their peers (p. 21–22).

Timperley (2007) identifies seven elements “as important for promoting professional learning in ways that impacted positively and substantively on a range of student outcomes.” One of these is active school leadership in which leaders “actively organised a supportive environment to promote professional learning” (Timperley, Wilson, Barrar, & Fung, 2007, p. xxvii). City et al. (2010) argue that professional development must be “deliberately connected to tangible and immediate problems of practice to be effective.” City has also argued that “teachers learn in settings in which they actually work, observed and being observed by colleagues confronting similar problems of practice”
For a school to build practices that enable it to function as a professional learning community, internal accountability systems and practices must be characterised by a culture of professional, supportive, evidence-based conversations. Like City et al. (2010), Talbert and McLaughlin (1994) argue that “privacy norms characteristic of the profession undermine capacity for teacher learning and sustained professional commitment” (p. 124).

For Elmore, the organisation of the school and its practices of accountability must, by design, create processes of teacher improvement which take teachers out of the isolation of self-contained classrooms into collective learner – and learning – focused reflection that is normative and builds professional knowledge. Jika iMfundo seeks to promote professional learning communities at school level by creating the organisational arrangements and routines that promote collaboration and the de-privatisation of professional practice.

Jika iMfundo’s emphasis on teacher collaboration is supported in an analysis of highly performing schools in South Africa – the 2017 National Education Evaluation and Development Unit (NEEDU) report, Schools that Work II: Lessons from the ground. In the Jika iMfundo training and coaching, forms of teacher collaboration referred to in the report were explicitly taught and were focused on the identification and solving of curriculum coverage problems. At the level of the teacher and the teaching team, this focus is on identifying problems of pedagogy and their impact on coverage. At the level of the SMT, it is curriculum management to improve coverage.

Ninth, in order to be sustainable, the change must be systemic. If attempts are made to change an element of the system but that change is not reinforced systemically, the system will undermine the embedding of the desired change. Peurach (2011) argues:

The logic of systemic reform held that ambitious outcomes would not be realised with piecemeal, uncoordinated reforms. Rather, the problems to be solved were understood to be many and interdependent (p. 6).

Jika iMfundo was designed to be coherent and mutually reinforcing across the practices of district officials and schools. It was realised that the long-term sustainability of changes at schools would need to be sustained by the support of district officials, not countermanded. It is for this reason that Jika was implemented across all schools in a district and with the support of the province. All elements were co-designed with the responsible officials at provincial level and taken forward under their line-authority. This approach is being deepened in the 2018 phase of rollout with Jika iMfundo activities being led within the responsible provincial Chief Directorates and integrated into their annual performance plans.

Tenth, the design must be scrupulously **costed to be replicable at scale** within the resource constraints of government. A pilot for scale must be costed for replicability on an even greater scale. This is especially true for the human resource components
of any model. In the case of Jika iMfundo, the interventions proposed initially had to be re-appraised and rigorously remodelled so that they were implementable within the resource constraints of the human resource provisions in the KZN districts and the supervision resource constraints within schools.

This design principle is critical to understanding and reviewing Jika iMfundo. The “dosage” of the intervention is extraordinarily light relative to many interventions. We would love to have done more to support the educators and SMT members, but the rule of thumb was that, if there were not the resources within the system to do this on scale, it could not be part of Jika iMfundo. The experience of so many excellent “pilot” interventions is that they are resource-intensive and not designed for scale and are therefore not, sadly, scalable.

Because of this discipline, it is now possible for the recurrent funding of the provincial rollout of Jika iMfundo across all 6 200 schools of the province between 2018 and 2020 to be met from the provincial budget, while the costs of the change-support interventions (short-term) will be met by the NECT. The NECT evaluation framework of the 2015–2017 Jika iMfundo interventions characterises the PILO model thus:

The [PILO] Model emphasises a low-intensity (in terms of cost per school), management-focused intervention across all schools in the district. This is a behavioural change model that encourages the empowerment of the agency and motivation of HoDs, Deputy Principals and Principals. The Whole District Model also does not import any additional human resources into the school and district education ecosystems, but rather aims to reconstruct how existing [education role players] go about their job to improve learner outcomes.

Lastly, to effect change across a system is ambitious in itself and the scope of change must be relentlessly focused and consistent with the key elements of the theory of change. There should be no more “elements of change” than can be told as the story of and motivation for change by participants at every level – teachers, School Management Team members and officials. If there are more elements of change than can be told as a simple, compelling story of change, this will mean that focus and coherence is dissipated. For Jika iMfundo, the simple story was, “we are improving learning outcomes by improving curriculum coverage.” This was a compelling narrative that bound the different role players at different levels of the system to a shared programme of action even within a complex system with complex challenges. This narrative has inspired the collective action of stakeholders in the provinces where PILO has historically worked or begun to work.

This focus had to be sufficiently clear and consistent to be maintained over time whatever the urgent and intrusive system challenges nibbling at attention and energy. PILO’s early diagnostic and focus groups showed that officials and schools were weary of change initiatives that had been poorly implemented without real change; “quick fix”
solutions with unrealistic time frames; being over-burdened with multiple instructions and few resources; plans being abandoned because of new and competing priorities; and of the multiple parallel and competing instructions filtering through the different silos in the education system.

Consistency and focus on a clearly understood and limited set of change objectives is key to stamina and focus. Most of all, underlying these objectives must be the principle that the official/educator must believe that the effort is worthwhile because the outcome will help them with the real challenges that they face in their work. Given these critical conditions for success and the building of confidence to sustain change, constant vigilance to change management processes is critical to the design and implementation of Jika iMfundo.

**Curriculum coverage as the object of change in Jika iMfundo**

The Jika iMfundo focus on curriculum coverage as the object of change must be understood across several dimensions and curriculum coverage itself must be understood as a multi-dimensional phenomenon. Each of these dimensions is central to the design of the CAPS Planners and Trackers, to the training of School Management Teams (SMTs) and to the work of district officials.

Firstly, curriculum coverage provides a lens for exploring the dynamics of the instructional core, which are learning-teaching-content, and that changes must take place if learning is to improve. Elmore (2008b) argues that the only way in which learning outcomes will improve is through improvement in “the complex and demanding work of teaching and learning” in the instructional core, by “influencing what teachers do and when they make the practices they are being asked to try work in their classrooms”. In his view, the influence that SMT members have on “the quality and effectiveness of classroom instruction is determined not by the leadership practices they manifest, but by the way those practices influence the knowledge and skill of teachers, the level of work in classrooms and the level of active learning by students” (Elmore, 2008b, p. 1). The focus on curriculum coverage – with a particular emphasis on evidence of learning and its supportive management by the SMT – gives the SMT a direct “line-of-sight” into the instructional core.

Secondly, curriculum coverage provides the disparate components of the system with a common “message” of what needs to change. Teachers, SMT members and district officials all understand the fundamental necessity of improving curriculum coverage if learning outcomes are to improve and they understand the contribution of the role they perform in achieving this goal. The shared project of achieving curriculum coverage to which each component of the system is invited to participate is understood as integral to their collective core commitment – improving learning. This is maintained as the core moral and professional focus, and motivation throughout the implementation of the project. How these become routine in the institutional practices of each set of role-players is covered elsewhere in this volume.
Thirdly, curriculum coverage provides a vehicle for a SMT and the teachers it supports to establish routine practices of monitoring, identifying and solving problems of coverage as a key step in a journey of professional conversations that will be generative of increased professional development through reflection and collaboration on the basis of the real pedagogical problems in the classroom. The routine and structured monitoring of curriculum coverage is a “way into” an examination of learning and, as a consequence, into the privatised space of teaching practice that is related to this learning. This approach recognises that the primary site of teachers’ professional growth is the school. The SMT training and coaching invests heavily in guiding the SMT to supervise supportively so that teachers are open to sharing their challenges and revealing their inadequacies.

Fourthly, curriculum coverage is quantifiable, despite the complexities of quantification (as will be discussed later). Quantitative dates, which can be aggregated (as well as deconstructed qualitatively), make system level diagnostics above the classroom possible at school and district levels. Aggregated data that are routinely and regularly monitored, with reporting to the level at which action can be taken, can be used to respond supportively to problems identified. The Jika iMfundo pilot has enabled learning about ways to create dashboards of coverage information that can be regularly monitored, reported to the level where action can influence change and that action can be taken in a regimen of reciprocal accountability. Hargreaves and Braun (2013) argue that accountability contributes to improvement when there is “collaborative involvement in data collection and analysis, collective responsibility for improvement and a consensus that the indicators and metrics involved ... are accurate, meaningful, fair, broad and balanced.” This is as true within the school as within the greater system. Their view that, “when these conditions are absent, improvement efforts and outcomes-based accountability can work at cross-purposes, resulting in distraction from core purposes, gaming of the system and even outright corruption and cheating.” In this next section, we will show how this “gaming” operates in relation to measures of curriculum coverage at schools and district levels.

Fifthly, curriculum coverage is a collective project that is amenable to work on scale and improvement on scale within the existing capacity of the system. Design for system replicability is a central goal of the intervention. Whilst social and economic factors erode learning potential, material constraints hamper education delivery and teacher knowledge and skill undermine their ability to deliver the intended curriculum. The planning and monitoring of curriculum coverage is within the zone of the short-term potential capability of all schools that have the capacity and desire to absorb the intervention. Improving curriculum coverage is a professional matter for which School Management Teams of officials can assert their agency, no matter how challenging their circumstances. Indeed, the routines of internal accountability and a culture of professional development are a necessary basis for further professional learning within the school.
The sixth point is that curriculum coverage is an acknowledged problem, a central concern of government and a key policy goal of the DBE’s Action Plan 2019 (2015a) as Goal 18 specifies: “Ensure that learners cover all the topics and skills areas that they should cover within their current school year.”

The DBE indicator for this goal is:

The percentage of learners who cover everything in the curriculum for their current year on the basis of sample-based evaluations of records kept by teachers and evidence of practical exercises done by learners (DBE, 2014, p. 13).

In 2011, performance against this the indicator was 53% of learners nationally (DBE, 2014, p. 40). The national target for 2016 was that this should be 66%. Learning deficits are cumulative in character. The DBE Macro Indicator Report (2013a, p. 63) indicates:

Poor learning outcomes can be traced to differential ‘input indicators’ or characteristics of school and teacher practices. The report showed, in particular, that incomplete coverage of the curriculum and inadequate teacher subject knowledge are examples of the problematic ‘inputs’ to educational quality.

The findings of the 2011 DBE School Effectiveness Survey (DBE, 2013b) are instructive in terms of coverage trends across grades and subjects. Unfortunately, there is no more recent study from which to draw. No large-scale survey with verification of documentation has been undertaken since 2011. The table below shows curriculum coverage (defined as completing the minimum number of exercises per week, for Grades 8 and 9.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Subject</th>
<th>% Completing Minimum Four Exercise Per Week</th>
<th>Average # Written Exercises Per Week</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>KZN</td>
<td>National</td>
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Table 2.1 Curriculum Coverage Survey Grades 6 and 9 mathematics and EFAL

*Extracted from DBE (2011a).*
In summary, these results indicate that coverage should be a grave concern for both KwaZulu-Natal and the country as a whole. In KwaZulu-Natal,

- only 13% of Grade 6 learners had covered a minimum of four language exercises per week and the average number of written language exercises per learner per week was 1.8 (DBE, 2016, p. 71).
- 40% of Grade 6 learners had covered a minimum of four exercises per week and the average number of mathematics written exercises per learner per week was 2.8 (DBE, 2016, p. 75).
- for Grade 9, no learners covered a minimum of four language exercises per week. This result was consistent across all provinces. The average number of written language exercises per learner per week was 1.1 (DBE, 2016, p. 79).
- for mathematics, 4% of Grade 9 learners had covered a minimum of four exercises per week (the national score was 6%) and the average number of mathematics written exercises per learner per week was 1.7 (DBE, 2016, p. 83).

Several observations can be made. Firstly, the number of written exercises completed each week (as a measure of curriculum coverage) in 2011 was far below the specification of the official curriculum nationally and in the KZN province. Secondly, the achievement of the set target of exercises was abysmal in language in particular and declined in both subjects between Grades 6 and 9. Thirdly, verification of learner exercise books is possible for written work, but not in respect of oral work which is a critical component of language study.

The Annual National Assessment (ANA) provides a proxy indicator for curriculum coverage. The construction of the ANA is “aligned to the coverage of work as indicated in the CAPS for the first three terms of the academic year” (DBE, 2014, p. 29). Figure 2.3 has been constructed from the 2014 ANA Report (DBE, 2014) to illustrate the ANA results comparatively across grades in mathematics and EFAL in 2014 in KwaZulu-Natal.

It is evident that the curriculum coverage deficit, in terms of the mastery of the official curriculum, is pronounced by the end of primary school. In the 2014 Annual National Assessment, in Grade 6, the average percentage mark in both mathematics and English First Additional Language (EFAL) (which is the medium of instruction in the majority of schools) was in the region of 40%. Such poor curriculum coverage, as measured by learner performance, is progressive and cumulative in both its causes and in its effects. This means that a teacher beginning the year with the Grade 7 mathematics class cannot assume that the concepts from previous years have been mastered. Learners in Grade 9 achieved only 8% and 28% for mathematics and EFAL in Grade 9. As learners proceed to Grade 10, they carry with them a massive deficit in the “opportunity to learn” that cripples their chances of success and makes the task of the teacher, in responding to the range of learning levels, overwhelming. The poor performance in EFAL negatively affects opportunities to learn in all subjects where this is the medium of instruction.
The DBE Action Plan 2019 (2015a) states that curriculum coverage is improving from its 2011 baseline of 53%:

This has occurred in the context of better guidance, through the Curriculum and Assessment Statement (CAPS) and national workbooks, on what work should have been covered by specific weeks of the year. The key challenge in the coming years will be to move from systemic research to practical tools that can be used by all districts and school Principals to monitor curriculum coverage. There is a real risk that must be managed, namely, the risk that monitoring leads to a ‘tick box approach’ to the curriculum, where teachers seem to comply with timeframes, but there is too much compromising in terms of depth and actual learning. In this regard, it has become increasingly clear that there is not enough good guidance offered to teachers on how to deal with a multitude of abilities within the same class. Decisions on when to move from one topic to the next in the curriculum, when some learners are still clearly struggling with the previous topic, are extremely difficult decisions for teachers. Support and guidance for teachers here is crucial (DBE, 2015a, p. 43).

![Figure 2.3 Average percentage marks in ANA 2014 KwaZulu-Natal by grade: Mathematics and EFAL](image)
It is precisely in the areas identified as challenges that PILO is working:

- [The development and testing on scale of] “practical tools that can be used by all districts and school Principals to monitor curriculum coverage”
- [Moving away from] “a ’tick box approach’ to the curriculum, where teachers seem to comply with timeframes, but there is too much compromising in terms of depth and actual learning”
- [Developing system capacity and routines, on scale, for] “good guidance offered to teachers on how to deal with a multitude of abilities within the same class. Decisions on when to move from one topic to the next in the curriculum, when some learners are still clearly struggling with the previous topic, are extremely difficult decisions for teachers. Support and guidance for teachers here is crucial.”

The challenges of monitoring curriculum coverage problems, coverage compliance that compromises depth of learning and teacher support for solving coverage problems have been central to design of Jika iMfundo and to the learning from the intervention.6

Lastly, curriculum coverage was chosen as the object of change because of its manifest impact on “opportunity to learn”. The work of William Schmidt has shown that, while public schooling is seen as “the great equaliser” (Schmidt, 2010, p. 12), great inequalities exist in public education systems and that unequal educational outcomes are clearly related to unequal educational opportunities. He argues that “educational equality in the most basic, foundational way imaginable – [is] equal coverage of core academic content” (Schmidt, 2010, p. 12). He has shown that “whether a student is even exposed to a topic depends on where he or she lives” (2010, p. 13). He also shows that “socioeconomic status and opportunity to learn are both independently related to achievement” (2010, p. 16). This is of profound significance. Whilst Bernstein’s famous dictum that “education cannot compensate for society” may frame the challenges in which education works for social justice, opportunities to learn can compensate for socio-economic status. Schmidt defines “opportunity to learn” as curriculum coverage and concludes that,

the implication of our conceptual model is that by adopting focused, rigorous, coherent and common content-coverage frameworks, the United States could minimize the impact of socioeconomic status on content coverage (Schmidt, 2010, p. 16).

The Annual National Assessments can be seen as proxy for curriculum coverage, understood as mastery of the official curriculum. These results show a close correlation between coverage as performance and socio-economic quintiles. In the tables below, quintile one includes the poorest households and quintile five the most affluent. The achievement gap in mathematics at Grade 1 is 13%. By Grade 6, this has increased to 22%.
Jika iMfundo has trialled, on scale, the adoption of “focused, rigorous, coherent and common content-coverage frameworks” and tools and training to support focused system routines for identifying and seeking solutions to problems of coverage. As a system intervention, it has the potential to increase opportunities to learn across all quintiles, but some design elements focus on schools most needing support to overcome socio-economic challenges. For example, the subjects focused on include English First Additional Language (rather than First Language) as this automatically prioritises poorer communities as this coincides with race and class.

Jika iMfundo is but one contribution in the wide range of factors that constrain improvements in learning. The seminal Coleman study in the USA, *Equality of Educational Opportunity* (1966), found that personal and family characteristics had a greater influence on performance than characteristics of schools. While education inequalities are firmly rooted in societal inequalities and achievement is more closely tied to family background than to school resources, this does not mean that quality differentials in schooling do not matter. Coleman concluded that “it is for the most disadvantaged children that improvements in school quality will make the most difference in achievement” (1966, p. 22). The imperatives of both justice and efficiency require that what happens in schools and how schools are resourced must be interrogated to understand how schools’ practices might be changed to mediate greater success of the poor.

The Coleman report found that schools do make a difference for disadvantaged students, primarily through teacher quality, resources and curriculum (Christie, 2008, pp. 167–168): “A given investment in upgrading teacher quality will have the most effect on achievement in underprivileged areas” (Coleman, 1966, p. 317). Schmidt has similarly argued that opportunities to learn (by increasing curriculum coverage) can compensate for socio-economic status. This is the focus of the Jika iMfundo campaign.

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*Table 2.2* Average % mark in mathematics by grade and poverty quintile, annual national assessment 2014 (DBE, 2014, p. 89)
Curriculum coverage: A complex and collaborative professional judgement based on assessment

What is “curriculum coverage”? As highlighted in the DBE Action Plan, it is not teachers “ticking” what they have taught as a compliance exercise. The understanding of curriculum coverage, as only reports of what is taught, is an inadequate descriptor of coverage. In this impoverished notion of curriculum coverage, coverage can improve – but at the expense of learning. Teachers’ reporting on what they have taught is a necessary and important component of the professional judgement of teachers of curriculum coverage, but it is only a first step towards the larger professional process of judging and reporting coverage as a function of what learners have learned as an indicator of curriculum coverage. Assessment practices – formal and informal – are at the heart of the monitoring of curriculum coverage and engagement with learners’ work as a practice is central to the professional practices and conversations introduced and deepened in Jika iMfundo.

Many monitoring surveys (including the Department of Basic Education’s 2011 School Monitoring Survey) focus on a partial definition of coverage – that of tasks completed and assessed, with physical checks of learner workbooks. This is a limited proxy for the measure of curriculum coverage without a parallel analysis of learning. For example, this approach might show a situation where none of the exercises for the last three weeks of a term had been attempted, but there may have been evidence of term 1 work having been done in term 2. Could this non-CAPS-compliance be the result of a considered and evidence-based professional judgement that key concepts in Term 1 needed more attention? Could this be an example of a teacher exercising agency and choosing a curriculum pacing that she considered to be in the best interests of her learners? This would be consistent with a study by Reeves and Muller (2005) referred to in the DBE Technical Report for the School Monitoring Survey (DBE, 2013b) which showed that,

... learners in Grade 5 and 6 are spending more time on subtopics that they were expected to have covered in earlier grades than they do on subtopics at the level expected for their grade. This shows evidence of slow curricular pacing across the grades and that learners are studying topics lower than grade level expectations (p. 57).

Other explanations are also possible:
• Could teaching-time have been lost in term 1 for a range of possible reasons? Is this a management problem creating coverage problems?
• Could the teacher be so concerned about the children performing poorly at the bottom end of a normal distribution curve that she was prepared to compromise the appropriate pace for children at the average to upper end of performance and did not have the necessary pedagogical skills of differentiated instruction to provide for this range?
• If the subject was English, could it be that the teacher’s professional judgement was that the level of fluency was so poor that she needed to spend more time developing oral fluency?
• In some subjects, such as mathematics, where teachers’ content knowledge is weak, could a similar pattern be an indication of teachers’ lack of confidence in the content that was not taught and the gaps be an avoidance mechanism?

What are the considerations that a teacher must manage in assessing coverage and how does a teacher make these judgements in her professional interaction with the guidance given by CAPS? The teacher interacts with the expected pace of progression of teaching of the content specified by CAPS by making judgements of what learners have learned. In making judgements and decisions regarding the pace of teaching in order to meet expectations of curriculum coverage in the specified time-frame, the teacher is influenced by her judgements of how many learners are performing at what level of achievement as specified in CAPS and at what levels of cognitive complexity. Teachers know that there will be a range of achievement from “not achieved” to “outstanding achievement” in a class – particularly given the wide range of difference in mastery of prior knowledge, given current progression policy and generally large classes. If the majority of learners in a class are achieving at a level below “adequate”, the teacher will need to make a judgement that, even if the time allocated for that concept is exhausted, the coverage problem will need to be solved. Her professional judgement will need to take into account:
• The cyclical nature of CAPS and opportunities that exist later in the year to revisit the concepts.
• How available time can be adjusted to allow for more time to consolidate the concepts relative to the weighting of the concept in CAPS and this judgement will be made relative to how much time has elapsed and how much time remains.
• How the relative importance of the concept in the foundational progression of the concept informs the prioritisation of that content relative to the work that still needs to be completed and, in some cases, this consideration of the relative prioritisation of the concept/skill means that it can be omitted.

Many considerations inform the judgements teachers are making but these judgements are too often made in privacy and not shared. A compliance-driven approach makes these judgements invisible and the “gaming” strategies that teachers are forced to employ include:
• Testing what they have taught rather than the full set of concepts and skills that CAPS requires.
• Testing at a cognitive level below CAPS expectations but at which the learners can succeed.
Teachers consistently report that they construct assessments on the basis of what they have taught, not what they should have taught. Indeed, this is consistent with the pedagogical compact of trust between learner and teacher. The work of teachers in relation to assessment, as an essential element of monitoring curriculum coverage, includes:

- how to prioritise “coverage” relative to the time available and the learners’ level of performance
- deciding what will be assessed
- deciding the cognitive level of the informal assessment task
- deciding how to “pitch” the content and the level of assessment relative to their expectations of the performance of the class. It is not likely that teachers will set an assessment task that they know the majority of their class will not achieve. It is for this reason that routine provincial or district “common tests” are both a cause of teacher resentment, but also may not reflect learner performance rather than what teachers have taught. Learners proceeding at a pace that is less than expected may “pass” the components of the test actually taught, but “fail” the common assessment because it includes new content.

These are collective, not individual, judgements because such decisions will have an impact on teaching in subsequent grades.

It is especially important to deepen understanding of the expectation of CAPS in relation to cognitive levels. In Fleisch’s (2007) summary of the research on pedagogy and achievement, he concludes that teachers who teach poorer schoolchildren tend to have lower expectations of what learners can achieve and tend to interpret the official curriculum to support their lower expectations and that children collectively achieve to the low expectations of their teachers.

Teacher judgements are invisible when they are not made in contexts of professional collaboration because of a compliance mind-set that insists that the curriculum must be declared to be covered at all costs. Teacher judgements and troubling problems can only be tested and resolved in a professional and supportive conversation in which the teacher feels “safe” to reveal professional decisions usually made in “private”. That is the purpose of the professional supportive conversation with the teacher and making it public in the immediate professional community must be the starting point for exploring the collective solution to the problem of curriculum coverage.

The concept of professional interaction with CAPS rather than compliance with CAPS is a discomfiting thought for many educators driven by a compliance mind set. The compliance requirement results in compliance reporting of what officials wish to hear rather than what is the reality of the classroom. Jika iMfundo invests substantially in making incomplete coverage visible as the first step in identifying curriculum coverage problems and in supportive professional interactions as the necessary condition to solving these.
The professional judgement of individual teachers is best exercised in the community of teachers whose work is affected by that decision. Teachers are members of a professional community whose collective work of achieving curriculum coverage affects other teachers. Where a teacher in one year is unable to complete the teaching of all concepts and skills necessary for a teacher in subsequent years to achieve curriculum coverage (because incomplete coverage has cumulative effects over time), decisions about solutions to curriculum coverage problems cannot be taken by individual teachers without reference to teaching teams.

The management of assessment and the use of assessment information to inform decisions regarding curriculum coverage is central to the Jika iMfundo programme. The SMT, as a whole, has a responsibility to monitor what was taught, what was assessed and what percentage of learners performed at a level that is adequate. The SMT has a responsibility not only to monitor “coverage” in this way, but also to support the Heads of Department (HoDs) in their leadership of solving curriculum coverage problems. Monitoring only that assessment has been “done” is a poor curriculum management practice. A SMT needs to assess the content of the assessment relative to the demands of CAPS. Where coverage has not been achieved, the SMT should know this before assessment is conducted. SMTs need to monitor that the assessment is at the cognitive level required for progression to subsequent CAPS content. The SMT needs to be able to monitor both if assessment has been set on the required content and also the level of difficulty (including) cognitive demand. This monitoring and the professional, evidence-based and supportive conversations that are part of the monitoring, identify problems in order to provide support in the resolution of these problems.

These practices of planning, monitoring and responding to assessment are an integral part of the Jika iMfundo CAPS planners and trackers given to all teachers each term and to the SMT training. These skills and practices are built incrementally over the three years. The work that is done at district level with Circuit Managers and Subject Advisers similarly builds the skills and attitudes required for professional, supportive conversations about curriculum coverage that are based on the evidence of both what teachers report of their teaching and assessment as a window into learning.

Curriculum coverage improvement that results in the improvement of learning outcomes must be the outcome of professional development processes that impact positively on teacher practices and the exercise of professional judgement in the instructional core. Supportive accountability mechanisms within the school that routinely support change in these practices are one way of building professional agency to improve curriculum coverage – understood as improving the quality and depth of learning while extending coverage of the scope of the intended curriculum. Teacher capability is strengthened by an institutional culture and practice that collaboratively monitors, supports and solves problems of curriculum coverage. The work of PILO in the Jika iMfundo programme and the development of monitoring tools used routinely in the school and the district to identify problems for the explicit purpose of assisting
teachers to solve these problems can be a valuable contribution to the DBE’s desire to have “a workable methodology for tracking curriculum coverage in any class in a school” (DBE, 2015b, p. 44).

Having a workable methodology for tracking curriculum coverage in a school must be a central task of improving the system – and this methodology must be a core practice of teachers, the SMT and officials who support them. If the reporting of any indicator is going to be useful to educators, it must assist them to solve the problems they face and add value to their daily work of improving learning. It will not help to improve learning if it only adds another layer of burdensome compliance reporting – but with no support consequential to this reporting. The monitoring of coverage, as defined by learners learning, is a key indicator of the outcome of processes in the instructional core and must enable the core function of the SMT to support teachers to solve pedagogical problems associated with poor coverage. The role of the SMT and district staff is to receive and verify reports for the purpose of providing meaningful support. If such routines are systemic, the monitoring and evaluation of Goal 18 of the DBE Action plan will provide for regular system knowledge and responsiveness as envisaged by the DBE’s Action Plan 2019 (2015a). The Trackers used by the teachers provide exemplars of assessment with cognitive level each term and the SMT training guides the HoDs to review coverage by discussing examples of learners’ work.

The practices implied in the overview of curriculum coverage above are what drive the design of the Jika iMfundo resources, tools, training and coaching. The theory of change posits that, when these practices are in place, curriculum coverage will improve because problems in coverage are “de-privatised” and brought into an institutionalised space of collective reflection and collegial support.

A note on curriculum coverage, progression policy and the complexity of classrooms

Professional judgements about coverage are made in the context of a progression policy which allows for learners to repeat only one grade per phase. This results in learners being “progressed” without having achieved at the necessary level to master the concepts in that year. The DBE (2011b) National Policy Pertaining to the Programme and Promotion Requirements of The National Curriculum Statement defines progression as

... the advancement of a learner from one grade to the next, excluding Grade R, in spite of the learner not having complied with all the promotion requirements provided that the underperformance of the learner in the previous grade is addressed in the grade to which the learner has been promoted (p. x).

The rationale for the progression policy as provided in the DoE Guidelines for Inclusive Learning programmes (2005) is:
The developmental needs of learners should not prevent them from progressing with their age cohort as the value of peer interaction is essential for social development, self-esteem, etc. The 1998 policy on Assessment allows for learners to spend a maximum of one extra year per phase. An additional year over and above what the policy currently states may be granted by the head of education of the province. This would mean that learners experiencing barriers to learning may be older than their peers (p. 19).

This progression policy depends on the capability of the system to support “progressed” learners. For Grades 4–6, the DBE (2011b) National Policy Pertaining to The Programme and Promotion Requirements of The National Curriculum Statement document states,

A learner who is not ready to perform at the expected level and who has been retained in the first phase for four (4) years or more and who is likely to be retained again in the second phase for four (4) years or more, should receive the necessary support.

When learning barriers are identified in the classroom, the CAPS documents refer teachers to support structures at school and district level and the DoE Guidelines for Inclusive Learning Programmes (2005). For example, the CAPS maths Grades 4–6 indicate that,

[the key to managing inclusivity is ensuring that barriers are identified and addressed by all the relevant support structures within the school community, including teachers, District-Based Support Teams, Institutional-Level Support Teams, parents and Special Schools as Resource Centres. To address barriers in the classroom, teachers should use various curriculum differentiation strategies such as those included in the Department of Basic Education’s Guidelines for Inclusive Teaching and Learning (2010).

A teacher seeking assistance would find limited advice in the DoE Guidelines for Inclusive Learning Programmes (2005).

The consequence of the progression policy means that, in terms of learners’ needs, many classes are, in fact, multi-grade in terms of learner performance while teachers are required to adhere to the CAPS content for one specific grade. They are asked to achieve this through lesson plans and teaching while providing for differentiated learning and scaffolding assessment activities. This is a huge demand of teachers when the ANA results for KZN in 2014 indicate that, in Grade 4, only 40% of learners in maths and 43% in EFAL are mastering the required content and that these figures remain more or less constant from Grades 4 to 6. This suggests that the 60% who are not mastering the content must be progressed and the teaching and assessment must
be CAPS compliant. In the context of the reality of the multi-level performance of learners in one class, this requires the exercise of professional judgement and collegial collaboration in interacting with CAPS.

The design of the set of Jika iMfundo interventions
The overarching strategic objective of Jika iMfundo is to improve learning outcomes. The theory – or logic – of change to achieve this objective is that, if the curriculum coverage improves (using a complex notion of coverage as not what teachers say they have taught, but what learners have learned at the required level), then learning outcomes will improve.

The monitoring and evaluation framework for Jika iMfundo was developed in 2013 with the support of the Zenex Foundation. The first phase examined the conceptualisation and design of the proposed programme and assisted in focusing and developing “whether programme goals and objectives were well formulated, whether programme activities and outputs were clearly specified and whether expected outcomes and associated indicators were specified” (Mouton, 2014). This clarificatory process preceded final programme design, the process evaluation process and monitoring, and outcome evaluation and impact assessment. This laid the basis for subsequent stages of process evaluation – “assessing if implementation and delivery of programmes were as scheduled … If programme activities were implemented properly and how are these received and experienced by the target group” (Mouton, 2014).

The monitoring and evaluation process led to a logic model where the outcome and impact evaluation was based on the premise that, in order for curriculum coverage to improve, the following behaviours associated with curriculum coverage must improve: monitoring of curriculum coverage (not of what teachers have taught, but of what learners have learned); the reporting of this at the level where action can be taken; and the provision of supportive responses to solve problems associated with curriculum coverage. These are the behaviours (monitored as lead indicators) that must change in order to achieve an improvement in curriculum coverage (the lag indicator) and, from that, to realise an improvement in learning outcomes. The theory of change underpinning the Jika iMfundo monitoring and evaluation framework posits that the change in the lead indicators (changes in curriculum coverage management practice) is a necessary precursor to the improvement in curriculum coverage that follows (or lags).

This chapter will not provide a comprehensive overview of the monitoring and evaluation framework or process. These elements of the framework are introduced here to explain the framing of the lead indicators regarding the practices of teachers, HoDs, Principals and district officials in the theory of change underlying Jika iMfundo. The logic of cause (intervention) and effect (programme outcomes or benefits) in the monitoring and evaluation framework of the programme are that, in order to improve curriculum coverage, necessary (but not sufficient) conditions are:
• **Teachers** are to consistently plan, track and report on curriculum coverage and reflect on teaching and learning

• **Heads of Department** are to regularly check teachers’ curriculum tracking and learners’ work, work with teachers to improve coverage and assist teachers with problems in relation to the curriculum coverage

• **Principals** (and Deputies) are to meet HoDs regularly to review the quality of coverage and tracking; take action to improve coverage; and supervise the overall management of curriculum in the school

• **Circuit Managers** are to engage with schools to identify and solve key problems around the management of curriculum coverage

• **Subject Advisers** are to train and support HoDs to supervise and support teachers in curriculum coverage

• **District officials** are to work across silos to ensure data-driven problem solving and support to schools.

Without achieving the systemic adoption of these key practices, it is unlikely that curriculum coverage (defined as learners’ demonstration of learning) will improve and without improved curriculum coverage, or “opportunity to learn” (Schmidt, 2010), it is unlikely that systemic measures of learning outcomes will improve.

In the monitoring and evaluation framework, these key practices are **lead indicators** for the lag indicator of improved curriculum coverage. Curriculum coverage, as a **lag indicator** of that behaviour change, if successful, becomes a **lead indicator** for the **final lag indicator** and the goal of the intervention – improvements in learner outcomes. This is shown diagrammatically in Figure 2.4.

The achievement of each of these elements of the causal sequence (behaviour change, improvement in curriculum coverage and improvement in learning outcomes) is not simultaneous, but is sequential with an assumption of causal sequence. The consolidation of each lead indicator leads to improvement in its lag indicators and the impacts of each should have a cumulatively positive effect over time. The more curriculum coverage improves from one year to the next, the more likely it will be that the learner will be able to cover the curriculum in subsequent years. The monitoring and evaluation of these indicators to measure progress in 2015 to 2017 will only be of initial improvement. On-going consolidation of these changes, if sustained, will progressively, over subsequent years, result in even greater improvement.

These are necessary, but certainly not sufficient, conditions for improving both curriculum coverage and learning outcomes. So many extraneous factors (or “validity threats” in Mouton’s language) can negatively or positively impact either of these “lag” indicators. But, what is certain is that these practices and the collaborative culture and climate that must support them are certainly necessary conditions to lay the institutional basis for improving curriculum coverage.

In the face of these daunting structural challenges, the approach taken in designing...
the Jika iMfundo intervention was to focus on what could be changed, within human agency, in the short-term and on-scale. Teachers continue to teach despite the material constraints and despite the real impact of poverty on the learning-readiness of the children that they teach. They continue to do so without substantive opportunities to improve their content or pedagogical knowledge on-scale. The design of the intervention was premised on providing:

- teachers with support to navigate planning for teaching and assessment with minimal resources
- instructional leaders at school level (heads of department and subject or grade leaders) with opportunities for considering key conceptual challenges in that phase and subject at the start of each term (the “Just-in-Time” training)
- instructional management leaders (Heads of Departments and Principals and their deputies) with both the professional understanding of CAPS and its assessment in order to lead the management of the curriculum, as well as the adaptive and technical tools to put in place routine behaviours of curriculum management.

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**Figure 2.4** The Jika iMfundo Theory of Change for monitoring and evaluation
In making these design choices to achieve change at scale, we are aware that these modest interventions cannot compensate for the overwhelming contextual disadvantages. We have therefore not set ambitious goals for improvements in learning outcomes. We do however believe that improvements in the supportive management of curriculum and its coverage will result in modest improvements in learning relative to schools where such practices are absent and that they will lay the institutional basis for ongoing improvement.

The behaviours – or as PILO names them, key practices – described in these lead indicators are surprisingly modest because they are fundamental cogs of practice generally assumed to be in place in schools and districts but without which aspirational education improvement instructions and goals are hollow. Relative to the torrent of instructions that pour onto the desks of school and district leaders, these may seem trivial and are certainly taken for granted. We would argue that, in choosing these practices for this massive investment, we have chosen “those changes that have the most potential for the most students with the least effort” (Levin, 2010, p. 68).

Whilst it may be true that, relative to many of the other ambitious policy dicta, the achievement of these practices should be a simple matter, we have found that this goal is deceptively ambitious, firstly, because of ingrained ways of behaving that are resistant to change despite a will to do so and because considerable system and individual capacity building is necessary. Levin (2010) concludes that,

> … where performance is weak, so is people’s knowledge or skill as to how to do better. Improving system performance requires a large and sustained effort to improve skills (p. 234).

Secondly, there is a range of objective systemic factors that makes their realisation difficult, in particular, time, resources and a lack of focus in the system which intrudes with contradictory, and possibly urgent, but definitely less important, demands. These will be discussed in the next section.

**The components of the Jika iMfundo interventions**

The set of interventions that comprise the Jika iMfundo campaign have been constructed to provide district officials, teachers and School Management Teams with support by providing tools and training for institutionalised practices. These will have a positive change on the behaviours (or key practices) necessary to increase curriculum coverage in all classrooms through professional, supportive and evidence-based conversations about curriculum coverage between teachers, between teachers and the SMT and between the district staff and the SMT. The goal is to make these behaviours routine (embedded and sustained) in the practices of teachers, Heads of Department, Principals and district officials. The tools and materials have been collaboratively developed with department officials with the intention of driving meaningful and
substantive engagement around identifying problems and actively seeking the solutions together, as well as providing support in relationships of reciprocal accountability. These interventions intersect and are mutually reinforcing across the sites of intervention.

PILO has learned a great deal from the trial-at-scale in 1 200 schools in King Cetshwayo and Pinetown between 2015 and 2017. On the basis of that learning, many of these interventions are being improved and refined. What we have learned and how the component interventions will be improved will not be discussed in this chapter. The chapter has as its purpose the recording of the interventions in this period to inform the research pieces that follow. The considerable success of the project will be built on in the next phase of the rollout from 2018.

The sites of intervention are the district and the school. At district level, the role-players included in the interventions are Circuit Managers (supervisors of school managers) and Subject Advisers (phase and subject-specific curriculum and pedagogy experts supporting teachers). At school level, the role-players are the Principal (and Deputy), the Heads of Department and the teachers. Each role player is provided with (or adapts) a set of tools that institutionalise the desired key practice. The adoption of each key practice and its tools is supported by training or coaching (or other processes such as co-creation).

**Teachers (Grades 4–12)**
Teachers often repeat their own experiences as learners without access to other models of practice which can be scrutinised as resources for the exploration of alternatives. Poor practices are handed down in generational cycles which must be disrupted by critical and collaborative reflection. Confidence in transitioning to unfamiliar methodologies and in expanding repertoires of practice must be supported in school routines that nurture instructional and leadership excellence, make classroom practice public as a basis for collaborative and reflective professional dialogue and develop teachers into coaches of their peers. Collaborative practices are key to self-sustaining system improvement. This potentially accommodates differing skill levels of teachers and avoids the restriction of compliance-driven control which de-professionalises and de-skills more highly-skilled teachers while providing sufficient structure for less-skilled teachers. It grounds teacher support in a critical pedagogy in which the agency of the teacher is not numbed, but respected and nurtured. This takes time. Quick-fix solutions (dismissed as “microwave” courses by teachers) cannot succeed. A long-term view with continuity of implementation built in to routines and rhythms of school organisation can provide this basis.

The Jika iMfundu initiative seeks to take the first steps towards assisting the SMT to put in place the routines required to make collaborative professionalism possible at the school level and the rigour necessary to deepen these practices progressively over time. This is essential because the system has little capability to provide support external
to the school. This point cannot be overemphasised. Hargreaves defines collaborative professionalism thus:

Collaborative professionalism is about how teachers and other educators transform teaching and learning together to work with all students to develop fulfilling lives of meaning, purpose and success. It is organized in an evidence-informed, but not data-driven, way through rigorous planning, deep and sometimes demanding dialogue, candid but constructive feedback and continuous collaborative inquiry. The joint work of collaborative professionalism is embedded in the culture and life of the school, where educators actively care for and have solidarity with each other as fellow professionals as they pursue their challenging work together and where they collaborate professionally in ways that are responsive to and inclusive of the cultures of their students, themselves, the community and the society (Hargreaves, 2017, p. xi).

In order to lay the basis for the achievement of this ideal systematically and starting from the core principle of working within the capacity of the system, teachers are supported by the Jika iMfundo Curriculum Planners and Trackers. These were developed in close consultation with the Curriculum Section of the Provincial Department and the responsible curriculum officials in both districts. They were trialled and then revised on the basis of feedback from school visits and focus group discussions. The Planners and Trackers were distributed to all teachers in all grades in key subjects (maths, EFAL and natural/physical science) and are systemically reinforced by the School Management Teams (SMTs) and the district staff. The support of the teacher unions is visually prominent in the logo of the teacher unions on the cover.

The Jika iMfundo Curriculum Planners and Trackers help teachers to:

• plan the coverage of the curriculum content each day and each week of each term
• align the CAPS content planning to the textbook used
• align planning to other available resources such as the DBE workbooks
• track curriculum coverage by keeping a record for each class of when the learners have mastered the content
• reflect on curriculum coverage on a weekly basis
• use the tracking and reflection together with learner work as a part of an evidence-based one-on-one curriculum coverage conversation with the Head of Department (or her delegate).

This diagrammatic introduction to the use of the trackers in the front pages of the Tracker orientates the teacher to the use of the trackers – both for planning and for tracking, reflecting and reporting.
A. ABOUT THE CURRICULUM AND ASSESSMENT PLANNING AND TRACKER

1. Your quick guide to using this planner and tracker

What is Jika Imfundo and where do I fit in?

What you do matters! What you do every day as a teacher can change the life-chances of every child that you teach. Jika Imfundo is a campaign that supports teachers by providing CAPS planners and trackers so that teachers can plan to cover the curriculum, track progress, and seek help when they fall behind.

But who will help me?

Jika Imfundo will work with your school management team (SMT) and assist them to have supportive and professional conversations with you about curriculum coverage that will be orientated to identifying and solving problems.

Quick 5-step guide to using the CAPS Planners and Trackers

1. Find the textbook that you are using.
2. Use the planning page each week to plan your teaching for the week. It will help you link the CAPS content and skills to relevant material in the textbook, the teacher's guide, and other materials such as the DBE workbook.
3. Keep a record of the date when you were able to complete the topic. It may be different from the date you planned, and for different classes. Write this date in the column on the right for your records.
4. At the end of the week, reflect and check if you are up to date. Make notes in the blank space.
5. Be ready to have a professional and supportive curriculum coverage conversation with your HoD (or subject or phase head).

The CAPS planners and trackers also provide guidelines for assessment with samples, and may also have enrichment and remedial suggestions. Read the introduction pages carefully for a full explanation.

I have looked at the planner and tracker. It goes too fast!

The CAPS planner and tracker is an expanded ATP. It helps you pace yourself as if you were able to cover everything in the ATP/CAPS. When you fall behind because time has been lost, or because the learners are progressing slowly, you need to confidently discuss this with your teaching team without feeling blamed. The pace of coverage will be determined by the pace of learning. This is why coverage must be tracked by the teacher and the SMT.

How do I use the planner and tracker?

See the “Quick 5-step Guide to Using the CAPS Planners and Trackers” on the opposite page.

Figure 2.5a Quick guide to the tracker and its purposes

Figure 2.5b Quick guide to the tracker and its purposes
The Planners and Trackers for Grades 4–12 are constructed by aligning the CAPS requirements to each of the eight approved textbooks for that grade and subject for every day and week each term. Each page of the Tracker provides an overview of the work for the week (if the teacher is keeping pace with CAPS) sequenced for the textbook she is using. It references the CAPS topic and page in the CAPS document; the page on the learner book (LB) and the relevant learner activities (LB act); the page on the teacher guide (TG) to assist in lesson preparation; the related pages in the DBE workbook and the additional resources required. It also indicates the pages in the additional mental mathematics (MM) resource provided. This information is all related to the “planning” function (super-imposed as [1] in Figure 2.6).

It also provides columns to record when the particular CAPS concept or skill was taught to each class. This information is all related to the “tracking” function (super-imposed as [2] in Figure 2.6). The column is necessary to make visible the “problems” in coverage-pace per class. The existence of the columns invites the acknowledgement that the CAPS-specified pace is not necessarily achieved.

![Figure 2.6 An example of a page in a Tracker and Planner, Mathematics Grade 4](With numbered annotations indicating purpose)
Each page invites reflection on the week’s teaching – the “reflection” function (superimposed as [3] in Figure 2.6). The prompt questions differ relative to the subject and time of the schooling year. Each page is “signed off” by the Head of Department as the first step in initiating the “professional, supportive conversation based on evidence aimed at the ‘discussing and seeking assistance’ function.” The SMT training provides the Head of Department with the adaptive tools for this conversation to take place in a supportive atmosphere and in the spirit of reciprocal accountability and with the technical tools to manage this process administratively. It also provides “conversation prompts” to deepen the shared reflections. Reflection tools are provided for the teacher to consider what learners are doing in preparation for the conversation and the SMT training emphasises that the conversation should start with a description of what the learners are doing (drawing on City et al., 2010) rather than what the teacher does which deflects the conversation from what is often perceived as “personal” to a discussion of the learners.

The Trackers also include exemplar assessments with memoranda and cognitive levels. These assist the teaching team in benchmarking their teaching against the content-coverage of CAPS and the expected range of difficult and conceptual levels across test items. They also assist the non-specialist HoD to monitor assessment against CAPS expectations.

A key purpose of the Planner and Tracker is to be a tool for personal professional development through reflection and collaboration. The reflection is the basis for the HoD to structure a professional and supportive supervision conversation with the teacher on the basis of evidence, including the evidence of the learners’ work (in workbooks or exercise books) in order to reflect on learning and to identify and find solutions to problems of curriculum coverage. The SMT training supports the HoD to develop the supervisory skills needed to sustain this. The Curriculum Planner and Tracker also helps the teacher plan assessments with examples and resources and provides enrichment activities and remediation activities.

To reiterate the issues discussed above, all of the national monitoring information shows that curriculum coverage is a problem. This has cumulative consequences – well expressed in the 2011 School Monitoring Survey (DBE, 2013b):

If teachers do not teach a topic which is supposed to be covered during the school year (in whichever learning programme/subject) then how will learners be able to perform on a test that is based on curriculum implementation expectations? More importantly, however, is the issue of progression: If the required number of topics in a learning programme is not covered, learning of the topic will, in subsequent years, be even more challenging for the learner. The accumulated deficit will therefore widen as the learner progresses through the grades, because the basics were not covered sufficiently well or not covered at all.
This point was reiterated to underscore the constant refrain of teachers that they cannot keep up with the Trackers, expressed as “the Trackers go too fast”. This means that they are not keeping up with CAPS, as the Trackers are paced by CAPS. From the inception of PILO, the intention has been to track in order to identify and solve problems of curriculum coverage. The training and coaching has sought to maintain a delicate balance between encouraging a variety of strategies to increase the pace of curriculum coverage and the necessity of making professional judgements as to what to do when coverage in a term or a year cannot be achieved. Many schools still protest that Jika iMfundo is unreasonable in its coverage expectation. It has been necessary to communicate that, through tracking and reporting, Jika iMfundo is seeking to establish an evidence-base about curriculum coverage so that professional and supportive conversations can assist the teacher to make professionally-defensible decisions about prioritisation within the curriculum.

As with all Jika iMfundo tools, the Planners and Trackers are artefacts provided to support the teachers’ professional practice and their goal is the capability to have a professional conversation about curriculum coverage based on evidence. The Planner and Tracker can scaffold this capability to the extent that the teacher needs it. Teacher support is provided directly through the materials and systemically through the support given by the HoD or the lead teachers in the phase/subject.

Given the reality that many teachers may not have the pedagogical knowledge to teach the material prescribed by CAPS, the Planners and Trackers can, to some extent, support their engagement with the material. They also need support with the content therefore Jika iMfundo worked with the Subject Advisers to plan and deliver “Just-in-Time” (JIT) content workshops, on content identified by the advisers for the first three terms of each of the three years. The system only has the capacity, even with supplementation of additional trainers, to provide this JIT training for every grade and so these were offered for phase grouping – intermediate, senior and FET. Concepts/topics were chosen that could be treated in terms of the development of the concept within the phase. The workshops were attended by the HoD and by the “lead” teacher in that subject and phase (not a formal position). The workshops were typically attended by approximately 40 participants, constructed to maximise participation and were of 5–6 hours duration.

For each of the first three terms of each year from 2015 to 2017, an average number of 3 160 participants (for both districts) attended the JIT, as shown below per subject and phase. The number of schools invited remained constant.

Monitoring was done of the participants’ self-reported satisfaction with the content and its delivery, as well as their confidence in using the Trackers. This monitoring information was captured electronically.
Foundation Phase Teachers

For the Foundation Phase, where the teachers do not have the content support of textbooks, Jika iMfundo provides a set of resources, called a “toolkit” to support the teachers in covering the curriculum. This includes Lesson Plans, graded readers in both isiZulu Home Language and English (FAL), as well as a range of posters and materials, including learner workbooks in maths. As with the Grade 4–12 material, these were developed in close consultation with the Curriculum Section of the Provincial Department and the responsible curriculum officials in both districts. They were trialled and then revised based on feedback from school visits and focus group discussions.

Emphasis was placed on the Foundation Phase because learning deficits are cumulative in character. The DBE Macro Indicator Report (2013a) indicated that,

... low access at higher levels of education is mainly a symptom of weak education quality in the earlier parts of the school programme ... low scores in these local and international assessments reflect that our children are taking too long to acquire fundamental literacy and numeracy skills (p. 2).

<table>
<thead>
<tr>
<th>PHASE AND SUBJECT</th>
<th># SCHOOLS INVITED</th>
<th>% SCHOOL ATTENDANCE (AVERAGE)</th>
<th># PARTICIPANT TRAINING SEATS FILLED (AVERAGE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades 4–7 maths</td>
<td>628</td>
<td>83%</td>
<td>845</td>
</tr>
<tr>
<td>Grades 4–7 EFAL</td>
<td>465</td>
<td>76%</td>
<td>795</td>
</tr>
<tr>
<td>Grades 8–9 maths</td>
<td>380</td>
<td>74%</td>
<td>290</td>
</tr>
<tr>
<td>Grades 8–9 EFAL</td>
<td>335</td>
<td>63%</td>
<td>200</td>
</tr>
<tr>
<td>Grades 8–9 natural science</td>
<td>335</td>
<td>62%</td>
<td>350</td>
</tr>
<tr>
<td>Grades 10–12 maths</td>
<td>306</td>
<td>70%</td>
<td>250</td>
</tr>
<tr>
<td>Grades 10–12 EFAL</td>
<td>350</td>
<td>72%</td>
<td>220</td>
</tr>
<tr>
<td>Grade 10–12 physical science</td>
<td>342</td>
<td>64%</td>
<td>210</td>
</tr>
<tr>
<td>Average participants per term</td>
<td></td>
<td></td>
<td>3 160</td>
</tr>
</tbody>
</table>

Table 2.3 Grade 4–12 Participants attending each JIT session across both districts, 2014–2017
The lesson plans are instructional tools for the teachers who interact with them according to their professional judgement. Pedagogically, they may promote new approaches to teaching and may challenge existing practices.

The lesson plans typically include a comprehensive section explaining the alignment of the lesson plans with CAPS and the component of CAPS for that subject; broad guidelines for using the lesson plans; comprehensive methodology guidelines; a record of key vocabulary; phonic words and their meaning; and printable resources. The lesson plans are only one component of a toolkit which provides all the resources needed to deliver the lessons, including posters and readers.

The lesson plan gives an indication of time required (as stipulated by CAPS), the content/concepts/skills taught, the resources required and an outline of the focus of the lesson with suggestions in sequence. This is a resource for the teacher when planning for the lesson – in terms of organising resources and preparing the content, and planning assessment and homework activities. It also assists the teacher to meet the requirements in CAPS for the amount of time and lessons to be offered each week in various components in each grade and term.

![Foundation Phase teacher toolkits](image)

**Figure 2.7** Foundation phase teacher toolkit
Planning is further assisted by the CAPS Planner and Tracker which, in the same way as the Grade 4–12 Trackers, tracks against the LPs rather than a learner book/textbook for each week.

Considerable assessment resources are provided in the Tracker to assist the teacher with preparing and managing assessment. These include:
- The assessment programme for the subject and grade for the term
- The programme of assessment as it relates to the lesson plans
- Reading assessment exemplars
- Assessment activities in the lesson plans and how they relate to the CAPS rubrics
- The CAPS rubric for the term
- A checklist for the term to record learner marks on which teachers indicate which specified skills their learners have achieved
- A sample mark sheet to record learner marks so that they will accord with SA-SAMS.

This list of resources is illustrative of the complex professional tasks of a Foundation Phase teacher. The tools and resources assist in structuring teaching towards CAPS compliance but both CAPS and the lesson plans also introduce pedagogical approaches with which the teacher may be unfamiliar. In order to support teachers in exploring new pedagogical approaches, the use of the new material is supported by the Heads of Department who attend training on key methodological issues every term – the JIT for the Foundation Phase.

The delivery of the Foundation-Phase “Just-in-Time” Training was the responsibility of the Foundation Phase Subject Advisers. This is consistent with the intention of the pilot-at-scale which was to demonstrate that change is possible on scale within the existing capacity of the department.

The PILO foundation phase team responsible for the development of the lesson plans worked closely with the Subject Advisers in deciding on the topics/focus for

C. RESOURCE LIST

The resources below are part of the toolkit provided with the lesson plans. You will also need various other resources as noted in the lesson plans.

- **Printable resources** (See Section G)
  - Reading word sheet: Look-and-say words
  - Phonics word sheet: Homework words
  - Flashcard templates: Phonics letters/sounds
  - Flashcard templates: Look-and-say words
  - Posters: A4-sized School and Home posters
  - Posters: Class-sized School and Home wall posters
  - CD: EFAL
  - Readers: Living Things and Sunny Days for Group Guided Reading
  - Term 1 Planner and Tracker

*Figure 2.8 C Resource List graphic*
the workshops and in developing the training material. This was done by bringing all the Subject Advisers into one venue for two or three days to work through the draft material and to improve it, where necessary, before the Subject Advisers proceeded with the training. The PILO experts were seen as a resource for the advisers and worked under their authority. The Subject Advisers found this process extremely professionally empowering.

The high ratio of Subject Advisers to schools (1:100 or more) meant that Subject Advisers could not always reach all of their schools. Additional trainers are provided by PILO working in support of the advisers with whom responsibility remained.

This training was intended to assist the HoD in her role as pedagogical leader and, as such, the materials focused on the pedagogy underlying the lesson plans and their alignment to CAPS. The HoD and a lead teacher from the school in the subject (languages or maths) attended the training and used the facilitators’ and participants’ packs to report back to the foundation phase teachers as part of their leadership work.

For the last term of 2014 (preparing the schools to receive the toolkit) and for each of the first three terms of each year from 2015 to 2017, the number of participants who attended the Foundation Phase JIT was in the region of the figures shown in Table 2.4 (for both districts), averaged across the 10 JIT sessions.

As with the Grade 4–12 JIT, monitoring was done of the participants’ self-reported satisfaction with the content and its delivery, as well as their confidence in using the trackers and lesson plans. This monitoring information was captured electronically.

Heads of Department (HoDs) are supported in two ways: subject and phase specific content training, as described above, and SMT training and coaching in management and leadership.

<table>
<thead>
<tr>
<th># SCHOOLS INVITED</th>
<th>PERCENTAGE SCHOOL ATTENDANCE (AVERAGE)</th>
<th>NUMBER OF PARTICIPANT TRAINING SEATS FILLED PER SESSION (AVERAGE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>710</td>
<td>90%</td>
</tr>
<tr>
<td>Languages (isiZulu and EFAL)</td>
<td>656</td>
<td>86%</td>
</tr>
<tr>
<td>Average total training seats per term</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.4 Foundation phase participants attending JIT per term across both districts
**SMT training and coaching**

**Scale and modality of training**
The engine of the change process of Jika iMfundo is the SMT training and coaching. Before outlining the purpose, content and approach of the training and coaching, the scale and modality will be explained.

As with JIT, SMT sessions were held for each of the first three terms for the three years. The HoDs attended two SMT sessions a year for the three years, one of which was with the Principal/Deputy Principal. The Principals/Deputy Principals attended two SMT training sessions a year for three years, one of which was with the HoDs.

SMT attendance each term was, on average, 1,700 participants for each SMT Module across both districts. Sessions were participative, with no more than 40 participants. The training was presented by PILO’s coaches and generally the Circuit Managers would attend, even if briefly, to give the session the stamp of their ownership in their opening or closing remarks. The sessions were generally 5–6 hours with a large proportion of the day spent in group activities that provided opportunities to address practical problems of leading the curriculum collaboratively. The attendance at the training of schools functioning at different levels of confidence meant that the activities were an opportunity for schools to learn from each other. Jika iMfundo coaches were explicitly and frequently reminded that the wisdom and experience would be within the participants present and the purpose of the session was to access that and make it visible so that it could be shared.

**Content and approach of the SMT training**
The content and approach of the SMT training was informed by:
- the need to orientate schools towards a culture of internal and reciprocal accountability
- the theory of change established in the monitoring and evaluation framework
- the set of target key practices that Jika iMfundo sought to establish incrementally as routine
- an understanding of Jika iMfundo as a “campaign” that had to establish and maintain the desire to improve learning by improving curriculum management practices that would positively impact on curriculum coverage
- the necessity of building personal agency to achieve this change in the face of the overwhelming challenges schools face
- the need for technical “tools” that would assist the SMTs with the “how to do” the multitude of the “what to do” of compliance instructions
- professional knowledge related to CAPS management
- the need for adaptive leadership practices necessary to drive and inspire the change at school level
- practical solutions to the challenges of time needed for supervision.
The content of each SMT session was informed by feedback from challenges in adopting the key practices in schools. Persistent challenges and problems identified were revisited across multiple sessions.

**A school culture of internal and reciprocal accountability**

The culture of the education system tends to be hierarchical and authoritarian and is characterised by command and compliance both within schools and between the districts and the schools. Supervisory relationships often have an attitude of triumphant fault-finding. This culture results in deceptive compliance reporting and challenges that educators conceal. This is alienating and inimical to personal and professional growth. The SMT training and coaching is consciously rooted in an approach which embeds the desire to improve in moral purpose and is constructed to shift school cultures towards the deepening of autonomy and of agency in order to establish a culture of professional collaboration and support in the school as a basis for ongoing professional development.

Recurring themes in the training and coaching focus on the routine practice of professional, supportive conversations about curriculum coverage, based on evidence, which are conducted in a “safe space” with an attitude of “How can I help you?” tools, provided in the training and reinforced in the coaching, plan and structure evidence-based conversations. A deepening shift towards these practices fundamentally changes relationships to support collegiality which is generative of professional learning. Core concepts were taught that aimed to inform the changed practice. These included: reciprocal and internal accountability; distributive leadership; the centrality of the instructional core in system improvement; the de-privatisation of the personal professional space; building the phase or subject as a professional learning community; and the value of reflective, collaborative professional practice.

**Jika iMfundo as “campaign” and building personal agency despite challenges**

Each session of the SMT training began with a recommitment to the campaign, a reminder of the goals, the story of change and the agency driving the effort of change. Often, this was done as reflection and an implied recommitment in order to focus on the session mindful that, despite challenges, there are issues within their person control that matter.

**SMT “Technical Tools” to create school routines of supportive accountability**

These tools were constructed in conversation with officials and schools with good curriculum management practices to assist with the “how to do” in relation to the “what to do” of compliance instructions. The SMTs were given tools in the training session which were reinforced in subsequent sessions and in coaching sessions in order to support the development of the key supervisory practices of:

- scheduling routine checking of teachers’ curriculum tracking and learners’ work
- having structured and supportive conversations with teachers to improve coverage
and to assist teachers with problems in relation to the curriculum coverage.

Technical Tools included a range of tools that could be used in the schools to plan, track, report, identify and collaboratively solve curriculum coverage problems. It was stressed that these tools were to be adapted by the school and that their only purpose was to support the routine practice of professional supportive conversations about curriculum coverage based on evidence in order to act on problems and provide differentiated support.

Some tools assisted HoDs with the task of planning the management tasks associated with curriculum coverage by providing an overview reminder of purpose and process and suggesting keys for tasks to be scheduled, with a simple calendar for planning. This helped HoDs to plan systematically and is also part of the body of evidence they would use in their professional and supportive conversations with the Principal or Subject Adviser regarding curriculum management in their departments. Schools were encouraged to customise the tools to their own circumstances.

Another tool provided a format for the structuring of conversations so that they focused on key practices and guided the conversations to the identification and solving of problems, based on evidence of learners’ work. This would take place in a supportive and constructive manner with space for a commitment from both the teachers and the HoDs about what each will do to achieve the improvement agreed upon. Another tool provided a checklist for the HoDs to use in reflection – what is working and what needs work – in preparing for the overview of their curriculum management for their conversations with the Principals of the schools.

**Professional knowledge**

Work was also done on practically understanding the SMT responsibility in terms of the management of CAPS. This included the ways in which professionals can interact with the guidance given by CAPS in making judgements regarding pacing and sequencing. The tools also included tools for planning and monitoring formal assessments in terms of CAPS compliance.

**The need for adaptive leadership practices necessary to drive and inspire the change at school level**

Adaptive tools to support “the practice of mobilizing people to tackle tough challenges and thrive” (Heifetz et al., 2009, p. 14) were provided to build confidence in mobilising, leading or enabling change. These tools included the Johari Window; Covey concepts relating to judgements of urgency and importance; confronting the challenges of supervision; techniques for managing difficult conversations; building teams; creating safe spaces; understanding positional and substantive authority; and adopting a growth mind set.

The practical challenges of supervising are evident in these statements made in
discussion with SMT members and district officials and emphasise that injunctions to “supervise” will not be met without addressing the adaptive skill required to lead and the practical problems faced by over-burdened HoDs.

<table>
<thead>
<tr>
<th>I am afraid to show areas of weakness or need in the work of my colleagues</th>
<th>I am supervising people that are my friends</th>
<th>I find it hard to have difficult conversations and tend to avoid these</th>
<th>I cannot shift patterns of interaction with people that were previously my peers</th>
<th>I find it difficult to give negative feedback about people</th>
</tr>
</thead>
<tbody>
<tr>
<td>I cannot find the time to look at what the people I am supervising are actually doing</td>
<td>I don’t feel that I add any value to the work of the people I supervise</td>
<td>My colleagues distrust the process through which I was appointed or placed.</td>
<td>I am struggling to get people to accept my authority</td>
<td>I feel that the people I supervise don’t respect me</td>
</tr>
<tr>
<td>I am unable to take criticism from the people I have to supervise</td>
<td>Everyone stamps and signs; nobody gives feedback. So, I find it difficult to be the only one commenting and giving feedback on the work of those I have to supervise.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some of the people I supervise know more than me</td>
<td>I work in a totally dysfunctional school, and people have accepted the situation, and say I am going to do as they do soon.</td>
<td>I specialised in one subject, but I have to supervise others, in which I have not specialised.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know my job, but I find it difficult to relate to people.</td>
<td>I teach in the Foundation Phase, and I am a class teacher. There is no time for me to supervise.</td>
<td>I find it difficult to do my job because department officials gave us mixed messages about what we have to do.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was trained in the ‘what’ but not in the ‘how’ of my supervisory role.</td>
<td>I have never been trained as a curriculum manager. I do not feel confident supervising the work of others, particularly because I come from the same school.</td>
<td>The principal dictates what I have to do in my phase. Sometimes what the principal expects me to do is not in line with departmental policy.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 2.9** Comments of HoDs: Why supervision is difficult
Practical solutions to the challenges of time needed for supervision

Our work has shown that an additional structural constraint inhibiting the internal capacity of the system to provide supervision is the supervisory span of control relative to time. At school level, the material conditions are such that HoDs have little time to fulfil their supervisory functions.

The workloads of educators are regulated by what is commonly referred to as the “PAM” – the Personnel Administration Measures – which prescribe the “Terms and Conditions of Employment of Educators Determined in Terms of Section 4 of The Employment of Educators Act 1998”.

<table>
<thead>
<tr>
<th>SCHOOL TYPE/ NUMBER OF HoDs</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>150</td>
<td>320</td>
<td>520</td>
<td>880</td>
<td>-</td>
</tr>
<tr>
<td>Secondary and Combined</td>
<td>150</td>
<td>200</td>
<td>455</td>
<td>770</td>
<td>1050</td>
</tr>
</tbody>
</table>

HoD “span of control” taken from the SADTU KZN (2017)

Primary schools get a Deputy once the enrolment reaches 520 and a second Deputy at 1040. Secondary and Combined schools get a Deputy once the enrolment reaches 455 and a second Deputy at an enrolment of 910. No more than four HoDs can be allocated to a primary school and five to a secondary school, even if the enrolment is far higher.

In terms of teachers, this is regulated in terms of Post Provisioning Norms (PPN) which use the DoE’s (1996) Post distribution model for the allocation of educator posts to schools. In KZN, funds permitting, schools are allocated a school clerk when enrolment
reaches 600 and the educators are responsible for entering and managing the schools’ SA-SAMS database. Complexities of post-distribution aside, these are some of the scenarios – at opposite ends of the size spectrum – that arise from the allocation of teachers, HoDs and Deputies relative to learner numbers. Finding time for effective supervision of teachers that has the potential to assist them in their professional growth would be more than a challenge, particularly for FP HoDs who would inevitably be teaching for 100% of the school teaching time. In the majority of cases, HoDs in secondary schools carry the additional burden of supervising subjects that they are not teaching and in which they may not be confident.

The impossibility of these ratios relative to the reduction in teaching loads to accommodate the considerable additional administrative and supervisory responsibilities leads to an inability to prioritise and focus. There is insufficient staffing-time for the system to operate in a way that does more than superficial and, essentially, compliance monitoring. This would be true of schools at both ends of the size spectrum.

Learning from our implementation monitoring, we substantially amended our strategies during implementation to provide the tools, strategies and dispositions required so that supervisors could have professional, supportive conversations about curriculum coverage based on evidence by using situational techniques for supervising large teams. These included strategies of delegation; using distributive leadership strategies; time management; and prioritisation. Within the current allocations or responsibilities of HoDs (which are administratively greater than curriculum management) relative to the time available, these are the only measures possible to make the system work within resource allocations that are essentially unworkable for effective performance of the leadership responsibilities.

Coaching

Coaching sessions followed training sessions and were held on school sites with the whole SMT – sometimes in clusters of schools experiencing similar challenges. Each PILO coach was responsible for approximately 110 schools, so attention to schools had to be carefully planned and prioritised. In targeting which schools should participate in the coaching, coaches were guided by requests from schools, from insights gained from coaching sessions and by requests from the Circuit Managers. Investment of the resource of coaching time was prioritised towards schools with the capacity to absorb the intervention. These schools were often explicitly set up as Professional Learning Communities of SMTs which would continue meeting after the three-year period of training and coaching. The broad analysis used in the segmentation process was to divide schools into 3 categories:

- **Green Schools** – that adopt the target behaviours confidently and are able to progress in the use and adaptation of the tools provided independently with ongoing participation in the training
• *Amber Schools* – that have a clear intention and motivation to adopt the target behaviours and attempt to do so, but need assistance

• *Red Schools* – that are unable to adopt the practices because of greater dysfunctionality in the schools (often to do with contested leadership).

These categories were not static and the intention was to work with the schools which had the greatest capacity to support the intervention and shift them from “amber” to “green”. In the first year, there were some schools that were “red” simply because they had not attended any of the training but which, after a small investment in coaching, rapidly became “amber” or even “green”.

“Green” schools would not necessarily have attended the coaching sessions and many schools that were “amber” would have attended more than one. The average number of participants per session was in the region of five in Pinetown and seven in King Cetshwayo, but this would be an average across individual school and cluster sessions.

Coaching provided the climate and support structure for improving the method, theory and practice necessary to establish routines of professional, supportive, collaborative conversations about curriculum coverage based on evidence as a foundation for identifying and solving problems. The coaching gave participants a safe space to discuss their challenges; helped build relationships; gave participants a sense of accomplishment because they set their own learning goals; and developed new skills and knowledge required to perform at higher levels. Coaching was conducted in cluster sessions as a conscious strategy of building sustainable professional learning communities across SMTs.

<table>
<thead>
<tr>
<th></th>
<th># Cluster Coaching Sessions</th>
<th># Schools Coached</th>
<th># SMT Members Coached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-March 2016</td>
<td>31</td>
<td>149</td>
<td>205</td>
</tr>
<tr>
<td>April-June 2016</td>
<td>188</td>
<td>378</td>
<td>828</td>
</tr>
<tr>
<td>July-Sept 2016</td>
<td>100</td>
<td>133</td>
<td>427</td>
</tr>
<tr>
<td>Oct-Dec 2016</td>
<td>82</td>
<td>82</td>
<td>107</td>
</tr>
<tr>
<td>Jan-March 2017</td>
<td>107</td>
<td>211</td>
<td>920</td>
</tr>
<tr>
<td>April-June 2017</td>
<td>144</td>
<td>315</td>
<td>771</td>
</tr>
<tr>
<td>July-Sept 2017</td>
<td>27</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>TOTAL</td>
<td>679</td>
<td>1303</td>
<td>3293</td>
</tr>
</tbody>
</table>

*Table 2.5* King Cetshwayo 2016–2017 SMT coaching: Number of sessions and schools and participants coached
Districts
Mc Lennan (in this volume) has provided a thorough analysis of the literature on district functioning and its challenges and has focused, in particular, on the role of Circuit Managers. She has also provided a comprehensive account of the work of Jika iMfundo in Pinetown and King Cetshwayo from 2015 to 2017. There is no need to add further to this work.

The work of Subject Advisers (SAs) requires explication as this is an under-researched and under-documented area in South Africa. The area of greatest learning in the 2015–2017 Jika iMfundo trial-at-scale has been the Teaching and Learning Support (TLS) within the district. We had to reconceptualise what support to teachers means and to operationalise this within the parameters of the available resources.

The official model is not fit for purpose. TLS, as currently structured and resourced, is under-conceptualised and poorly understood in the education system. While we worked closely with the SAs in the process of developing and reinforcing the use of the “Just-in-Time” training and in developing a draft tool to assist in the planning and reporting of visits, not as much progress as hoped for was made in the pilot-at-scale in King Cetshwayo and Pinetown even though a great deal has been learned which can inform the next phase of implementation which will include Pinetown and King Cetshwayo. This section will not outline all the activities undertaken with SAs because there is no research piece on this work. It will however provide an overview of the challenges in this area.

<table>
<thead>
<tr>
<th></th>
<th># Cluster Coaching Sessions</th>
<th># Schools Coached</th>
<th># SMT Members Coached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-March 2016</td>
<td>99</td>
<td>381</td>
<td>957</td>
</tr>
<tr>
<td>April-June 2016</td>
<td>76</td>
<td>271</td>
<td>733</td>
</tr>
<tr>
<td>July-Sept 2016</td>
<td>67</td>
<td>115</td>
<td>142</td>
</tr>
<tr>
<td>Oct-Dec 2016</td>
<td>60</td>
<td>95</td>
<td>617</td>
</tr>
<tr>
<td>Jan-March 2017</td>
<td>77</td>
<td>102</td>
<td>762</td>
</tr>
<tr>
<td>April-June 2017</td>
<td>155</td>
<td>212</td>
<td>848</td>
</tr>
<tr>
<td>July-Sept 2017</td>
<td>25</td>
<td>25</td>
<td>69</td>
</tr>
<tr>
<td>TOTAL</td>
<td>460</td>
<td>820</td>
<td>3171</td>
</tr>
</tbody>
</table>

*Table 2.6* Pinetown 2016–2017 SMT coaching: Number of sessions and schools and participants coached
There are several features that either contribute to or are a consequence of the “Cinderella” status of SAs:

- There is ambiguity about the reporting line of the Subject Advisers. While Subject Advisers are located physically in the district, their official reporting line is to the Curriculum Section of the province.
- The highly silo-ised internal professional-identity-driven structure and working arrangements makes it hard for them to operate as part of a cross-functional team. Subject Advisers cannot contemplate playing a role outside of their narrow phase- and subject-specific identity. This means that translating their commitment to working across silos into conversations at school level with HoDs, who are not working in the Subject Advisers’ subjects, has been extremely difficult. Other than in Foundation Phase where there is a strong sense of professional community, Subject Advisers tend to define their professional community as the broader network of similar phase and subject-specific people outside of the district. In the district, they are largely disconnected and isolated in their direct phase and subject-specific concerns. The natural community of an FET subject specialist is her fellow subject specialist in other districts. This observation is consistent with McLaughlin and Talbert’s (1993, p. 8) framing of professional learning communities in terms of boundaries and strength. From their work with secondary school teachers, they argue that professional communities differ from one another in boundaries and culture defined by an inclusiveness driven by shared priorities and strength determined by a common discourse.
- The mismatch between institutional and curriculum arrangements and the definition of the scope of work of Subject Advisers, as FET or GET, has resulted in FET Subject Advisers being responsible for both primary and secondary schools because they serve Grades 4–9 which spread over both primary and secondary schools.
- The discrepancy between the requirements of the role and the impossible scale of the responsibilities renders their work meaningless. The “performance area responsibilities” of SAs assume that they play a key role in supporting teachers by providing professional support and advice; ensuring that teachers receive a regular flow of curriculum information; monitoring curriculum management; and ensuring curriculum compliance. This requires effective working relationships with teachers in their subject area of which there would be an estimated average of four in each school.
- Apart from the direct teacher support, there are a variety of networking and coordination responsibilities.
Table 2.7 gives a snapshot of the number of Subject Advisers, by phase and subject, relative to the number of schools supported in Pinetown and King Cetshwayo in 2015. The use of the term “snapshot” is key because the number of Subject Advisers changes constantly. Advisers retire, resign or are promoted and the posts are vacant possibly for long periods until they are filled. The figures below were accurate in early 2015, but some have been filled and others are now vacant but even if three times as many Subject Advisers were appointed in all categories, the conclusion that there is a lack of system capacity to support teachers meaningfully would remain.

The ratio of Subject Advisers to schools cannot be understood without analysing the posts relative to the NQF band, the phase and the subject. The misalignment between the structure of the curriculum phases and the institutional design of schools leads to a situation that, while the FP and FET advisers are responsible for three grades in primary and high schools respectively, the intermediate and senior phase advisers are responsible for Grades 4–9 which are spread across both primary and high schools. In King Cetshwayo, one subject adviser was responsible for 696 schools and six grades. In Pinetown, one natural science adviser was responsible for 556 schools and three grades. The FET phase also has unacceptably high ratios. One subject adviser for EFAL supports 173 schools in Pinetown. Foundation Phase ratios are also too high for meaningful support – advisers are each responsible for nearly 100 schools. Being responsible for a school means three grades, with possibly several teachers per grade. This summary of resource availability does not take into account distance to be travelled between schools and between the school and the district office.

Table 2.8 from the Auditor-General of South Africa: KZN (2017, p. 22) shows, firstly, that the figures for Pinetown and King Cetshwayo are not atypical for the province, and secondly, that even in this thorough review of the work of Subject Advisers, the phase specialisation distinction was missed and so the average number of schools per adviser is incorrect. The maths and English FET advisers would be visiting high schools only, while the GET maths and English FET advisers would be visiting both primary and secondary schools. While it is difficult to disaggregate further without the numbers of Subject Advisers by FET and GET, the numbers will not be dissimilar to those on Table 2.7 above.

If Subject Advisers did nothing else but visit schools for the 40 weeks of the teaching year and managed to do three per day, they would not get through all the schools for which they are responsible. Apart from such an exercise being practically impossible on the current model, the visits would have little value.

Given the paucity of time to visit schools, it is not surprising that the AG KZN established that the majority of school visits were no less than one hour in duration (see Figure 2.10).

The monitoring tools completed by the Subject Advisers did not cater for the requirements mentioned above. The performance agreements of Subject Advisers also do not prescribe the frequency and nature of school visits.
<table>
<thead>
<tr>
<th>Band</th>
<th>Phase</th>
<th>Institutional location</th>
<th>Grades</th>
<th>Grades for which advisers are responsible</th>
<th>Subjects</th>
<th>Pinetown</th>
<th>King Cetshwayo</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GET Foundation Phase</td>
<td>Primary schools</td>
<td>1–3</td>
<td>1–3</td>
<td>Foundation Phase</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Intermediate Phase</td>
<td>Primary Schools</td>
<td>4–6</td>
<td>4–6</td>
<td>English FAL</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Senior Phase</td>
<td>Primary &amp; Secondary Schools</td>
<td>7–9</td>
<td>7–9</td>
<td>Maths</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Senior Phase</td>
<td>Primary &amp; Secondary Schools</td>
<td>7–9</td>
<td>7–9</td>
<td>Natural science</td>
<td>1 (Sick leave since 2014)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>FET FET Phase</td>
<td>Secondary schools</td>
<td>10–12</td>
<td>10–12</td>
<td>English FAL</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Maths</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Physical science</td>
<td>1 (Acting)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Table 2.7** Snapshot of Subject Advisers (SA) numbers relative to schools Pinetown and King Cetshwayo, 2015
The resource constraints of Subject Advisers are further restricted by system weaknesses.

The Auditor-General (AG) of South Africa, in his Education Sector Report for 2015–16, identified the functioning of districts as a matter requiring further investigation. This was taken forward by the AG KZN in the report referred to above. The recommendations of this national report indicated, in respect of Subject Advisers, that

- “PEDs should revise their recruitment processes to ensure that vacancies are filled timeously. The department should plan and use the existing resources optimally while vacancies are being filled.
- “Curriculum coordinators and Circuit Managers should plan and coordinate their school visits.
- “Job descriptions, performance agreements and work plans should be revised to include key performance areas on the nature and frequency of curriculum support to schools.
- “Standard operating procedures and templates to record curriculum monitoring and support by Subject Advisers during school visits should be revisited to ensure

<table>
<thead>
<tr>
<th>District</th>
<th>SA Maths (A)</th>
<th>SA English (B)</th>
<th>Number of schools/district (C)</th>
<th>Ave. no of schools/SA for Maths (C/A)</th>
<th>Ave. no of schools/SA for English (C/B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amajuba</td>
<td>6</td>
<td>4</td>
<td>249</td>
<td>42</td>
<td>62</td>
</tr>
<tr>
<td>Ilembe</td>
<td>3</td>
<td>5</td>
<td>430</td>
<td>143</td>
<td>86</td>
</tr>
<tr>
<td>Pinetown</td>
<td>4</td>
<td>5</td>
<td>532</td>
<td>133</td>
<td>106</td>
</tr>
<tr>
<td>Sisonke</td>
<td>6</td>
<td>3</td>
<td>452</td>
<td>75</td>
<td>151</td>
</tr>
<tr>
<td>Ugu</td>
<td>4</td>
<td>1</td>
<td>502</td>
<td>126</td>
<td>502</td>
</tr>
<tr>
<td>Umgungundlovu</td>
<td>6</td>
<td>3</td>
<td>544</td>
<td>91</td>
<td>181</td>
</tr>
<tr>
<td>Umkhanyakude</td>
<td>6</td>
<td>3</td>
<td>544</td>
<td>91</td>
<td>181</td>
</tr>
<tr>
<td>Umlazi</td>
<td>6</td>
<td>2</td>
<td>518</td>
<td>86</td>
<td>259</td>
</tr>
<tr>
<td>Umzinyathi</td>
<td>4</td>
<td>3</td>
<td>501</td>
<td>125</td>
<td>167</td>
</tr>
<tr>
<td>Uthukela</td>
<td>5</td>
<td>4</td>
<td>456</td>
<td>91</td>
<td>114</td>
</tr>
<tr>
<td>Uthungulu</td>
<td>7</td>
<td>5</td>
<td>669</td>
<td>96</td>
<td>134</td>
</tr>
<tr>
<td>Zululand</td>
<td>8</td>
<td>5</td>
<td>751</td>
<td>94</td>
<td>150</td>
</tr>
</tbody>
</table>

**Table 2.8** Average number of schools per subject advisor for mathematics and English for 2014–15

(Auditor-General of South Africa: KZN, 2017, p. 23)

*Provided by the KwaZulu Natal Department of Education from Persal*
complete and standardised curriculum support.

- “The Provincial Department should provide training and guidance in terms of the roles and responsibilities of Subject Advisers.
- “PEDs and education districts should provide adequate guidance and support during the development of the education district and school improvement plans to ensure timely, appropriate and complete plans.
- “Management information systems and processes should be developed and implemented to:
  - identify schools on which education districts need to focus
  - track and assess the monitoring and support provided to schools by education districts
  - measure the changes in the educational outcomes that are attributable to the curriculum monitoring and support actions of the education districts.
- “PEDs should address the lack of proper filing and archiving systems. This will ensure that documentation and information are readily available to support transactions and management decisions.”

These recommendations were then pursued in the KZN study of 2017 which carefully considered them.

![Figure 2.10 Duration of subject advisor visits with an educator during school visits (per selected district)](Auditor-General of South Africa: KZN, 2017, p. 23)
<table>
<thead>
<tr>
<th>AREA</th>
<th>KEY FINDINGS</th>
<th>KEY RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources to provide curriculum support</td>
<td>- There was an uneven distribution of schools per Subject Adviser resulting in inconsistent curriculum support to schools. Other initiatives were put in place as compensating measures.</td>
<td>- The department must assess the extent of the inequitable allocation of Subject Advisers per district. It must ensure that a plan to address the disparities is developed and implemented to inform the reallocation of Subject Advisers to provide equitable curriculum support and monitoring to schools in the province.</td>
</tr>
<tr>
<td></td>
<td>- Subject adviser posts were vacant due to budgetary constraints which delayed the filling of these positions.</td>
<td>- The department should document and keep records of the number of Subject Advisers for each phase, to assist with the work allocation of the Subject Advisers across the phases.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- The department’s decision on budget allocations to districts should consider the activities and level of support districts plan to provide to schools annually, given the department's strategic objectives and priorities.</td>
</tr>
<tr>
<td>Impact of visits and systems of monitoring and reporting</td>
<td>- When Subject Advisers identified shortcomings during school visits, recommendations were not always provided to the school on how to rectify them. In addition, these shortcomings and recommendations were not always included in the school improvement plan.</td>
<td>- The department should consider implementing a comprehensive management information system to ensure that:</td>
</tr>
<tr>
<td></td>
<td>- No evidence was provided to indicate that Subject Advisers assisted and supported educators by providing guidance on how to address shortcomings identified during school visits. The Subject Advisers also did not agree on time frames to implement corrective action and for future monitoring activities with the educators.</td>
<td>- Information is updated in a timely manner</td>
</tr>
<tr>
<td></td>
<td>- The management information systems and processes to evaluate the frequency, adequacy and outcomes of on-site curriculum support to schools did not enable effective monitoring.</td>
<td>- The system enables identifying root causes contributing to poor performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Historical information is available for the department to assess trends in performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Information is easily accessible</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Education districts should maintain formal records of the work performed during school visits.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- The department should develop programme indicators and targets to measure and report on the performance of districts in providing curriculum support and monitoring.</td>
</tr>
</tbody>
</table>

The more detailed report of findings indicated that,

- no evidence was provided to indicate that Subject Advisers assisted and supported educators by providing guidance on how to address shortcomings identified during school visits. The Subject Advisers also did not agree on time frames to implement corrective action and future monitoring activities with the educators. In addition, some of the required information was not always completed on the monitoring tool used by the Subject Advisers during site visits to schools.
- the monitoring tools completed by the Subject Advisers during school visits did not assess the following:
  - Learner difficulties identified
  - Whether the educators had intervention strategies for learners with barriers to learning and/or learning difficulties
  - The appropriateness and effectiveness of the educators’ intervention strategies for learners with barriers to learning and/or learning difficulties
  - Whether additional intervention strategies for learners with barriers to learning and/or learning difficulties were recommended by the Subject Advisor.

In a detailed analysis of the response of schools to 12 SA visits, the AG report found that, as a consequence of 10 of these visits, they could find no evidence of any deficiency or recommendation identified by the Subject Advisor being incorporated into work or plans after the visit. For the remaining two visits, they found that the school improvement plan did include lesson planning and presentation which should assist with lesson preparations.

The work of Jika iMfundo going forward will build on the learning of the pilot on scale and on the consensus achieved that

- the relative neglect of Grades 8 and 9 must be redressed
- the reactive effort in Grade 12 needs to be counterbalanced in the long term by a proactive strategy of focused support more continuously through the 12 grades
- there is a need to move away from a narrow compliance focus to substantive engagement and a need to move authoritarianism, blame and negativity to meaningful professional engagement and support
- monitoring simply for compliance for control will not change what happens. The emphasis of the work of SAs should be on support for improvement
- the SAs need to work more closely with the HoDs
- curriculum management cannot be neglected, but should be a focus of the Subject Advisers’ visits
- roles, responsibilities and relationships between CESs, DCESs and advisers need strengthening.

The work planned for SA in the next phase will address these challenges.
In conclusion
It has been a privilege to work so closely within the system and with so many schools and to have had the opportunity of understanding, in much more detail, the challenges of their work. We have had the opportunity to gather evidence for key system insights that will contribute to the policy and implementation process and will be shared with government and other stakeholders in appropriate fora.

We have learned a great deal about the complexities of change at scale and deepened our understanding of why change fails. We have learned that magical thinking and magical reporting in a compliance culture drive non-compliance underground and make it invisible, as more senior role-players are told what they want to know rather than what the real problems are. We have learned that personal agency is undermined in a demoralised system, attention is difficult in a complex, busy system as efforts are invested in wrong and unplanned priorities and accountability becomes amorphous in an underperforming system. The system needs to build agency, attention and accountability so that officials can do the good work that will build belief in their effectiveness and success – this has transformed agency.

We have learned that supervisory relationships within schools and to schools are completely under-resourced and there is little meaningful support for teachers with problems of pedagogy and that these problems are seldom shared professionally.

But, we have also learned that there is a huge hunger and determination for improvement and that it is possible to provide the tools and training to create the institutional routines to make support meaningful at school and district levels.

The Jika iMfundo project in KZN represents an enormous private and public investment in education change. There will be a NECT-led evaluation, but there are multiple components which will not be exhaustively scrutinised in that process. This set of research papers have been written because PILO wishes to make secondary data on the implementation of Jika iMfundo available to researchers for independent analysis and critique so that lessons can be learned as the project continues and is further rolled out; weaknesses are corrected; and areas that require strengthening are identified. This analysis needs to be in the public domain so that lessons learned are shared as soon as possible, given the growing attention on systemic improvement, and so that the shared learning informs further enquiry and practice.

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DBE, see Department of Basic Education.


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Pretoria: Government Printer.


Elmore, R. F. (2008a). Improving the instructional core, draft. 3/08; rev. 6/08. Cambridge, MA: Harvard University, Graduate School of Education.


NEEDU, see National Education Evaluation and Development Unit.

OECD, see Organisation for Economic Co-operation and Development.

Organisation for Economic Co-operation and Development. (2016). School leadership for


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**Notes**

1. PILO is currently working with the Gauteng and Free State Departments of Education.
2. In particular, the DBE Action Plan 2019 (2015a) and The DBE National Learner Attainment Strategy (2015b).
3. The change management work of PILO has been greatly influenced by the work of John Kotter.
4. The current costs of the intervention are less than R25 per learner per year.
5. The Northern Cape and currently Gauteng and the Free State.
6. Space does not allow for this chapter to examine the ways in which the assumptions within and the implementation of CAPS and other curriculum policies may contribute to coverage problems.
7. The DBE issues a list of no more than eight textbooks per grade and subject that are approved for schools to purchase and schools choose from this list.
8. The Jika iMfundo Lesson Plans were re-versioned from the Lesson Plans produced for the Gauteng Primary Literacy and Mathematics Strategy by agreement between the two Heads of Department.
10. These figures are taken from the SADTU KZN (2017).
11. PILO employed coaches from 2016. In 2015, the coaching team was managed by Performance Solutions South Africa, the organisation responsible for the Principals Management Development Programme.